WRITING SELVES
WRITING SOCIETIES

EDITED BY CHARLES BAZERMAN
AND DAVID R. RUSSELL

Writing Selves
Writing Societies

Research from Activity Perspectives

Perspectives on Writing, an Electronic Books Series Sponsored by the WAC Clearinghouse (http://wac.colostate.edu)

Writing Selves
Writing Societies

Research from Activity Perspectives

Edited by

Charles Bazerman
University of California, Santa Barbara

David R. Russell
Iowa State University

Electronic Production: Mike Palmquist

Cover and Interior Design: Mike Palmquist

This book is dedicated to our students.

Table of Contents

Introduction

Charles Bazerman and David R. Russell

Writing is alive when it is being written, read, remembered, contemplated, followed--when it is part of human activity. Otherwise it is dead on the page, devoid of meaning, devoid of influence, worthless. The signs on the page serve to mediate between people, activate their thoughts, direct their attention, coordinate their actions, provide the means of relationship. It is in the context of their activities that people consider texts and give meaning to texts. And it is in the organization of activities that people find the needs, stances, interactions, tasks that orient their attention toward texts they write and read. So to study text production, text reception, text meaning, text value apart from their animating activities is to miss the core of text's being. This collection presents a group of essays that attempts to understand texts and what people do with them as part of the activities realized through textual action.

Activity Theory is a set of related approaches that view human phenomena as dynamic, in action. Human-produced artifacts, such as utterances or texts, or shovels or symphonies, are not to be understood as objects in themselves, but within the activities that give rise and use to them. Their meanings are found in these dynamics of human interaction. Things human exist in an evanescent world held up by focused consciousness and attention and activity. The objects created and used in action then are studied as mediating artifacts rather than things in themselves, having rules of objects. The principles by which they are formed and maintained and changed are those of activity. Texts—alphanumeric marks on surfaces—are one material tool or technology among many. But texts powerfully and pervasively mediate and re-mediate human activities.

The main line of activity approaches grows out of a tradition in Soviet psychology founded on the work of L. S. Vygotsky's (1978; 1986) dynamic view of psychology, particularly developed by A. N. Leontiev (1978; 1981). Various specifics of this tradition are reviewed in essays in this collection. But also other traditions, especially postmodern views of language and social processes, such as Latour's Actor/Network theory (1987; 1994), have entered into contemporary activity theory and are reflected in the chapters here.

Although Activity Theory relies on an interdisciplinary perspective that understands psychological states and performance as shaped by and responsive to social, historical, cultural, and linguistic resources, conditions and processes, it has until been recently elaborated in largely psychological terms. The sociological, anthropological, historical and linguistic dimensions of activity need to be elaborated to fill out the perspective promised by activity theory. The study of writing—its production, its textual manifestations, and its use within organized social settings-- provides one means of elaborating these dimensions. This is particularly so since writing activities and artifacts have become pervasive structuring elements within large systems of modern life, systems which have emerged historically in coordination with the development of their textual practices (such as law, science, government, bureaucracy, and financial institutions).

The work of this collection grows out of a long historical intersection between studies of writing and studies of activity. Activity theory pioneers Vygotsky and Luria (1981) were interested in writing, and writing pioneers James Moffet (1968), Janet Emig,(1971) and James Britton (1971) drew on the work of Vygotsky. One specific line of work bringing writing together with activity has been through the study of genre as mediating socially organized activities. This line of work has been expressed and developed in Bazerman (1988), Bazerman and Paradis (1991), Freedman & Medway (1994); Berkenkotter & Huckin (1994); Geisler, (1994); Russell, (1997), Russell and Bazerman, (1997), Dias et al, (1999); Van Nostrand (1997); Winsor (1996), Prior (1998), Swales, (1998), Smart (1993, 2000); Haas (1996), Coe et al (2002).   These studies have been elucidating how writing as situated at the crucial junctures of the organized activities of modernity, have been spelling out how writing does socially organized work, and how writers so situated do the work of creating and interpreting text within their daily activities. The current collection grows out of this tradition, which will be elaborated and advanced in each of the chapters. (For useful introductions to the theory, see especially Russell & Bazerman, 1997).

Research on writing in human activity has a range of applications. More and more human activities are mediated through writing, particularly as technology uses writing more and more to link us together. Modern business, government, education, and science run on writing, in myriad, constantly-changing genres and media. "Knowledge work," as the current buzzword has it, is almost always "paper work."   And most dramatically, the World Wide Web runs on writing, often writing linked to visual images and databases, with cascading consequences felt worldwide. Yet the ways people use writing to get things done, to structure our interactions, or even to organize the time and tempo of our very lives have not been much studied.

The lines of research represented here have far-reaching potential applications. The design of electronic tools, whether hardware software, interfaces or documentation, has benefited from activity research on writing (Spinuzzi, 2000; Spinuzzi & Zachry, 2000). Similarly, the design (re-mediation) of organizational structures and procedures mediated by writing have benefited from research focusing on the written tools in use, such as "communication audits" of organizations. Education has also felt its effects, in helping students to learn through writing, as well as learn to write the specialized genres that mediate teaching, learning, research, and outreach (most notably the international Writing across the Curriculum movement). And in a wider sense, this research has informed critical analysis of political and social structures of disciplines and professions, and public policy debates, such as in environmental and risk-management controversies (Herndl, 1996; Sauer, 2002), medical research and practice (Berkenkotter & Ravotas, 1997, 1998; McCarthy & Geiryn, 1991, 1994), social work (Paré, 1993, 2000), and many others. The study of writing in activity shows great promise for making important contributions in the huge range of human activities that are mediated by writing.

The chapters in this volume look at human activity and writing from three different perspectives: The role of writing in producing work and the economy; the role of writing in creating, maintaining, and transforming socially located selves and communities; and the role of writing formal education.

Producing Work and the Economy. Graham Smart traces the complex set of genres a central bank evolved to communicate with various publics, and in doing so he examines the ways genre sets are linked to intersubjectivities and organizational learning, both for internally formulating policy (through debate) and for regularly communicating a unified rhetorical position for the organization to outsiders. Catherine Schryer and her colleagues describe how medical students come to assert their agency in the genre of the case presentation, as they learn to diagnose patients by consuming and producing texts. Cheryl Geisler chronicles the ways Palm Technologies' personal digital assistants have rapidly become embedded in the lives of users, mediating and organizing everyday activity through written genres. Clay Spinuzzi shows how 22 software developers use *compound mediation*—drawing simultaneously upon textual artifacts in many genres, official, unofficial, or ad hoc—to create different *genre ecologies* to carry out their work. Derek Wallace charts the processes and mechanisms of policy development (here, the privatization of electricity supply in New Zealand) as a textually-managed *system of production* rather than a rational decision-making process, through which the government in power uses the traditional system of written genres of policy deliberation to circumvent democratic agenda setting, consultation, and enactment of policy.

Producing Selves in Community. Paul Prior and Jody Shipka analyze in detail the ways three people writing in different settings select and structure elements of their environment to manage time and space. Radically expanding notions of writing process, the chapter argues that that literate activity is not simply specialized cultural forms of cognition—however distributed—or the use of ready cultural tools, but rather *laminated* ways of making and transforming the material and social worlds we inhabit. Linda Flower's chapter describes the mediating role of documentation in a community think tank on inner city workforce issues. She explores how literate practices use cultural difference to build collaborative knowledge and support wise action. Katrina M. Powell examines the wide range of genre systems at a small, private, Catholic-affiliated college, and asks how genres can constitute identities within activity systems, as students negotiate competing motives in their textual self-representations. Similarly, Jean Ketter and Judith W. Hunter's case study of one student in a small, elite private college doing an internship in public relations explores how she negotiated her identity and aspirations through writing simultaneously the genres of competing activity systems: academia and public relations.

Producing Education. Janet Giltrow analyzes the ways teachers and students mutually construct and reconstruct a "legend" of the examination system within a university in India. Drawing on Bourdieu and Bakhtin, she reflects on the ways linguistic consciousness and the self are formed and reformed through genres of written discourse in the institutional systems of modernity. Kathryn Evans uses activity theory to understand why two instructors shifted in and out of transmission models of communication in their classrooms. She identifies patterns in these shifts in mental models of communication, arguing that the resilience of transmission models is buttressed by their usefulness in a range of recurrent sociocultural situations, often involving teacher power. Charles Bazerman reflects on the history of Deweyan progressives' struggles to assess student work (particularly writing) beyond the local level, then considers ways activity and genre theory might enable such mass assessment, drawing on an analysis of

materials collected from a complex sequence of social studies writing assignments on the Maya from a sixth grade class. Building on Prior's concept of layered or laminated systems and Engeström's concept of contradictions between activity systems, Dana Lundell & Richard Beach analyze problems graduate students in a large Midwestern research university have in finishing their dissertations, as they encounter constraints in writing the genre in relation to a range of different activity systems: the Graduate School, department, advisor, committee, current employment, and potential job market.

To advance in productive ways, practical or theoretical, writing research needs to move beyond texts as ends in themselves. The study of writing benefits from being embedded in people's uses and interpretation of texts and the creation of meaning and consequence in carrying out the work of the world. This rhetorical view of language in purposive use deepens the social and historical analyses of traditional rhetorical approaches, locates rhetorical action within the complex and differentiated organized activity systems of the contemporary world, and opens up for analysis the many influences written language may have beyond persuasion.

The activity approaches to understanding writing presented in this volume give us ways to examine more closely how people do the work of the world and form the relations that give rise to the sense of selves and societies through writing, reading, and circulating texts   These essays provide major contributions to both writing research and activity theory as well as to the recently emerged but now robust research tradition that brings the two together.

<div align="right">

-- the Editors

</div>

References

Bazerman, C. (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison: University of Wisconsin Press.

Bazerman, C., & Paradis, J. (Eds.). (1990). *Textual dynamics of the professions*. Madison: University of Wisconsin Press.

Berkenkotter, C. & Huckin, T. (1995). *Genre knowledge in disciplinary communication: Cognition/culture/power*. Hillsdale, NJ: Erlbaum.

Berkenkotter, C. & Ravotas, D. (1998). Voices in the Text: Varieties of Reported Speech in Psychotherapists' Initial Assessments, *Text: An Interdisciplinary Journal for the Study of Discourse* 18 (2) 1998: 211-239.

Berkenkotter, C. & Ravotas, D. (1997). Genre as Tool in the Transmission of Practice Over Time and Across Disciplinary Boundaries. *Mind, Culture, and Activity,* 4, No. 4, December, 1997: 256-274.

Coe Richard. ed. *Ideologies of Genre*. Creskill, NJ: Hampton, 2002.

Dias, P., Pare, A., Freedman, A., & Medway, P. (1999). *Worlds apart: Acting and writing in academic and workplace contexts*. Mahwah, NJ: Erlbaum.

Freedman, A., & Medway, P. (1994). Locating genre studies: Antecedents and prospects. In A. Freedman & P. Medway (Eds.) *Genre and the new rhetoric* (pp. 79-101). London: Taylor & Francis.

Freedman, A., & Medway, P. (Eds.) (1994). *Learning and teaching genre*. Portsmouth, NH: Boynton/Cook Heinemann.

Geisler, Cheryl. (1994). *Academic literacy and the nature of expertise. Reading, writing, and knowing in academic philosophy*. Hillsdale, NJ: Erlbaum.

Haas, Christina. (1996). *Writing technology: Studies in the materiality of writing.* Mahwah, NJ: Erlbaum.

Herndl, C. G., Brown, S. C. (1996) *Green culture: Environmental rhetoric in contemporary America.* University of Wisconsin Press.

Latour, B. (1987). *Science in action.* Cambridge, MA: Harvard University Press.

Latour, B. (1994). On technical mediation-philosophy, sociology, genealogy. *Common Knowledge, 5,* 29-64.

Leont'ev, A. N. (1981). *Problems of the development of the mind*. Moscow: Progress.

Leont'ev, A. N. (1978). *Activity, consciousness, and personality*. Englewood Cliffs, NJ: Prentice-Hall.

Luria, Alexander R. (1981). *Language and cognition*. New York: Wiley.

McCarthy, Lucille P. (1991). A psychiatrist using DSM-III: The influence of a charter document in psychiatry. In C. Bazerman & J. Paradis (Eds.), *Textual dynamics of the professions* (pp. 358-378). Madison: University of Wisconsin Press.

McCarthy, L. P., & Geiring, J. P. (1994). Revising psychiatry's charter document, DSM-IV. *Written Communication, 11*(2), 147-192.

Paré, A. (2000). Writing as a way into social work: Genre sets, genre systems, and distributed cognition. In P. X. Dias & A. Paré (Eds.) *Transitions: Writing in academic and workplace settings.* Cresskill, NJ: Hampton.

Paré, A. (1993). Discourse regulations and the production of knowledge." In R. Spilka (Ed.), *Writing in the workplace: New research perspectives* (pp. 111-123). Carbondale: Southern Illinois University Press.

Paul Prior.*Writing/Disciplinarity: A Sociohistoric Account of Literate Activity in the Academy*. Mahwah NJ: Erlbaum, 1998.

Sauer, B. *Rhetoric under uncertainty*. Mahwah NJ: Erlbaum, 2002.

Russell, D., & Bazerman, C. (Eds.). (1997). *The activity of writing, the writing of activity.* Special issue of *Mind, Culture, and Activity, 4*(4).

Russell, David R. (1997). Writing and genre in higher education and workplaces. *Mind, Culture, and Activity, 4*(4), 224-237.

Smart, G. (1993). Genre as community invention. In R. Spilka (Ed.), *Writing in the workplace* (pp. 124-140). Carbondale: Southern Illinois University Press.

Smart, G. (2000). Reinventing expertise: Experienced writers in the workplace encounter a new genre. In P. X. Dias & A. Paré (Eds.), *Transitions: Writing in academic and workplace settings*. Cresskill, NJ: Hampton.

Spinuzzi, C. (2000). Exploring the blind spot: Audience, purpose, and context in "Product, process, and profit." Journal of Computer Documentation 24.4, pp. 213-219.

Spinuzzi, C. & Zachry, M. (2000). "Genre ecologies: An open-system approach to understanding and constructing documentation." Journal of Computer Documentation 24.3. pp. 169-181.

Swales, J. *Other Floors, Other Voices: Toward Textography and Beyond* . Mahwah NJ: Erlbaum, 1998.

Van Nostrand, A. D. (1997). *Fundable knowledge.* Mahwah, NJ: Erlbaum.

Vygotsky, Lev. (1986). *Thought and language* (Alex Kozulin, Trans.). Cambridge: MIT Press.

Vygotsky, Lev. (1978). *Mind in culture*. Cambridge, MA: Harvard University Press.

Winsor, D. (1996). *Writing like an engineer.* Mahwah, NJ: Erlbaum.

Winsor, D. (in press). *Writing power: Communication in an engineering center.* Albany, NY: SUNY Press.

Moffet, J. (1968). *Teaching the Universe of Discourse.* Boston: Houghton Mifflin.

Emig, J. (1971). *The composing processes of twelfth graders.* Urbana, IL: NCTE.

Britton, James, et al. (1975). The development of writing abilities (11-18). London: Macmillan.

Acknowledgements

Special thanks to Cissy Ross for her skilled copy-editing and to Mike Palmquist at the WAC Clearinghouse for his superb editing and production. Thanks also to Professor Gerard McKiernan for his sage advice on internet publishing.

The John S. Knight Institute for Writing in the Disciplines at Cornell University provided us with time and encouragement for this project.

Finally, our thanks to friends, colleagues, and students (too numerous to list) who supported us in this project to make research on writing in human activity available free to others. Among these are the Group for Research in Applied English Studies at Iowa State University and the members of the Mind, Culture, Activity discussion forum moderated by Michael Cole.

Part 1: Producing Work and the Economy

A Central Bank's "Communications Strategy": The Interplay of Activity, Discourse Genres, and Technology in a Time of Organizational Change[1]

Graham Smart

Department of English
University of Wisconsin–Milwaukee
Milwaukee, Wisconsin 53211
gsmart@uwm.edu

Abstract

This chapter reports on an ethnographic study of the technology-mediated discourse practices of a professional organization in a period of major transition. Employing theories of genre and activity along with other theoretical constructs, the study examined how the Bank of Canada, the country's central bank, employs a "Communications Strategy" to orchestrate the organization's communicative interactions with other social groups in the Canadian public-policy sphere. After identifying a set of written and spoken genres associated with the Communications Strategy, the chapter suggests that the genre set and various mediating technologies can be usefully viewed as parts of a local sphere of organizational activity. The chapter then describes two features of the genre set: the genre knowledge within the community-of-practice associated with it and the relationship of the genre set to processes of organizational change. Next, the chapter discusses the role that the genre set plays in the activity of the Communications Strategy, focusing on three primary functions: co-coordinating the intellectual and discursive work of a large number of individuals performing a variety of professional roles; generating, shaping, and communicating the "public information" that constitutes the Bank's official public position on its monetary policy; and acting as a site for organizational learning. The chapter concludes with five theoretical claims regarding the way in which the genre set, mediated by technology, operates within the Bank, suggesting that these theoretical claims might serve as a heuristic for other researchers.

> "Our thinking about our external communications these days is much more strategic than it used to be: we're concerned with how to use our communications strategically—to have an approach that supports our monetary policy objectives, and to be effective with this." (The Communications Czar)

> "With this kind of access [to the Bank's Intranet], everyone is wired." (A Deputy Governor)

> "I think the change here in the Bank has happened through a combination of new institutional procedures and culturally assimilated values. Yes, there have been formal efforts to provide media training, to teach people the tricks of the trade. **. . .** But there's still another kind of change required. And I think it's something that people have to pick up, through their work, more by osmosis

than through a training course." (The Chief of the Communications Department)

Introduction

The winds of organizational change and technological innovation are at play in the world . . . and in the literature. Recent strands of research and theory focusing on collaborative knowledge-intensive work in the professions, on the social and rhetorical dimensions of information manufacture and use, on transformations in the social structures and work practices of organizations, and on the fusing of texts[2] and new digital information/communication technologies all converge at a point that opens up a conceptual space for examining the interplay of discourse and technology in times of organizational change. In this chapter, I report on a study that draws on various aspects of this scholarship as well as, in a more specific way, on theories of activity and genre to provide the theoretical underpinning for an ethnographic investigation of the shifting, technology-mediated discourse practices of one particular organization during a period of major transition.

In earlier work (e.g., Smart 1998a, 1998b, 1999, 2000), I employed an activity-based theory of genre[3] and an ethnographic methodology to produce accounts of how economists at the Bank of Canada, that country's central bank and monetary-policy authority (and counterpart of the U.S. Federal Reserve Board), use an internal set of written and spoken genres in combination with the technology of computer-run mathematical models to accomplish the collaborative activity of generating, negotiating, shaping, and distributing specialized knowledge about the present and expected future state of the Canadian economy—knowledge that is used by the Governor of the Bank (the counterpart of the Chairman of the Federal Reserve Board) and his senior colleagues in directing the nation's monetary policy. In this chapter, I will be talking about something related, but different: I will look at another kind of activity, another set of written and spoken genres, and another cluster of technologies—all used by the Bank of Canada to orchestrate its external communications with other social groups in Canada's public-policy sphere, groups that include the media, the general public, government, the financial markets, the business sector, organized labor, and academia (see Diagram 1). Within the Bank, the activity of orchestrating the institution's communicative interactions with these outside groups is commonly referred to as the "Communications Strategy." Using the Communications Strategy as a point of focus, this chapter will examine the role of an evolving set of technology-mediated discourse genres during a period of significant organizational change for the Bank.

Before going further, though, I will provide an overview of the chapter. I begin with the design of the study—first describing the research site, the Bank of Canada's head office in Ottawa, and then moving on to discuss the study's methodology and theoretical orientation. I next present an account of the technology-mediated set of discourse genres that animates, coordinates, and applies the intellectual and discursive work underlying the Bank's communicative interactions with other players in the arena of Canadian public policy. After identifying the various written and spoken genres associated with the Communications Strategy, I suggest that the genre set and a number of mediating technologies can be usefully conceptualized as integral parts of a local

sphere of organizational activity; and then, within this context, I go on to discuss two significant features of the genre set: the genre knowledge displayed within the community-of-practice engaged in the activity of the Communications Strategy; and the relationship of the genre set to
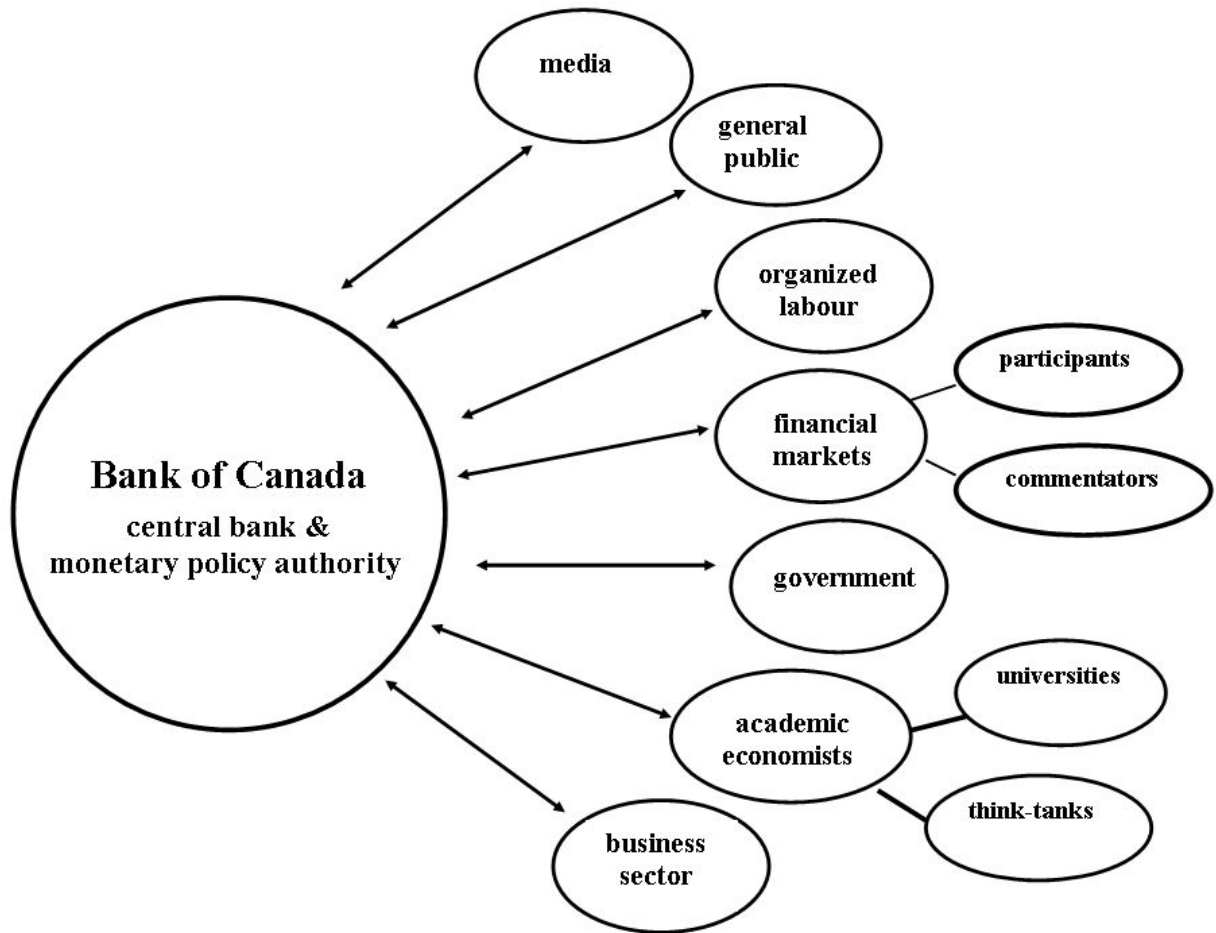
Diagram 1

processes of organizational change. Next, I discuss the role that the genre set plays in the activity of the Communications Strategy, focusing on three of its primary functions: co-coordinating the intellectual and discursive work of a number of individuals performing a variety of professional roles; generating, shaping, and communicating the "public information" that constitutes the Bank's official public position on its monetary policy; and acting as a site for organizational learning. To conclude the chapter, I propose a set of theoretical claims regarding the way in which this set of discourse genres, in conjunction with technology, operates within the Bank to accomplish intellectual and discursive work, and I suggest that these claims might serve as a heuristic for other researchers engaged in examining the role of technology-mediated discourse in the activity of professional organizations. As well, running through the chapter is a thread of commentary on the use of existing theory and building of new theory in ethnographic research, with regard both to the present study and to ethnographic inquiry more generally.

The Study

In this section I describe the research site for the study and then outline its methodology and theoretical framework. As we shall see, both the original aim and the research questions that I initially brought to the study were quickly modified once I entered the site and began to gather data.

Research Site

I will start by describing the setting for the study, the head office of the Bank of Canada in Ottawa (see Figure 1). As a central bank, the Bank of Canada's primary role is to direct the country's monetary policy, a function that involves managing the national money supply by influencing interest rates, with the larger goal of improving the performance of the economy over time. Over the last decade the Bank has made the pursuit of price stability, or low inflation, its primary policy goal (as have central banks in other industrialized countries). Accordingly, the Bank has committed itself to guiding the Canadian economy towards a series of "inflation-control targets" running out into future years, staged in five-year periods.

Figure 1: Bank of Canada Head Office, Ottawa

Decisions on monetary policy are made by an executive group called the Governing Council that includes the Governor, the Senior Deputy Governor, and four Deputy Governors. Supporting this group of decision-makers with economic analysis are six Senior Advisors and some 170 staff economists, situated in four departments—Research; Monetary and Financial Analysis; International; and Financial Markets (known collectively as the "economics departments")—with each department headed by a Chief. In addition, five other departments, including the Communications Department, house employees who provide technical expertise in a range of areas such as corporate communications, editorial services, information technology, and library services. (See Figure 2 for a stylized organization chart of the Bank of Canada.) In addition to this staff in the Ottawa head office, the Bank has regional representatives in five cities—Halifax, Montreal, Toronto, Calgary, and Vancouver—who provide financial and economic information and analysis from their respective parts of the country, as well as a senior person in Montreal and

another in Toronto whose role is to maintain ongoing communication with key players in the financial markets. Within the Bank, the broad collaborative activity of data gathering, economic analysis, and policy-making is known as the "Monetary Policy Framework."
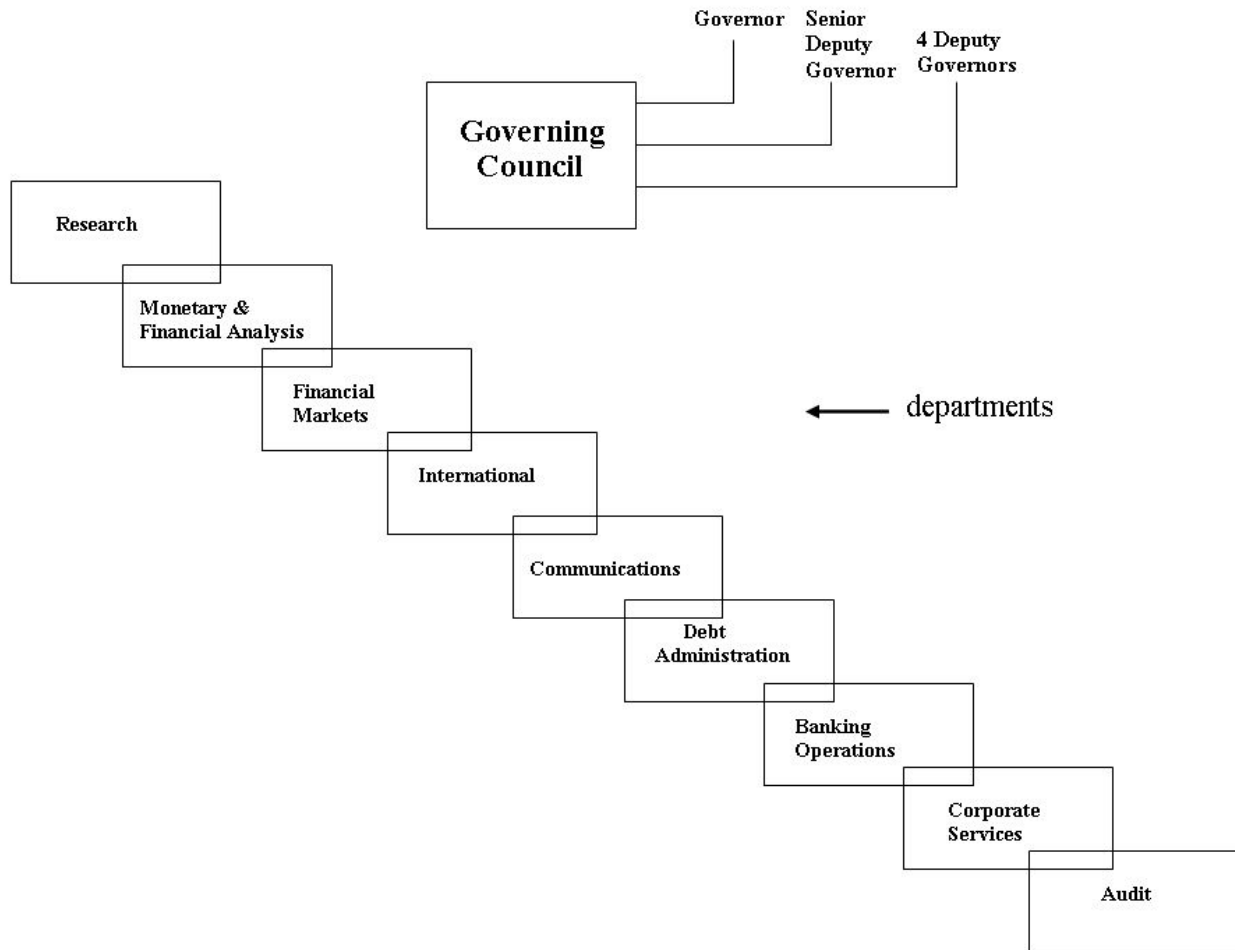
Figure 2: Bank of Canada Organization Chart

Overlapping with the Monetary Policy Framework is the activity that members of the Bank's staff refer to as the "Communications Strategy." The Communications Strategy is a complex, technology-mediated collaborative activity through which the Bank orchestrates its discursive interactions with the outside groups mentioned earlier—the media, the general public, government, the financial markets, the business sector, organized labor, and academia.

An important point to note here is that the Bank's approach to communicating with outside groups has shifted dramatically over the last seven or eight years. The Bank of Canada, like other central banks around the world, has moved from being an institution that veiled its decision-making processes in secrecy and maintained a reactive (some might say defensive) posture of monitoring and cautiously (some might say elliptically) responding to outside commentaries about its monetary policy, to being an institution that is committed to the principle of "transparency" (of which more later) regarding its views on the Canadian economy and its own

monetary-policy goals and actions. And this fundamental shift in approach has been accompanied by significant changes in the uses of discourse and technology within the activity of the Bank's work. While the discursive, intellectual work-world of any professional organization evolves continuously, dramatic change such as that experienced by the Bank of Canada during this period makes the dynamic interplay of activity, discourse, and technology more visible to a researcher, and at one remove, to the reader of a research report.

Methodology and Theoretical Orientation

I will move on now to the research methodology and theoretical constructs employed in the study. The methodology I have used is interpretive ethnography, an approach which allows a researcher to explore a social group's repertoire of shared symbolic resources, or discourse, in order to learn something of how its members view and function within their particular, self-constructed corner of the world. As I will demonstrate below, interpretive ethnography can also enable a researcher to investigate how the members of a social group construct, characterize, and interact with outside groups, and so has offered an effective way of looking at how the Bank of Canada uses written and spoken discourse genres, in combination with a range of technologies, to enact its communicative exchanges with other groups in Canada's public-policy sphere.

Interpretive ethnography, in striving to explore and represent the shared meanings that constitute the discursive and conceptual world of a particular social group, relies heavily on the research practice of eliciting and presenting "displays of members' thoughts, theories, and world views" (Van Maanen, 1988). Thus the accounts produced by interpretive ethnographers typically have a multi-vocal, polyphonic quality, with informants' voices and perspectives given pride of place— all with the intention of achieving the "thick description" (Geertz, 1973) of a group's "interworked systems of construable signs [and] structures of meaning" (pp. 6, 14, 182) that is the larger goal of interpretive ethnography. Accordingly, this chapter includes numerous insider perspectives, as conveyed in excerpts from interviews with Bank of Canada staff members, in the findings of the study presented later in the chapter. Cumulatively, this insider discourse provides a unique window onto the indigenous work-world constructed and co-inhabited by the study's informants.

In developing my account of the activity and discourse employed by the Bank of Canada in enacting its Communications Strategy, I have drawn both on an extensive amount of qualitative data that I collected in the Bank's head office in Ottawa during the fifteen years or so that I worked there as a full-time in-house writing consultant and trainer prior to my departure in 1996, and on a more focused set of data gathered from informants at the Bank over a two-day period in June 2000 and supplemented by e-mail exchanges and document gathering in the time since my visit. The data gathered in June 2000 include taped interviews, averaging an hour and a quarter in length, with nine informants: the then Governor of the Bank, three deputy Governors, a Senior Advisor, the Chief of the Bank's Communications Department, the Governor's Senior Assistant (who acts as a speech-writing facilitator, among other functions), and two members of the

Bank's editorial staff. The data also include a variety of Bank documents, including both internal and published print texts, as well as material from the Bank's Web site.

As a side-note here, I want to mention that when I visited the Bank of Canada in Ottawa in June 2000 to observe in the work environment, gather documents, and interview members of the Bank's staff, the research took a significantly different turn from what I had foreseen. I was expecting to explore the organization's traditional reactive posture of monitoring and cautiously responding to outside commentaries about its monetary policy (a posture shared by central banks around the world). And indeed this assumption was instantiated in the lists of questions I had sent to the interviewees ahead of time.[4] However, the morning I began the interviews I quickly realized that since I had left the Bank as an employee in 1996, a dramatic change had taken place in the organization's approach to communicating with outside groups, and I immediately decided to reorient my inquiry to focus on the new Communications Strategy. As the two days I spent at the Bank observing, conducting interviews, and gathering documents progressed, and I began to get a sense of the nature and degree of the change that had occurred, I proceeded to explore different facets of this activity.

To orient my inquiry at the Bank of Canada and to help me interpret the data I gathered there, I have drawn on a number of theoretical constructs from the literature. The first construct to mention is a social theory of genre, and the second, a theory of activity. As we know, contemporary theorizing, building on Carolyn Miller's (1984) ground-breaking work, has recast genre as a form of socio-rhetorical action that, in many professional organizations, plays a central role in the genesis, shaping, distribution, and use of the specialized types of knowledge an organization needs to accomplish its work (Bazerman, 1988; Beaufort, 1999; Berkenkotter & Huckin, 1995; Freedman & Smart, 1997; Schryer, 1993; Smart, 1998a, 1998b, 1999, 2000; Winsor, 2001).

For professional organizations, it is the discursive recurrence and stability associated with genres—their capacity for regularizing rhetorical acts and writer/reader transactions in ways that allow for the creation and use of particular types of knowledge—that make them essential sites for rendering the intellectual and discursive efforts of various individuals mutually visible and comprehensible and, on a collective level, for connecting, co-coordinating, and harnessing this work (Paré & Smart, 1994). While this characterization accentuates the communal and conventionalized aspects of genre, theorists have also drawn on Anthony Giddens's (1984) concept of the "duality of structure" to show that organizational genres are not only sites of discursive recurrence and stability, but also sites of individual agency and collective innovation (Bazerman, 1994a; Miller, 1994; Yates & Orlikowski, 1992). This dual character allows genres to function, simultaneously, as both vehicles of continuity and instruments for change. In a similar vein, Bakhtin (1981) points to a tension between "centripetal" and "centrifugal" tendencies in discourse—"official" discursive energies that would impose uniformity and order on the world versus "unofficial" energies tending towards heterogeneity and disorder—that we might expect to see reflected in organizational genres.

Researchers working with a social theory of genre have also come to recognize that genres used within organizations typically function together in sets, with each genre set operating as an integrated rhetorical/epistemic site (Bazerman, 1994b; Berkenkotter, 2001; Devitt, 1991; Yates & Orlikowski, 2002). Reflecting the structural duality of individual genres, genre sets provide an organization with discursive continuity and stability, while at the same time displaying a marked plasticity and potential for self-reinvention. Moving beyond the scope of a single organization, Charles Bazerman (1994b) conceptualizes an inter-organizational level of discourse—a "genre system" encompassing the full range of discourse genres used by two or more social groups to interact with one another in pursuing a joint endeavor of some kind.

The concept of a genre system encompassing a variety of genres produced by a number of organizations suggests a further aspect of genre theory that will prove relevant later in the chapter: Anne Freadman's (1994) notion of "uptake," a tennis metaphor, where a text in one genre—a shot served over the net, as it were—will frequently elicit, in the natural course of social events, a response in the form of another text. In the context of a genre system, we might think of a pair of genres, each originating in a different social group, that exist "in some sort of dialogical relation" (p. 48), to quote Freadman—so that the appearance of a text in one genre invites a responding text in the second genre.

A final aspect of genre theory pertinent to my study at the Bank of Canada concerns the concept of "genre knowledge"—that is, participants' rhetorical awareness of the ways in which a genre set functions (Beaufort, 1999; Berkenkotter & Huckin, 1995; Giltrow, 2002; Giltrow & Valiquette, 1994; Orlikowsky & Yates, 1994; Paré, 2000). In my study, the knowledge displayed by members of the Bank staff who are users of an internal genre set regarding who is responsible for doing what, and when, in the collective accomplishment of the rhetorical work of the genre set turns out to be particularly significant.

In addition to social conceptions of genre, a number of researchers examining discourse in professional organizations have been drawing on North American**,** British, and Scandinavian extensions of Soviet cultural-historical theory known, collectively, as activity theory. From this theoretical perspective, a set of workplace genres can be viewed as one part of an "activity system" (Cole & Engeström, 1993): a local, historically and culturally situated sphere of collaborative endeavor, in which thinking, knowing, and learning are distributed across a number of people and their work practices and, at the same time, mediated by an array of culturally constructed tools—all with the larger aim of accomplishing a set of communally defined goals. Or to put it more simply, an organizational activity system is (and here I draw on the language of Jean Lave & Etienne Wenger [1991] and James Wertsch [1991]: *people collaborating—over time—within an organizational community-of-practice—in goal-directed activity—using culturally constructed tools to think and act with.* While Lave and Wenger's concept of the "community-of-practice" originated as part of their theory of "situated learning," it has been adapted more broadly to refer to the group of collaborating individuals who participate in an activity system (see, for example, Dias, Freedman, Medway, & Paré, 1999).

As well as defining the concept of the activity system, I want to note three key characteristics of organizational activity systems that are relevant to the study reported in this chapter:[5]

- Within an organizational activity system, cognition—that is, thinking/knowing/learning—is diffused, or distributed, across a community-of-practice and its culturally constructed tools, with the pattern of cognitive distribution reflecting the division of labor among the participants.

- The various culturally constructed tools in use within an organizational activity system, with their respective affordances, or functional capacities, exert a significant mediating influence on participants' cognition, discourse, and work practices, and are frequently, if not always, infused with particular values and interests.[6] Such tools can include, for example, digital technologies, built environments, analytical methods, systems of classification and standards, the regularized social interactions associated with written and spoken genres, and texts in various symbol systems.[7]

- An organizational activity system, while having a strong cultural-historical dimension, is constituted through the moment-to-moment agency and social negotiations of the people who participate in it. The system changes constantly, continuously recreated in response to internal tensions or initiatives, to the possibilities afforded by newly available tools, or to external pressures and influences.

Together, theories of genre and activity offer a powerful conceptual schema for exploring and representing the ways in which professional organizations employ technology-mediated genre sets to prompt, display, coordinate, and deploy the goal-directed intellectual and discursive work of their members.

In addition to these two bodies of theory, the study described in this chapter also draws on theoretical perspectives on the nature of change in professional organizations, as it involves social structures, work practices, and technology, on the social and rhetorical aspects of the manufacture and use of information, and on the fusing of texts and new digital technologies. Wanda Orlikowski (2001) identifies three models of organizational change that have been prevalent in the literature: *planned change*, in which managers, responding to perceived shifts in the internal or external environments, rationally plan and implement changes they believe will improve the organization's performance; *technological imperative*, where a newly introduced technology drives change in and of itself; and *punctuated equilibrium*, where change occurs sporadically and dramatically, triggered by internal or external forces. Orlikowsky, finding these models only partial in their explanatory power, would see them subsumed in another, more comprehensive model that she refers to as *situated change*. From a *situated change* perspective—and this view is consonant with the practice orientation of activity theory, as described above[8]—change occurs as individuals perceive and, in ad hoc ways, respond to unfolding events in their work-world: "[O]rganizational transformation is grounded in the ongoing practices of organizational actors and emerges out of their (tacit and not so tacit) accommodations to and experiments with the everyday contingencies, breakdowns, exceptions, opportunities, and unintended consequences that they encounter" (p. 226). Bonnie Nardi and Vicki O'Day (1999) offer a complementary theoretical perspective on organizational change in

their concept of the "information ecology"—a variation on the "activity system"—in which individual and collective agency, technology-in-use, and continuous change are foregrounded.

Scholarship theorizing the social and rhetorical dimensions of information manufacture and use has also contributed conceptually to my study. Charles Bazerman (2001) writes, "Information is a human creation for human purposes [and thus] is neither disembodied nor neutral. Information is rhetorical. It is created and deployed in particular historical circumstances for the use of particular individuals and groups." In describing the construction by anti-nuclear activists of "public information" on the consequences of nuclear testing during the 1950s, Bazerman points to the "the intentional design of particular forms of information in particular historical circumstances [for the purpose of] influence[ing] individual and group action," highlighting the "recontextualization of knowledge and utterance from one site to another" (p. 261) as a frequent key aspect of this process. John Seely Brown and Paul Duguid (2000) point to the collaborative professional practices that typically underlie the production and deployment of such information.

And finally, I have also drawn on scholarship examining the ways in which texts are merged with new digital technologies (Engeström & Middleton, 1998; Geisler, 2001; Geisler et al., 2001; Haas, 1995; Henderson, 1999; Luff, Hindmarsh, & Heath, 2000). Geisler et al. (2001) coin the term "IText" to refer to the fusing and reciprocal mediation of texts and technology seen in "information technologies with texts at their core" (p. 270) and introduce the IText into theorizing of organizational genres and knowledge-making activity (pp. 291, 293-294). Barbara Carlson (2001) discusses the growing impact of a specific type of IText technology, the Intranet, a web-based system for sharing information internally within an organization that has become the "fastest growing" digital technology in the professional world. Carlson cites the claim that "Intranets leverage a company's intelligence by allowing users easily to create, access, and distribute company knowledge" (p. 84).

To borrow from Lucille McCarthy and Stephen Fishman (2001), I have used the theoretical constructs outlined above to "help [me] name, explore, and explain what [I was] seeing" in the data I gathered at the Bank of Canada. Taken together, these constructs constitute a conceptual framework that has helped me to recognize and describe how written and spoken genres, in combination with technology, are used to engender, render visible, coordinate, and apply a complex configuration of intellectual and discursive work within the activity of the Bank's Communications Strategy. In turn, I hope to complete the theory-data-theory cycle by making a contribution to theory in this chapter, in three ways. First, my analysis of the data will provide further empirical instances to strengthen existing theory. Second, the analysis also aims to add texture and elaboration to existing theory. And finally, I hope to build some new theory. In any event, this is my intention as we move now into an account of the findings from the study—we shall see how it turns out.

The Communications Strategy and Its Genre Set

This section first identifies the set of 33 discourse genres associated with the Bank's Communications Strategy as well as the various digital technologies and built environments

mediating the use of the genre set.[9] I go on to suggest that this internal genre set can be viewed as part of a larger inter-organizational genre system that also includes a constellation of external genres monitored by members of the Bank's staff for the purpose of gleaning information and perspectives from outside groups relevant to the Bank. Next, the genre set and the built environments and digital technologies associated with it are conceptualized as integral parts of a local sphere of organizational activity. I then discuss four significant features of the genre set.

I will begin by identifying the various written and spoken genres that come into play within the activity of the Communications Strategy. (The symbol ******* following a genre indicates either that the genre is new, having emerged with the Communications Strategy over the last seven or eight years, or that it preceded the Communications Strategy but has changed significantly in form and function in recent years. The letters "www.T" beside a written genre indicate that texts in the genre are currently available on the Bank's Web site, http://www.bank-banque-canada.ca/en/index.htm; and for spoken genres, "www.A" indicates the availability on the Web site of an audio file of the communication event, and "www.T" indicates the availability on the Web site of the written text on which the spoken performance was based.) First we will look at a group of 13 published written genres (with the symbol ▲ indicating the 11 genres that Bank insiders refer to as the main "communication vehicles" for the Communications Strategy, that is, the genres regularly used to convey the Bank's "key messages"), as well as at ten spoken genres that also play a part in the activity of the "Communications Strategy"—spoken genres that involve outsiders and so are visible to public view. I view the written genres as similar Bakhtin's (1986) "secondary speech genres" and the spoken genres as analogous to his "primary speech genres."

Written genres — published:

- *Monetary Policy Report*, with 4-page summary (▲,*******, www.T)
- *Update to Monetary Policy Report* (▲,*******, www.T)
- *Bank of Canada Annual Report* (▲,*******, www.T)
- *The Bank of Canada Review* (▲,*******, www.T)
- Governor's presentations to Parliament (two each year to House of Commons, one to Senate) (▲, *******, www.T, www.A)
- minutes from meetings of Board of Directors, featuring summary of Governor's presentation to Board (▲, *******, www.T)
- lectures by Governor, to university audiences[10] (▲, www.T , www.A)
- speeches by Governor, usually to industry, business, and labor groups (▲, www.T , www.A); and similar speeches by other senior members of Bank staff (www.T)
- formal presentations (usually) by Deputy Governors at major economics and public-policy conferences (▲, www.T)
- press releases announcing changes in interest rates and other significant events (▲, www.T , www.A)

- letters from Governor in response to letters, phone calls, and e-mail messages sent to Bank by members of public
- *Technical Reports* describing finished research by Bank staff economists (www.T)
- *Working Papers* describing research-in-progress by Bank staff economists (www.T)

Spoken genres — involving participants outside Bank:

- press conferences by Governor following adjustments to interest rates and following official release of *Monetary Policy Report*, *Update to Monetary Policy Report*, and *The Bank of Canada Review* (***, www.T , www.A)

- briefings by Deputy Governor to journalists in "lock-up" facility immediately preceding official release of *Monetary Policy Report*, *Update to Monetary Policy Report*, and *The Bank of Canada Review ***

- briefings by Deputy Governors to journalists and financial analysts following release of *Monetary Policy Report* and *Update to Monetary Policy Report ***

- lunch meetings at Bank of Canada between senior Bank officials and people in government, business, financial markets, organized labor, media, and academia ***

- meetings between Governor and other senior Bank policy-makers with editorial boards of newspapers and news magazines

- meetings of Governor, other senior Bank policy-makers, and staff economists with officials in various levels of federal and provincial governments

- informal presentations by senior Bank policy-makers, staff economists, and regional representatives to university audiences and to various industry and business groups ***

- meetings during visits by regional representatives to industries and businesses ***

- interactions between Bank economists and outside economists at conferences hosted by Bank on monetary policy and related economic issues ***

- regular telephone conversations between (a) Bank economists and market analysts, traders, and portfolio managers in Canadian financial institutions, and (b) senior Bank staff and journalists

All together, we see 23 written and spoken genres here. Now we will look at 11 other internal written and spoken genres that also play an integral role in the activity of the Bank's Communications Strategy—these are behind-the-scenes genres that, while an essential part of the

activity of the Communications Strategy, are not visible to outsiders. (The word "Intranet" after a genre indicates that texts in the genre are accessible to senior Bank staff on the organization's internal Intranet.)

Written and spoken genres – behind-the-scenes (not visible to outside world):

Written

- *Q & A's* (prepared questions-and-answers material) (***, Intranet)

- analyses of commentaries appearing in print and broadcast media following *Monetary Policy Report*, *Updates to MPR*, *The Bank of Canada Review*, *Bank of Canada Annual Report*, and lectures and speeches by Governor (***, Intranet)

- yearly report from Communications Department analyzing effectiveness of Communications Strategy (***, Intranet)

- yearly report from Financial Markets Department analyzing reactions of financial markets to Bank's monetary policy actions (***, Intranet)

- weekly analyses of information provided to Research Department by regional representatives regarding actions and views of business people and politicians ***

- reports on surveys of audiences for different types of Bank communications ***

- on-going analyses of financial markets' reactions to Bank's monetary policy actions

- daily "clippings" package – compendium of articles from print media mentioning the Bank of Canada or dealing with topics relevant to monetary policy

Spoken

- meetings involving writers and editors during production processes for genres such as *Monetary Policy Report*, *Bank of Canada Annual Report*, *The Bank of Canada Review,* and Governor's speeches ***

- meetings between members of Communications Department and senior Bank staff to discuss aims and effectiveness of Communications Strategy ***

- weekly conference calls involving regional representatives and staff economists in Research Department ***

These 34 genres can be seen to function together as a single genre set, in complex chains of communicative events and rhetorical/epistemic acts (as will be discussed in some detail later in the chapter).[11] At the same time, the use of this genre set is mediated by a variety of built environments and digital technologies such as those noted below (an *** beside a built environment or digital technology indicates that it is relatively new to the Bank):

- "lock-up" facility for journalists, with its various digital information/communication technologies ***

- press conference facility, where Governor and senior officials meet with journalists ***

- Bank's Intranet ***

- Bank's Web site *** (http://www.bank-banque-canada.ca/en)

- digital management information systems ***

- telecommunication system linking Ottawa head office with regional offices ***

- e-mail links via Internet to contacts outside Bank ***

- Governing Council's dining room, site for lunches with visitors

- networked computers used in document production that are linked to computer-run economic models and to electronic document archives and data bases

- digital links to wire services, press agencies, etc.

- digital connections to financial markets in Canada, U.S., and abroad

- telephone, conference-call technology, fax

When we look at the Communications Strategy's genre set, one of its striking characteristics is the interactivity of written and spoken discourse. One aspect of the relationship between these two modes of discourse involves chains of genres closely linked in their use—such as the Bank's *Monetary Policy Report*, the *Q & A's* material produced for use by the Governor in preparing for the press conference that immediately follows the official release of the *MPR*, and the press conference itself. Here we also see the way in which discourse and digital technologies merge into ITexts (Geisler et al., 2001): electronic copies of both the *MPR* and the *Q & A's* are placed on the Bank's Intranet for viewing by Bank staff several days before the official release of the *MPR*; and then following the release of the *MPR*, the Governor's press conference—held in a specially equipped built environment—is digitally recorded, with the spoken performance placed on the Bank's Web site as an audio file along with an electronic copy of the *MPR* .

If we examine the 34 genres and the various digital technologies and built environments listed earlier, we will see other similar chains of genres combining written and spoken discourse, often with specially constructed environments in play, and with ITexts as the frequent outcome. As soon becomes clear in looking at the genre set of the Communications Strategy, it comprises a discursive fabric of temporally and functionally linked written texts and spoken performances—all mediated by a complex network of digital technologies and built environments.

A related issue here is the blurred distinction between written and oral discourse within certain individual genres. How are we to categorize, for example, the Governor's speeches? In these spoken performances, the Governor reads, verbatim and in front of a live audience, a written text that has been carefully crafted through collaboration and document cycling involving a number of people over a significant period of time. Following the speech, the written text and an audio file of its spoken performance by the Governor will appear as complementary ITexts on the Bank's Web site. Should we classify the speech as a spoken genre, or as a written genre? If one applies Bakhtin's (1986) distinction between "primary speech genres," which are informal and conversational, and "secondary speech genres," which are more formal, rhetorically complex instances of written discourse, the speech would appear to be one of the latter.

In addition to the internal genre set associated with the Bank's Communications Strategy, one could also identify genres outside the Bank that members of its staff pay close attention to in order to glean relevant information and perspectives from outside groups—for example, commentaries in the print or broadcast media on the Bank's monetary policy, published reports by economists working in the financial markets, articles in academic journals and other publications on economic and public-policy topics, published exchanges occurring in the House of Commons' daily question period (reported in Hansard, the daily record of debate in the Canadian Parliament), and the texts of federal and provincial budgets. In a sense, the internal genre set associated with the Communications Strategy and the constellation of external genres monitored by Bank staff can be seen to function together in a single, complex interactive network of discourse. Together, the internal genre set and the assortment of related external genres resemble what Charles Bazerman (1994b**)** refers to as a "genre system"—a network of genres that extends beyond a single organization to encompass the discourse used by two or more social groups to interact with one another in accomplishing mutually significant work (although I should note here the discussion in this chapter does not cover, in any specific detail, the internal genres employed by the various external groups with which the Bank interacts communicatively).

To move ahead with my line of argument, I want to suggest that members of the Bank's staff who participate in the activity of the Communications Strategy can be viewed as what theorists Jean Lave and Etienne Wenger (1991) refer to as a "community-of-practice," with some of these same individuals also participating in another community-of-practice associated with the activity of the Monetary Policy Framework—so that, conceptually, we have two overlapping activity systems with their respective and overlapping communities-of-practice. Diagram 2 provides a sense of what these relationships look like when mapped out in this way. Characterizing the Bank and its Communications Strategy in this way is useful analytically in that it suggests insights about the part that genres, mediated in their use by digital technologies and built environments, play in the Bank's discourse and intellectual work.

Bank of Canada
central bank &
monetary policy authority

media

general
public

organized
labour

participants

financial
markets

Co-
commentators

**Monetary Policy
Framework**

community-of–practice
using cultural tools to
accomplish work

genre
set

built environments
&
digital technologies

**Communications
Strategy**

community-of–practice
using cultural tools to
accomplish work

genre
set

built environments
&
digital technologies

government

academic
economists

universities

think-tanks

business

Diagram 2

So then, what does this depiction of the Communications Strategy as an organizational activity system with an affiliated community-of-practice allow us to see that we might not see otherwise? I would argue that the characterization can help us recognize some of the various ways in which discourse genres function, mediated by digital technologies and built environments, to prompt, shape, coordinate, and apply the processes of collective thinking, rhetorical action, and ongoing learning that enable an organization to perform complex intellectual and discursive work. At the same time, looking at the activity of the Communications Strategy in this manner provides a window onto the way in which a professional organization uses genres of discourse in communicating with the array of outside groups with which it interacts in carrying out its mandate.

As a prelude to the next major section of the chapter, where I examine the role of the genre set in the activity of the Communications Strategy, I want to look now at two particular features of the genre set: the genre knowledge displayed within the community-of-practice associated with the Communications Strategy; and the genre set's relationship to processes of organizational change. In describing the role of the genre set, I will enlist the voices of a number of the people that I interviewed at the Bank. As suggested earlier, the discourse of insiders can offer a unique window onto the indigenous work-world that they communally construct and co-inhabit.

Practitioners' Genre Knowledge

The distributed cognition that is, to use Jean Lave's (1988) phrase, "stretched over" the members of the Bank staff who comprise the community-of-practice engaged in the activity of the Communications Strategy includes a complex network of "intersubjectivities," domains of shared focus, perception, and understanding that cognitively connect individuals within the community-of-practice, with particular intersubjectivities populated according to individuals' respective professional roles. A central area of intersubjectivity is that of genre knowledge—a rhetorical awareness of the ways in which the Communication Strategy's genre set functions. Below I examine four types of genre knowledge observed in my research.

The senior members of the Bank staff involved in making monetary-policy decisions share a common understanding of the two broad, closely linked goals of the activity of the Communications Strategy and its genre set: first, to establish public understanding of and support for the Bank's monetary policy, and second, to contribute to the effectiveness of the policy by reducing public uncertainly about the Bank's thinking, goals, and intentions. According to the Governor:

> At times central banks have to do difficult things, and it's much better if people outside the Bank of Canada understand monetary policy. It's particularly important that the financial markets be aware, but in the long run it's also important that governments and the public understand monetary policy as well. But it's not only a question of support for monetary policy, it's also a question of the effectiveness of policy, on an ongoing basis.

One of the Deputy Governors echoes this view of the dual goals of the Communications Strategy:

> With monetary policy, there's the issue of persuasion, in that part of our communication is to try to get people to understand, and hopefully not just understand, but support our policy. In a democracy, your ability to pursue a policy is related to the public support it generates; otherwise, when things get tough, it's much harder to carry on with the policy. And for that support to be there, public understanding of the policy is essential. But the other thing, of course, is that monetary policy works better when people understand it and align their expectations and decisions accordingly. For example, if the public is convinced that we *really are* committed to keeping inflation under control, if they really do believe that inflation is going to be at 2%, then when it comes to wage negotiations across the country, people won't be asking for 10% increases on the assumption that there's going to be 8% inflation, and employers aren't going to give 10%. So it's a question of the efficacy of policy as well as political support.

Another of the Deputy Governors, jokingly referred to by a colleague as the Bank's "Communications Czar" because of his key role in co-coordinating the Communications Strategy, elaborates on this shared perspective:

> The place I start thinking about the Communications Strategy conceptually, is—what do communications do for us? And you can cut into that several different ways. As a public-policy institution, there's one angle that says you need to be accountable, particularly in our case because, as a central bank, we've got a fair degree of independence from government. And then how do you achieve accountability? Well, you achieve it in part through transparency. And how do you become transparent?— through effective communications. The other angle in this is one of policy outcomes. And that gets into the whole issue of trying to minimize public uncertainty, in terms of what the Bank is up to with monetary policy and why—trying to influence public expectations of where we intend to go with monetary policy, whether it be [the expectations of] households, business, or financial markets, so that these expectations are in line with our goals for monetary policy. And again, you achieve that kind of policy outcome through transparency and effective communications. So communications is important to the Bank both in terms of generating support and in terms of the efficacy of monetary policy itself.

The particular aspect of genre knowledge that we see reflected in these instances of insider discourse—a shared cognizance of the goals of the Communications Strategy—can be viewed, in the context of activity theory, as distributed cognition in the form of a conscious awareness of the larger aims of the activity system. One might speculate here that in any organizational activity system, at least some of the participants will have this kind of explicit "discursive consciousness" (Giddens, 1984, cited in Giltrow & Valiquette, 1994) of its aims, an important communal resource that complements the presumably much larger measure of "practical consciousness" (Giddens, 1984) or "tacit knowledge" (Polanyi, 1966) within the community-of-practice.

A second type of genre knowledge displayed within the community-of-practice engaged in the activity of the Bank's Communications Strategy is an understanding of the division of intellectual and discursive labor involved. Practitioners' knowledge includes an awareness of who is responsible for doing what, and when, in the collective accomplishment of two key tasks: first, monitoring texts in written and spoken genres, produced by groups outside the Bank, that either comment directly on the Bank and its monetary policy or address other topics relevant to the Bank's work, such as economic research and theory, financial analyses, and broader public-policy issues; and second, composing written texts in different internal genres in order to respond to commentaries on Bank policy by outside groups. This genre knowledge is generally tacit, rather than inscribed in and communicated through formal written procedures. As a Deputy Governor responded, when asked about this: "The Communications Strategy, the approach, isn't documented anywhere, so I'm not really sure how it gets communicated to Bank staff, though it certainly gets communicated somehow."[12] (A discussion later in the chapter of how the Communications Strategy's genre set functions as a site for organizational learning will take up this theme.)

Below, a Deputy Governor conveys his sense of how various members of the Bank staff, operating in a variety of professional roles, monitor texts in written and spoken genres produced by certain of the outside groups with which the Bank interacts—a collective, but differentiated-

according-to-role, work effort that allows the organization to remain attuned to external discourses pertinent to its mandate for directing monetary policy:

> For watching the media, we have people in the Library who read the newspapers and wire services—and they're very good at picking up items that specifically mention monetary policy or are related to the economy more generally. And they send us a daily clippings package with the items they've selected. **. . .** As for what the [financial] markets are saying, our staff in [the] Financial Markets [Department] keep up with that, in a systematic way—they talk to people in the markets on a regular basis, getting their views, and also monitor the financial and business press. **. . .** And for things of interest in the academic literature, the Library circulates a daily list of relevant items that have appeared recently, and the staff in the economics departments [i.e., Research; Monetary and Financial Analysis; Financial Markets; and International] get these pieces through the Library and read them. And then sometimes there's a news report in the press about a recent academic study or report, and we'll make sure we get a copy of it through the Library. Or one of our economists comes back from a conference and says, "So and so gave a paper on such and such," and they circulate the paper. So all in all, we're very much aware of what's being said in different venues outside the Bank. Our staff are continually picking up on these things and filtering it and sending it along to us [i.e., the Bank's senior decision-makers].

Another Deputy Governor offers a similar perspective on the division of intellectual and discursive labor involved in this aspect of the Communications Strategy:

> There are people out there, outside the Bank, who issue daily, weekly, monthly, quarterly, and annual commentaries on the economy—for example, the staff economists at major banks produce these, and private-sector firms as well. And then there are the [economic] forecasts produced by other people, such as the C.D. Howe Institute. **. . .** And the Bank looks at all of this, with different people here having different responsibilities, different areas to watch. But we need to be aware of *all this*.

He goes on to display his understanding of the multiplicity of regular one-to-one interactions between members of the Bank staff and individuals in outside groups:

> And there's also the informal contacts between people in the Bank and people outside. There's a lot of this in the economics departments. For example on the academic side—in terms of research and theory—our people talk to academics doing similar kinds of research or who are doing forecasting, and they'll often exchange drafts of work-in progress as well. And there's also the continuous contact with people on the financial side [i.e., with analysts and participants in the financial markets].

Another facet of the practitioners' genre knowledge regarding the division of intellectual and discursive labor inherent in the activity of the Communications Strategy concerns situations in which the Bank decides to respond to outside commentaries on its monetary policy decisions and actions using one of several genres in the genre set. In cases of what are perceived to be significant errors of fact in the news media, the Chief of the Communications Department will,

within a day or two, make a phone call to the particular journalist or reporter in question. According to a Deputy Governor, the phone call will go something like this, "Well, you know, you got the facts somewhat wrong in that recent piece of yours. This is actually how we're operating now . . . ." He continues, pointing to another motive for this particular type of interaction, "it's also a question of educating the media, which is an ongoing effort, given the turnover of people in the media."

When it comes to interpretive critiques of the Bank's monetary policy by outside groups (as opposed to perceived errors of fact in outside commentary), the Bank may decide to respond through written discourse in one of a range of genres. The same Deputy Governor quoted above explains:

> It depends on the nature of the criticism—sometimes the media people are critical and it's not unreasonable, because reasonable people can differ on things. But at other times, we may think it's not quite as reasonable. And then, depending on whether we think it's important to get our message out and in what venue, we'll decide on a way to respond. **.** **.** **.** On the other hand, if it's something significant that appears in an academic forum, we'll respond in an academic forum. For example, I just got an invitation to do a piece in a book that's coming out on what's happened with the economy over the 90's, a piece on monetary policy. And at first I was thinking I'm pretty over-committed with this kind of writing at the moment. But when I saw that the book will also have a piece by [a university economist who is a well-known and professionally respected critic of the Bank's monetary policy] discussing our inflation-control targets, I thought, "Well, I don't know if I will do it myself, but *it will get done* by someone around the place—because I don't think having this kind of message out there, that we think is misleading, is helpful. [The critic's] view is very far from our view, so we need to respond.

The speaker goes on to reveal more of his understanding of the Bank's nuanced approach to, and motives for, responding to external critiques of its monetary policy:

> When the criticism out there is about our position on things, they can take that or not as they like—it's their interpretation. But we may choose to debate their interpretation if we think it's wrong or misleading. **.** **.** **.** We want people to have a clear understanding of what we're thinking about and how we're approaching a particular situation. And if we feel that they're completely misinterpreting what we're trying to do, then that may call for a speech or some other way of communicating our views.

He elaborates on the thinking underlying the decision of whether the Bank will choose to respond, and if so, in what particular genre:

> We take different opportunities to deal with particular kinds of issues. For example, I'll be giving a 45-minute presentation at the Western Economics Association Meetings next month, quite a long paper. I thought it would be a good opportunity to get some of our messages out, our views on certain issues that have come up recently; and it's also about rejoining the debate with [the critic of the Bank mentioned above] on the range of the inflation-

> control targets. Another example: the issue of whether the foreign exchange
> rate should be fixed or flexible—something that's been showing up in the
> press lately. The Governor chose to give a speech on that the other day,
> putting out the Bank's views. In fact, each time he gives a speech, he
> ponders whether it should be the regular type of speech dealing with current
> conditions in the economy, or whether there's some particular issue he wants
> to focus on. **. . .** So we're always very much aware of what's being said out
> there, but whether we feel the need to respond, and when and how, depends
> on the nature of the comment, who said it, how directly it relates to the
> Bank's business, where it was said, whether it's likely to be taken seriously,
> how important it is to get our side of the issue out, and so on.

This particular aspect of practitioners' genre knowledge—the sense of what constitutes an appropriate discursive response to a particular instance of external commentary on the Bank's monetary policy—reminds one of Anne Freadman's (1994) notion of "uptake," where a text in a particular genre, produced by one player, will tend, in the natural course of events, to elicit a response through a text produced in a second genre by another player. In this case, we see a text produced by another organization, in a genre within the larger genre system (Bazerman, 1994b), evoking a discursive response from the Bank through one of the genres of the Communications Strategy.

When the Bank does decide to respond to an interpretive critique of its policy from an outside group—as picked up by the Bank's communicative "radar" in an external text in the genre system—employing a particular internal genre, the composing of the text can be highly collaborative and iterative, an instance of distributed cognition that serves several functions: It elicits ideas from various individuals, enabling a collective and heuristic mode of thinking, and it contributes to organizational learning (a topic that will be taken up in some detail later in the chapter). A Deputy Governor provides his perspective on this form of collaboration:

> When you give a presentation, or a speech, there's always a paper to give out
> to the press. **. . .** And when I'm preparing a presentation that has policy
> implications of any kind, I'll always run the paper by the Governor, the other
> Deputy Governors, the Advisors, and sometimes certain other people as well.
> And I look very carefully at all their comments and I use them. So it's quite
> collegial in that sense. The *MPR*, the *Update to the MPR*, the *Annual Report*,
> the Governor's speeches—we all look at drafts of these, all the Governing
> Council, and other people too. It's always a collective effort, and you learn
> from doing it.

This quotation reflects another type of genre knowledge that is important for writers within a professional organization: who should be included in the document cycling process (Paradis, Dobrin, & Miller, 1985; Paré & Smart, 1994; Smart, 1993) for texts in any given genre within a genre set. (We will see an extended description of the collaborative drafting-reviewing-revising cycle later in the chapter in an account of the preparation of the Bank's *Monetary Policy Report*.)

A third type of the genre knowledge linked to the Bank's Communications Strategy is the vernacular of shared terms employed by staff members in talking about its activity and genre set. Clifford Geertz (1983) points to the importance—for the ethnographic researcher attempting to

illuminate the local, self-constructed reality of a particular social group—of looking carefully at "key terms that seem, when their meaning is unpacked, to light up a whole way of going at the world" (p. 157). In my interviews with informants at the Bank, a number of such terms came up repeatedly, including, for example, the dichotomy of "Old Bank" versus "New Bank" and the terms "transparency," "primary communication vehicles," "key messages." This form of genre knowledge—the common use of conceptually rich terms—appears to be essential for the inter-personal communication required of genre users within a community-of-practice.

A closer look at the terms mentioned above will provide readers with a sense of their communicative function in relation to the genre set we are looking at here. The "Old Bank," according to a Deputy Governor, was one where the organization believed that,

> to be effective, monetary policy had to involve a lot of secrecy, to be surrounded by mystique, and that central bankers had to be very careful in their communications. As an observer, you could take the Bank's words in different ways, and you had to look at the entrails, as it were. The view was that monetary policy was effective only if it surprised the markets, and so you couldn't give out any clues about what you were going to do.

In contrast, as the "New Bank" with its Communications Strategy, the organization takes a very different view:

> But now, we've really moved in the other direction, as have most of the world's other central banks, and we've moved towards much greater openness. Having inflation-control targets has helped a lot in this, because once the objective is clearly defined, and there's no quibble about the objective, then central bankers feel a lot freer about explaining what they're doing and why they're doing it. A large part of the fear in the past was always a fear of having a monetary policy that's too expansionary. **. . .** So central bankers have become a lot more open, more transparent.

This brings us to another term in the vernacular of the Communications Strategy that is frequently used by members of the community-of-practice using the genre set—"transparency." The use of this term in contemporary political and corporate discourse has made it somewhat suspect. But what exactly does the term "transparency" appear to mean within the Bank? According the Deputy Governor quoted above,

> Transparency means something particular **. . .** it's not just about giving out all the information you have; just giving out more information is not necessarily being transparent. There's a distinction between giving out everything you have versus giving out only the information that's relevant. The second approach is informative, and helps people understand what you're trying to do, while the other isn't necessarily informative at all, since what's important can easily get lost in a maze of detail.

The Chief of the Communications Department offers a qualification to this description of transparency:

> There's a difference between appropriate openness and inappropriate
> openness on the part of the Bank. It's the difference between, on the one
> hand, trying to help people to understand how we look at world, what we
> think inflation is going to do, and what our longer-term goals for the economy
> are, and on the other hand, revealing what the Bank is going to do in the
> short term with interest rates, which way we're leaning—the Bank can do the
> former, but not latter.[13]

The Bank's senior officials share the view that an important factor in achieving the goals of the Communications Strategy is allowing outside groups to understand something of how the organization looks at the world, or more specifically, at how it analyzes information about the economy. Providing an example of this particular facet of transparency, the Chief of the Communications Department talks about the Bank's communicative interactions with the "Bank-watchers," a group comprising analysts in the financial markets who make a living by closely following the central bank and its monetary policy and advising clients on their investments accordingly, and financial journalists who write about the Bank's monetary policy in their news stories and columns:

> The approach the Bank takes in its Communications Strategy—through the
> *Monetary Policy Report*, through the Governor's speeches, and so forth—is to
> help the people who watch us closely understand *how we think*. For example,
> with the "Bank-watchers," it's a case of, "Look, you too can evaluate the
> same range of information, economic indicators, that we evaluate—the
> [Consumer Price Index] just went up, or didn't go up, whatever—and you can
> learn how we look at it." And the good commentators, who are paid to say,
> "Well, the Bank is going to move [i.e., adjust Canadian interest rates] or not
> going to move," they—if they're doing it right—they're learning *how the Bank
> sees the world*. We're constantly trying to help people to understand *how the
> Bank looks at the numbers*, to understand all this, through our
> communications. It's almost like an ongoing do-it-yourself central banking
> course for people who are really interested.

Parenthetically, in this quotation we also gain a sense of how people who work at the Bank, in viewing it as a sentient and thinking entity, appear to possess an intuitive sense of the distributed cognition operating within the organization. In interviews, the informants repeatedly expressed similar perceptions. For example, a Deputy Governor referred to the regional representatives across the county as the Bank's "ears and mouth in the regions" and to the senior Bank officials in Toronto and Montreal as "the Bank's eyes and ears in the [financial] markets." I would suggest that such metaphorically expressed intuitions reflect the practitioners' tacit awareness of the phenomena of distributed cognition, and so add empirical support to the theory-influenced observations and theory-inspired interpretations of a researcher.

Two further terms to mention here in connection to the genre knowledge associated with the activity of the Communications Strategy are "primary communication vehicles" and "key messages." When members of the Bank staff use the first term, they are referring to a number of high-profile genres in the genre set, including the *Monetary Policy Report*, the *Update to Monetary Policy Report*, speeches and lectures by the Governor, the *Annual Report of the Bank*

of Canada, *The Bank of Canada Review*, and the Governor's presentations in the Canadian Parliament (two presentations each year in the House of Commons and one in the Senate). The term "key messages" refers to the most salient points included in any particular text, such as the *Monetary Policy Report*, as when a Deputy Governor mentions the primary questions asked by the Communications Department in analyzing commentaries in the media following the release of the *MPR*: "Were the key messages in the report picked up? Were we effective in conveying our key messages?" (Later in the chapter we will see how the key messages in the *Monetary Policy Report* are highlighted in a summary text attached to the *MPR*).

Shared terms such as those discussed above constitute a linguistic and conceptual shorthand, saturated with historically accrued shared meanings, that functions as an essential tool for genre users within a community-of-practice. And for researchers, focusing on such terms is an important way of gaining insight into the world-view of a community-of-practice, for as Clifford Geertz (1983) suggests, "the vocabularies in which [a group of practitioners converses offer] a way of gaining access to the sorts of mentalities at work in [it]" (p. 157).

A final type of genre knowledge within the community-of-practice associated with the Communications Strategy that I will discuss here, and one that is essential to the rhetorical effectiveness of the genre set, involves the discursive construction of the public-policy world outside the Bank through the differentiation and characterization of a constellation of outside groups. Consistently, the people interviewed in my study spoke about the seven social groups I have mentioned—the media, the general public, government, the financial markets, the business sector, organized labor, and academia, the latter taken to include both university economists and those working in private-sector "think-tanks." Further, the people I interviewed shared very specific notions about the nature of each of these external groups as a distinctive audience for the Bank's communications. And frequently, this characterization of particular audiences was accompanied by tactical notions on how best to communicate with them.

Here, for example, a Deputy Governor talks about the Bank's "strategic" approach to communications:

> We've been trying to focus our communication vehicles to ensure that we know how we're using them—Who are the different audiences we want to get at? How frequently should we try to get at them? What arguments are relevant to them? And what kind of language do we want to use for each audience—the general public versus elite business groups, organized labor versus people in the financial markets? And then we have different ways of communicating with politicians as one audience, the analysts in the [financial] markets as another, and so on. . . . We now have a Communications Department that helps with all this. So what we're doing these days is trying to be much more strategic: how to use communications, how to be effective.

Another Deputy Governor echoes this rhetorical concern, again pointing to the role of the Communications Department: "If you want to communicate with someone, you have to know where they're coming from, what they're looking for, what's important for them? What are our common interests and how can we maximize the value of the relationship for both sides? And

our Communications Department helps us with this." According to the Chief of the Communications Department, with the advent of the Communications Strategy,

> There's now generally a better sense [in the Bank] of relating to the specific audience, recognizing that there is one, indeed that there are many of them. And a sense of recognizing that to be accountable, you have to be able to explain what you're doing in a way that makes sense to a lot of different groups, and so you need different kinds of arguments and language, **. . .** to approach different audiences in different ways.

This type of genre knowledge also extends to a shared sense of specific rhetorical tactics for communicating with a given audience. The Governor's Senior Assistant, who works with the Governor to develop speeches and other texts, provides an illustration of this rhetorical approach:

> We're trying to tailor our messages better to our different audiences. For instance, one audience may lend itself to more technical issues than another audience. For example, the Governor recently gave a talk at the Fraser Institute [a conservative economic think-tank] in Vancouver, and we thought it would be a good time to talk about productivity issues in the economy. Or with a speech in one of the regions, say: depending on the location, we always try to have something on the regional economy, and try to mention what most matters to them at present.

She adds an interesting side-note on the difficulties that the use of new communication technologies can entail in this effort to produce audience-specific discourse:

Of course, it's tricky with these speeches, though. Regardless of the audience, we try to use simple language, because you can't get away from the fact that you're preparing the speech not only for that particular audience—speeches get broader distribution and coverage than they used to, now that we put them on our Web site as well. So you have to have a product that most people can understand.

Another such specific rhetorical tactic involves monitoring media sources that a particular audience can be expected to follow, in order to anticipate views about monetary policy that this audience might pick up through the media. For example, as the Chief of the Communications Department explains, "We follow the news on the Report on Business cable channel, which has more extensive coverage of the Bank. One part of trying to learn what particular audiences think of the state of economy, and monetary policy, and so on, is to monitor sources of information they're exposed to." The Governor describes a similar tactic:

> My colleagues on the Governing Council and I feel the need to read everything we can find that's written about the Bank in the press, because that's where the public picks up a lot of its ideas. For example, whenever I go out to give speech, there's always a press conference afterwards, and I know that the questions I'm going to get often come up because of what people have been reading in the newspapers about the Bank. So to be prepared, I need to know what's being said in newspapers.

The four types of genre knowledge described above are clearly essential to the functioning of the Communication Strategy's genre. This is not to say, however, that *all* the members of the community-of-practice possess *all* this genre knowledge; rather, it is distributed in a differentiated pattern within the community-of-practice according to the particular professional roles of individual members. And as well, while a certain amount of the genre knowledge is explicit, it would appear that much more of it operates on a tacit level.

The Genre Set and Processes of Organizational Change

As theorists from the Buddha on have repeatedly told us, the world—both the material and socially constructed versions—is constantly changing. This truth—and this does seem to be the appropriate word in this instance—points to another significant feature of the genre set associated with the activity of the Communications Strategy: its relationship with processes of organizational change. As we can see in the shift in the Bank of Canada's external communication practices over the seven or eight years since the initial implementation of the Communications Strategy, changes in work activity, discourse genres, and technologies appear to occur dialectically, in complex patterns of causality. One way of thinking about this causality is to call on Wanda Orlikowski's (2001) schema, mentioned earlier, as a frame of reference. For Orlikowski, while the concepts of *planned change* and *technological determinism* both appear to provide partial explanations for the changes that occur in organizations, the notion of *situated change*, according to which change occurs continuously as individuals improvise effective practices for responding to unfolding events in their work-world, is more comprehensive and carries a broader explanatory force.

Indeed, in the evolution of the genre set genre set associated with the Communications Strategy, we can see evidence for the causal influences of planned change and technological determinism. For example, in the vein of planned change, the Governor in office at the time of my interviews in June 2000, Gordon Thiessen, appears to have been the prime mover in a major, rationally conceived and implemented change in the way the Bank communicates with other social groups in Canada's public-policy sphere. According to one of the Deputy Governors,

> Gordon Thiessen has really been the driving force behind all of this—from his very first speech as Governor in 1994, when he emphasized communication and accountability. And there were other speeches as well, and two of the Governor's lectures—for example the Gibson Lecture that the Governor gave in 1998 has a long section on transparency and accountability, and how this improves the efficacy of monetary policy. He's been really determined about it over his time as Governor. Indeed, during Gordon's tenure innovations have been taken every year practically, in one way or another, to try to strength and improve our effectiveness on the communications side.

But this gives rise to the question of why the Governor, immediately upon taking office, decided on this dramatically innovative line of action. The Deputy Governor quoted above provides one answer: "If we put things in an historical context, you've had a growing trend within society for more information and for wanting public institutions to be accountable." And consequently, as

another deputy Governor says, "There's been a convergence among central banks around the world towards greater clarity, transparency, openness." However, having been an employee at the Bank during the transition in 1993-1994 from the tenure of the former Governor to that of Gordon Thiessen, I would add another detail to this historical perspective. The preceding Governor had received a great deal of public criticism for the Bank's high-interest rate policy of the early 1990's, a situation not at all mitigated by the perception of the media and many members of the Canadian Parliament that he could sometimes be condescending and dismissive in his interactions with journalists and Parliamentarians. Further, this criticism of the Bank's policies and the former Governor's demeanor was at times accompanied by calls to radically restructure the Bank in a way that would better represent the different regions of the county and break down the Central-Canada, Ottawa-centric world-view seen by many as insulating the Bank from the local economic concerns of the different regions of the county. In any event, while we appear to have reasonably good evidence for the existence of planned change on the part of the Governor, Gordon Thiessen, his agency in regard to the activity and genres of the Communications Strategy was clearly a response to a number of historical trends and events, both national and global, in the political and economic environment in which the Bank operates.

At the same time, though, other vectors of change also appear to have been at play over the period since the initial implementation of the Communications Strategy. On one level, it would appear that the emergence of new information/communication technologies such as the Internet and the Intranet has prompted important changes in the Bank's discourse genres. And while it is difficult to gauge the degree to which these changes are indeed a manifestation of technological determinism, in the sense of technology superseding human agency, it remains that there has been a clear correlation between the availability of new technologies and the evolution of the Bank's genres. (Though, parenthetically, we must remember that the correlation of events and causality between them are not the same thing. As a former Senior Deputy Governor once put it in an interview a number of years ago: "You know, if you think about it, you always see fireman at fires. And generally, the bigger the fire is, the more firemen you'll see there. So there's a definite correlation between fires and fireman. But does that mean you can say that the fireman themselves are setting the fires, that they are the cause of the fires?" Point well taken, sir.) One of the Bank's English-language editors tells an interesting counter-story, however, about technological determinism:

> As you know, the senior management and others throughout the Bank rely on the daily clippings package prepared in the Library. Well, last year the Library tried to eliminate the service. They said, "Well with the Internet, people can go on it themselves and find the material." And there was a huge reaction; in fact, all hell broke loose. You had everyone from senior management down saying, "Yes, you *could* find the stories yourself, *if* you had eight hours to do it." Nobody has time to go on the Internet looking for that stuff. And so that proposal died very quickly.

Another counter-example of technological determinism concerns the continued wide circulation in the Bank of hardcopy drafts of work-in-progress, annotated with reviewers' handwritten notes and comments, and the hardcopy versions of internal and external reports that Bank staff expect

to receive and continue to read. Why is the multiple drafting and document cycling that goes on in the Bank not done electronically rather than on paper? And why do Bank staff not employ laptop computers or electronic readers for reading reports, rather than continuing to rely on hard copies. One could cite tradition and inertia as a reason, but a much more important factor, I think, is ease of portability—people in the Bank carry their work with them, on the bus, on the train, on the plane, everywhere they go, and in such locations a paper text is more practical to work with than an electronic text on a laptop computer or an electronic reader, particularly if the reader wishes to annotate the text. (Brown & Duguid, 2000, and Sellen & Harper, 2002, both provide compelling arguments to account for the continued, and indeed expanding, use of paper documents in a digital world.)

Finally, the concept of *situated change* appears to account for a great deal in the evolution of the activity of the Communications Strategy and its genre set. The Chief of the Communications Department provides an example of this causal factor:

> With the development of the Bank's Web site, there wasn't any bureaucratic control structure to get it going. If that had been the case, we'd probably still be debating what should be on the site. It just kind of happened. Some people who were interested in it looked around and saw what other people out there in other organizations were doing, talked to people in the Bank who had material that could go up on the Web, and it's evolved from there.

This quotation reflects a subtle but important variation on Orlikowski's (2001) notion that change occurs as individuals respond, in ad hoc ways, to new developments in their work-world. While she sees organizational change as "grounded in the ongoing practices of [individual] organizational actors," the data I gathered in the Bank suggest a more communal version of situated change, one in which the community-of-practitioners acts collectively to improve the rhetorical effectiveness of the genre set associated with the Communications Strategy. A Deputy Governor provides a sense of this collective effort:

> We try to keep abreast of outside commentaries on monetary policy—from the media, from other economists, and so on. It's a question of gauging whether our messages are getting through. Are we explaining things properly? It's about getting feedback—we're trying to communicate, and communication is always a two-way street. And when you send out a message, was it understood the way you meant it to be, or was it understood differently? And if it's not understood the way you intended, then you have to gauge why this was. Is it because people have different opinions about the state of the economy? **. . .** Or is it because we missed something in our communication—that our message simply didn't register with people or that we were too opaque? You want to get a sense of this and adjust accordingly. The Communications Department has a group that tries to help us see whether we've been effective in conveying our messages and how we can improve.

As he suggests, the Bank's Communications Department is responsible for guiding the ongoing communal effort to increase the effectiveness of the genre set in the organization's

communicative interactions with outside groups. The Senior Assistant to the Governor, who is a member of the Communications Department, explains:

> One of the things that the Department does is try to think about how the Bank can better orchestrate its external communications in order to accomplish what it wants to do with all its messages on monetary policy. **. . .** We look at strategies for how we can get better at conveying our messages more clearly in the future. We're always asking, "For the various means of communications, and our different audiences, what are the most appropriate ways of delivering those messages?" **. . .** And then this also involves passing on suggestions to the Governing Council about the Bank's communications, including how to best match the messages to their audiences.

The discussion here touches on the concept of organizational learning, a theme that will be developed further later in the chapter.

With these two features of the genre set as context, in the next section of the chapter I turn to the role that the genre set plays in the activity of the Communications Strategy. In this account I again include numerous quotations from the Bank's staff in order to produce a "thick description" that conveys a sense of how the participants themselves experience and construct theories about the activity of the Communications Strategy.

The Role of the Genre Set in the Activity of the Communications Strategy

Functioning as a culturally constructed tool in a local sphere of goal-directed professional activity, the genre set associated with the Bank of Canada's Communications Strategy is a multi-faceted, socio-rhetorical site for accomplishing complex intellectual and discursive work within an organizational community-of-practice. To understand how the genre set is used in accomplishing the work of orchestrating the Bank's communicative interactions with other groups in Canada's public-policy sphere, we need first to consider more closely what it is that constitutes an individual genre. An organizational genre can be viewed as a distinctive profile of regularities across four dimensions: a set of texts, the composing processes involved in creating these texts, the reading practices used to interpret them, and the social interactions of writers and readers performing a variety of professional roles (Paré & Smart, 1994). By extension, an organizational genre set can be viewed as a complex meta-profile of texts, composing processes, reading practices, and reader/writer roles and interactions.

With this notion of genres and genre sets in place, I want to look now at the role that the genre set examined in this study plays in the activity of the Communications Strategy, a role that can be seen to include three primary functions. First, operating through an organizationally defined division of cognitive labor, the genre set serves as a site for co-coordinating the intellectual and discursive efforts of a large number of individuals within a community-of-practice. Second, the genre set generates, shapes, and communicates a particular institutional brand of "public information" (Bazerman, 2001)—the "official" discourse, written and spoken, that constitutes

the Bank of Canada's public position on its monetary policy. And finally, the genre set acts as a site for organizational learning—specifically, two kinds of learning: first, the learning the occurs through attending to the views of outside groups regarding issues essential to the Bank's mandate of directing monetary policy—most notably the issues of how the Canadian economy functions and how monetary policy interacts with the economy[14]; and second, the development of rhetorical knowledge about the effective use of the genre set.

Coordinating intellectual and discursive work within a community-of-practice

Functioning through the organizationally defined division of labor inherent in the activity of the Communication Strategy, the genre set serves as a site for co-coordinating the intellectual and discursive efforts of various individuals performing a range of professional roles. Senior executives, staff economists, regional representatives, corporate communications specialists, editors, a speech-facilitator, library personnel, and others collaborate as members of a community-of-practice and as genre users to accomplish the work of orchestrating the Bank's communicative interactions with other players in Canada's public-policy arena.

To gain a sense of how the genre set associated with the Communications Strategy performs this function, we will look at the chain of discursive events involved in the production, public release, and promotion of the Bank's *Monetary Policy Report*, its "highest-profile communications vehicle" (to quote a Bank official). A graphic representation of this temporally sequenced, but also cyclical and often recursive, chain of events is provided in Diagram 3. I will describe the chain of discursive events associated with the *MPR* in a degree of detail that will foreshadow and provide a context for the accounts of two other primary functions of the genre set that follow in this section of the chapter. In this description, we will see a complex pattern of collaborative cognitive and rhetorical work, configured according to the participants' professional roles, with all of this effort oriented towards accomplishing the two larger organizational goals of the Communications Strategy discussed earlier: establishing public understanding of and support for the Bank's monetary policy and contributing to the effectiveness of the policy by reducing public uncertainly about the Bank's thinking, goals, and intentions. We will also see how spoken and written genres are used interactively and, at the same time, how these genres are mediated by a range of digital technologies and built environments. Although temporally sequenced, the chain of discursive events linked to the *MPR* is also cyclical and frequently recursive, and in order to represent it in narrative form, as I wish to do here, we need to cut into the cycle at some specific point, and so we will begin with the preparation of the *MPR*, a twice-yearly occurrence.

Chain of discourse associated with _Monetary Policy Report_

| preparation & distribution of *MPR*, summary, Q & A's | → | pre-release of *MPR* to journalists in "lock-up" facility | → | official release of *MPR*, press conference with Governor | → | Governor's presentation to Finance Committee in House of Commons | → | briefings by Deputy Governors, Senior Advisors, & regional representatives to audiences across Canada | → | preparation of media-analysis report on media coverage of *MPR* |

Digital technologies & built environments in use:
networked computers, intranet, "lock-up" facility
press conference facility, telecommunication equipment

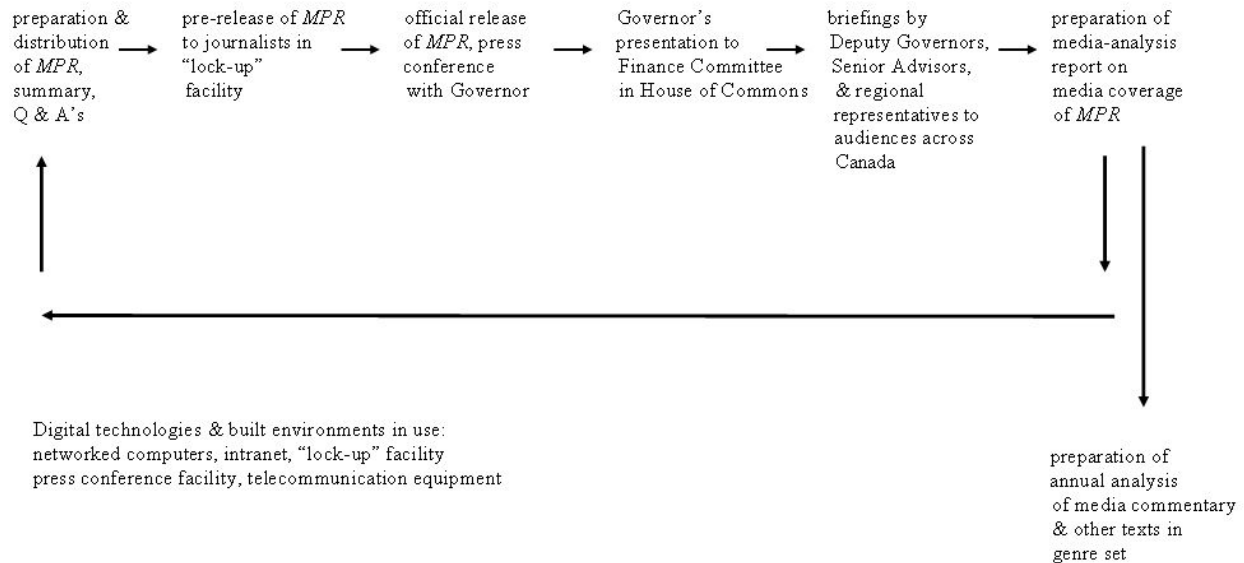preparation of annual analysis of media commentary & other texts in genre set

Diagram 3

Within the Bank, the *Monetary Policy Report* is considered the Communications Strategy's most important genre—the institution's foremost discursive medium for communication, transparency, and accountability. Texts in the *MPR* genre convey the Bank's current view of conditions in the Canadian economy, describe the organization's recent monetary policy actions and their impact, and look ahead to what the Bank believes the future holds for the economy (see a PDF version of the April 2002 *MPR*). One of the Bank's Deputy Governors describes the organization of these texts:

> The *MPR* has three parts to it. One part looks back over what the economy has done over the last six months. Then there's a second part on financial markets, where we also talk about why we've adjusted interest rates, if we indeed have adjusted them. Those two parts are what I think of as our statement of accountability—what's happened to inflation relative to our inflation-control targets, and what we've done to achieve those targets. Then there's a third part which is the outlook—where we see things going, looking ahead over the next six to twelve months or so.

For the Bank, the *MPR* functions as a stable rhetorical medium for enacting the organization's commitment to transparency and accountability, a commitment it views as central to the Communications Strategy.

The production of texts in the genre of the *Monetary Policy Report* occurs at the intersection of two activity systems: the Monetary Policy Framework and the Communications Strategy. The Bank staff involved in preparing the *MPR* draw on locally constructed knowledge derived from the activity of data-gathering, economic analysis, and policy-making that comprises the

Monetary Policy Framework and transform this knowledge into a unified, consistent discourse of "public information" (Bazerman, 2001) intended for outside audiences within the different social groups mentioned earlier. (The movement from active disciplinary knowledge to public information will be described in some detail later in this section.) The preparation of the *MPR* is highly collaborative, involving more than a score of Bank personnel: staff economists in three different departments, Senior Advisors, the members of the Governing Council, English- and French-language editors, translators (who translate English text into French), and graphics and production specialists. As the collaborative production of the *MPR* unfolds, it exhibits a highly regularized and structured pattern of work practices, professional roles, and social interactions. Through the lens of activity theory, the *MPR*, as part of the Communication Strategy's genre set, can be seen as one facet of a culturally constructed tool used to distribute cognition and organize intellectual and discursive work according to an organizationally defined division of labor. I will describe the collaborative process underlying the production of the *MPR* in some detail below in order to provide a sense of its intricate complexity.

Here is how one of the Bank's Deputy Governors describes the production of the *Monetary Policy Report*, as he experiences it:

> The Research Department and [the Department of] Monetary and Financial Analysis take the lead in preparing the first draft, with input from [the] International [Department]—with all this work being coordinated by the Chief of [the] Research [Department]. Before the drafting even starts, though, we [i.e., the speaker and two other Deputy Governors] sit down with the writers from the departments to identify broad themes. Then they do a first draft and send it on to me and [the two other Deputy Governors]. We then meet with the authors to talk about our response at a very high level—we give them our take on the broad messages and the way things fit together. And then they generally go back and produce a revised draft. From there, we have a week-by-week schedule that lasts about four weeks, with each new draft going to the full Governing Council. Each time, the Governing Council will have a discussion of the draft, and people's comments [annotated by hand on individual copies] are collected and sent back to the authors. So it's all very much an iterative process. **. . .** And then it gets to the point where someone in the Governing Council—it's been me in the past—takes it over and works on the sensitive parts towards the end of the report where we talk about conclusions and how to characterize the policy thinking behind the analysis. And then the [English-language] editors in [the] Communications [Department] get drawn into the process, at a stage about three weeks from publication, and we work together on drafts that we cycle through the Governing Council for comments. **. . .** At the same time as we're working together on this, the editors are also working with the people in production and layout, getting it all ready for the printers. And then of course there's also the translation process [to produce a French version of the text] and the editing in French.[15]

As the Deputy Governor explains, towards the end of the production process for the *Monetary Policy Report*, a separate summary of the report is also prepared through its own document-

cycling process (the text of the April 2002 summary can be viewed on the Bank's Web site at: http://www.bankofcanada.ca/en/mpr/pdf/mprsum_apr02.pdf):

> At the same time as the report itself is being written, the editors are also working with people in the Communications Department along with me and [a Senior Advisor] on creating a separate summary of the *MPR*, four pages or so. And there will usually be several iterations between us before the summary goes to the Governing Council for review. This summary is a relatively new initiative for us.

One of the two English-language editors picks up the narrative from her perspective at the point when the editors typically get involved in the production process, which she describes as "a team effort, to say the least!":

> Well it's angst, heavy-duty angst. Once the report comes to us, it's [the Deputy Governor] and us and the Governing Council. We set up a very stringent schedule, a three-week schedule: we get the draft from him [i.e., the deputy Governor acting for the Governing Council], we have a day to edit; we return it to him, it gets revised, goes to the Governing Council; they have two days to look at it, it comes back to him; he does those revisions, gets it back to us; we have a day, they have three days—it goes like this, over a three-week cycle. **. . .** We have a three-week cycle of practically editing in the bathtub, and it is heavy, heavy, heavy.

The editor goes on to describe the nature of the editors' particular professional role in working on the various iterations of the report:

> Our main job is to try to make the report approachable, understandable, readable, as much as is humanly possible. **. . .** We do a lot of rewriting. The first couple of drafts, I'd say we virtually rewrite it 75%. **. . .** Sometimes it's restructuring, sometimes it's rewording. The whole idea is to make it understandable to people outside the Bank: Why are we doing what we're doing?—What's happened in the economy? What did that tell us? Why are we doing what we've done? And what's the outlook from here? **. . .** The average business person out there, certainly, has to be able to understand it.

As this account reveals, the composing process associated with the *Monetary Policy Report* is highly regularized and structured, with the benefit to the organization of predictability and efficiency. As one of the English-language editors comments, "The whole thing has become a pretty structured, cohesive process, twice a year. Now they know what to expect, and we know what to expect, and it works very well." However, this was not always the case. According to the editor, when the *MPR* was first produced in 1995, the composing process was much more *ad hoc*, and it took several years for the current structured process to emerge and stabilize.

At the same time as the *Monetary Policy Report* and its summary are being prepared, a matching set of questions-and-answers material (*Q & A's*, in the Bank vernacular) is also being produced. These *Q & A's* are intended for the use of Bank staff who will be responding to questions from members of the media and other audiences about the *MPR*, including, typically, the Governor,

the Deputy Governors, one or two Senior Advisors, and the regional representatives. The Chief of the Communications Department describes the collaborative process of constructing the *Q & A's*, an account that once again, if viewed through the lens of activity theory, provides a sense of the distributed cognition and complex division of labor involved:

> The Communications Department coordinates the preparation of the *Q & A's* package. Typically in coming up with the questions, we have a number of sources. One involves monitoring the media for recent commentaries on monetary policy, because we know this commentary is likely to show up in the questions the journalists ask. As well, we pick up on questions in letters sent to the Governor or in e-mail messages sent to the Bank through our Web site. And we also usually get some questions from the staff economists. But we [i.e., staff in the Communications Department] also put on our pretend media hats and try to think of slightly off-center questions that journalists could pose, questions that the economists might not think of. And then when we have the list of questions defined, there will be some questions where we wouldn't worry about developing an answer; it's more by way of, "You could get this question coming at you from this angle." But then there are other questions where we do develop answers. Most of these questions would have the answers prepared by the staff economists, though some [of the answers] could come directly from a Deputy Governor—you know, the members of the Governing Council have talked about them; or the Governor himself may decide there are a couple of questions in particular where he wants to develop his own answers and share them with his colleagues and get some feedback on them, and then send them to us.

As the Chief explains, the *Q & A's* are used to a varying degree, and in different ways, by the Bank staff responsible for responding to questions from journalists and others about the Bank's monetary policy as represented in the *MPR*, following its official release: "People draw on them as they will, or not, depending on how experienced and comfortable they are in dealing with the media and other audiences."

While individual *Q & A's* packages are created for specific events, such as the release of the *Monetary Policy Report*, *The Bank of Canada Review,* or a speech by the Governor, they are cumulatively integrated over time into a meta-set of *Q & A's*. This meta-text, organized by topic and constantly updated and revised, is available on the Bank's Intranet as an IText for shared use within the organization by those preparing for communicative interactions with external audiences. As collaboratively produced texts serving as an important rhetorical resource for a variety of different people in the Bank, the *Q & A's*—both the individual packages and the meta-set—are an excellent example of distributed cognition in action (or in activity, perhaps I should say).

When the final versions of the *Monetary Policy Report*, the summary, and the *Q & A's* have been completed—usually several days prior to the official release of the *MPR*—they are all posted to the Bank's Intranet so that the senior staff in the Ottawa head office as well as the regional representatives across the county will have easy access to them. The material on the Intranet is also accessible to senior Bank staff traveling on business outside the county, as the Chief of the

Communications Department explains: "Say a Deputy Governor is off in the U.S. on business, and is going to face questions from the media about the *MPR*—they can dial in and remind themselves of the questions we're anticipating, and the answers to them." As a Deputy Governor puts it, regarding the Intranet, "With this kind of access, everyone is wired."

The next event in the discursive chain is the pre-release of the *Monetary Policy Report* to the media in what is known as "the lock-up." Several hours prior to its official public release, copies of the document, with an attached summary that opens with a one-page statement of the "highlights," is given to journalists from the wire-service agencies and newspapers who are assembled in a specially equipped room at the Bank. One of the Bank's Deputy Governors describes the event:

> With the *MPR*, we now do a lock-up. We have a facility where the journalists come in a couple of hours before the release of the report, and it's all equipped for them to prepare their stories. Then they're given the report. And they also have the attached summary, which begins with the highlights page—boom, boom, boom, boom, boom—these are the five key messages. And part way through, one of the Deputy Governors comes into the lock-up and makes a 5- or 10-minute presentation on the key messages, and is then available for not-for-attribution discussion. And it's usually a pretty good exchange. And then finally, at the official release time, we pull a switch and all the stories go out at the same time, so it's a level playing field for the different news people.

A particularly interesting aspect of the "lock-up" as an innovation for the Bank is the senior staff's perception of the event as a temporal and architectural solution to a serious rhetorical problem. Previously, journalists would not see the *MPR* until its official release, at a press conference with the Governor. From the Bank's perspective, this situation imposed a pattern of hasty and distorted reading and subsequent flawed writing by the journalists—a pattern the Bank felt did not serve its purposes for the *MPR*. The Deputy Governor describes what this scene used to look like: "Literally, in the past, when the *MPR* was released, you'd see [the journalists] reading the report and writing their stories at the same time, because the competition is so intense that the timeliness of getting those headlines out there quickly was crucial to them." The Governor of the Bank explains how this affected the journalists' reading of the *MPR* and their subsequent production of news stories about it: "We found ourselves in a situation where the fierce competition among the wire-services and newspapers to get their headlines out first meant that we often had somewhat garbled and sometimes even wrong messages coming out because they didn't have enough time to really read the report."

According to the Governor, the implementation of the lock-up, an innovation for the Bank proposed by the Chief of the Communications Department, "has improved things dramatically; [the journalists] have got all the time in the world to read the report, absorb the information, and write their stories."[16] The Deputy Governor adds: "You don't want the journalists' stories to misrepresent what it is we're trying to get across in the *MPR*. With the lock-up, the journalists are given time to digest the information and understand what's there before they write their stories on it. The summary, with the key-messages page, is very important here as well, in that it

focuses people on the essential points." And on a more general note, he comments, "You're always trying to manage the communications process effectively, trying to minimize misinterpretation by the media. And there's a lot of infrastructure that goes with that." Here we see an illustration of the mediating influence of a built environment and its digital technologies on the users of genres, in this case a mediating influence that has been intentionally designed to have a preconceived effect on readers. The Bank has used the lock-up facility as well as a particular genre feature, the summary and "key-messages" page attached to the *MPR*, in an attempt—and a successful attempt from its perspective—to influence how a key audience approaches and reads the document, builds an understanding of its contents, and produces a subsequent written commentary. In a sense, borrowing (and stretching) a term from Bakhtin (1981), one might say that in the lock-up facility/event, with its temporal and spatial "infrastructure," the Bank has created a chronotope intended to shape the journalists' behavior as readers and writers, forcing a moment (or in this case, two hours) of kairos upon them.

Immediately after the lock-up comes the official release of the *Monetary Policy Report* at a press conference in another area of the Bank where the Governor meets with journalists, with the event being recorded for television and radio (see http://wwwtor.activate.net/bankcanada/Apr24-02/1pm/en/index.htm for an audio file of the Governor's April 2002 press conference). At the same time, the *MPR*, along with the summary, is posted to the Bank's official Web site. Later that same day, the Governor visits the House of Commons in the Canadian Parliament to make a presentation before the Finance Committee on the *MPR* (see http://wwwtor.activate.net/bankcanada/Apr24-02/3pm/en/index.htm for an audio file of the Governor's April 2002 presentation). According to a Deputy Governor, "When the Governor goes to the House [of Commons], he's trying to get across the key messages we're trying to communicate, so as to avoid misinterpretation." Similarly, in the days that follow the release of the *MPR*, other senior staff—usually three of the Deputy Governors—go to Toronto and Montreal to brief different "Bank-watchers," as Bank staff refer to members of two professional groups: analysts in the financial markets who are paid to follow the central bank and its monetary policy closely and advise their clients accordingly and financial journalists who write about monetary policy. In addition, several of the Senior Advisors travel to meetings of economists' associations in major centers across Canada to give presentations on the *MPR*, while the regional representatives meet with journalists and others in their respective parts of the country. (For all these communicative interactions with outside audiences, the *Q & A's* material is available, as an IText on the Bank's Intranet, as a communal rhetorical resource.) As a Deputy Governor comments, with all this follow-up activity to the *MPR*, "there's a rather concerted effort to be pro-active and get out to meet with people to try to give them a clear sense of what our current thinking is and the analysis behind the *MPR*."

In the weeks following the release of the *Monetary Policy Report*, the Bank's Communications Department produces a document known as the "media-analysis report" on the coverage that the *MPR* receives in the Canadian media.[17] According to the Governor, "In monitoring the media after an *MPR*, to see how well monetary policy is being understood, there are three things we're interested in—are the messages being picked up out there, in the various commentaries? Is

what's being picked up understood? And what's the reaction?" This is how the Chief of the Communications Department describes the process of preparing the media-analysis report: Within about two weeks of an important communications event, we produce a report of four or five pages. It includes a summary of the media coverage on the *MPR*, and some analysis of it—how much coverage there was, in which news-services and newspapers, how much prominence they gave it, whether or not our key messages were adequately represented, what the criticisms were, and any other kinds of significant comments journalists might have brought to it. That's for the print media and stories pulled off the Internet from news sites. And then we also have a firm [Bowdens Media Monitoring] that monitors the broadcast media for us, TV and radio, following the release of the *MPR*. They monitor the hundreds of news items that appear on radio stations and TV stations, and prepare short summaries for us; and then, for any particularly interesting items, we can also order the full transcripts from them. And we include a summary and analysis of this material in our own final report as well. **. . .** When it's done, the final report is shared with quite a large number of senior people through our internal Web site [i.e., Intranet].

As we can see, the collaborative intellectual and discursive effort that occurs during the production, release, and promotion of the *Monetary Policy Report* is extremely complex, and the cluster of genres involved provides an important measure of achieved stability to the work. Similar chains of discursive events can be viewed in the production, release, and promotion of other "primary communication vehicles" in the genre set associated with the Communications Strategy, such as speeches by the Governor, the *Update to the Monetary Policy Report*, the *Bank of Canada Annual Report*, and *The Bank of Canada Review*, each with its own complex pattern of distributed cognitive and rhetorical action, configured according to the participants' organizationally defined professional roles.

Producing Public Information and Establishing a Unified Rhetorical Position

A second primary function of the genre set is to generate, shape, and communicate a distinctive organizational brand of "public information"—the "official" discourse, in both written and spoken forms, that represents the Bank of Canada's public position on the economy and monetary policy. This discourse conveys the Bank's views on the present and probable future state of the Canadian economy and the consequent appropriate monetary policy for the country, while at the same time reflecting the organization's awareness of outside commentaries on its monetary-policy actions and mounting responses to these commentaries.

 When we look at the Monetary Policy Framework and the Communication Strategy as overlapping activity systems, we see that their respective activities and genre sets are motivated by very different aims. The Monetary Policy Framework, the activity of data-gathering, knowledge construction, and policy-making, is intended, through its genre set, to foster and manage disparate views and debate—something akin, in its heterogeneity, to Bakhtin's (1981) centrifugal discourse. (For detailed accounts of the activity of the Monetary Policy Framework, see Smart 1998a, 1998b, 1999; Freedman & Smart, 1997.) Here, active disciplinary knowledge

in the form of economic analysis is generated, negotiated, debated, provisionally stabilized, and then used as a communal epistemic resource for policy-making and as a heuristic for further knowledge construction. A former Deputy Governor referred to the Bank as a "highly disputatious place, . . . a very tough shop, intellectually. People like to probe and critique ideas before they accept them." (It must be said, however, that a professional organization such as the Bank cannot encourage a fresh debate each and every day about its foundational goals or concepts or practices—such as the central policy goal of inflation-control or the use of computer-run economic models. Some things have to be accepted as the truth-for-now or best practices, or the organization would never be able to accomplish its work of directing monetary policy.) The larger aim of this activity is to produce provisionally stabilized knowledge—created through robust processes of sound analysis, rigorous debate, and negotiated consensus—to inform monetary-policy decisions and actions.

The activity and genre set of the Communications Strategy, on the other hand, are designed for some something quite different. In contrast to the way in which the Monetary Policy Framework promotes diverse perspectives and lively debate, from which emerges active disciplinary knowledge, the Communications Strategy is intended to build a consistent, unified public position on the state of the economy and the appropriate monetary policy for the country—a technocratically produced and ideologically inflected commodity for external distribution. In its production of this public information, the Communications Strategy's genre set is intended to provide for the consistent presentation of the key messages that the Bank wishes to get across in its communicative interactions with external groups in Canada's public-policy sphere. (It stands to reason that the Bank could not have the Governor making a statement about monetary policy in Montreal in the morning and a Deputy Governor saying something contradictory about policy in Vancouver in the afternoon—the financial markets would react frenetically and the Bank's credibility and effectiveness would be seriously impaired.) In its monovocality, the public information created and communicated by the Bank appears very much akin to Bakhtin's centripetal or "official" discourse.

What we see here, then, is active disciplinary knowledge from the activity system and genre set associated with the Monetary Policy Framework being transformed into another type of discourse through a different activity system and genre set, those linked to the Communications Strategy. In contrast to the production of disciplinary knowledge through the analysis of data and the thrust-and-parry of discursive exchanges among professional colleagues, we see a movement in another direction—the commodification, as it were, of active disciplinary knowledge into the circumscribed, homogenized, and monovocal discourse of public information.

A case in point is the *Q & A's* package—pre-prepared questions/answers material—that is created along with the *Monetary Policy Report* for the use of Bank staff in responding to queries from journalists and other audiences about the Bank's monetary policy as articulated in the *MPR*. As a Senior Advisor puts it, "The *Q & A's* are intended to provide the appropriate answers to certain lines of questioning." The intention is to ensure that the public messages communicated by members of the Bank staff are consistent on a range of different concerns related to monetary policy. The distinction here, according to the Senior Advisor, is "between issues that are still

being explored and debated in the research," where diverse perspectives are still in play within the activity of the Monetary Policy Framework, and "the Bank's formal views on things, where you have to have a consistency of message"—the "official" discourse and unified public position produced through the activity and genres of the Communications Strategy.

While disciplinary knowledge created within the activity of the Monetary Policy Framework is regularly transformed into public information through the Communications Strategy, at times information also moves in the opposite direction—from the activity of the Communications Strategy to that of the Monetary Policy Framework, where it is absorbed into processes of knowledge construction and policy-making. An example of this can be seen when information about the views of outside groups such as business associations, the financial markets, governments, and organized labor is fed back to the Bank's head office in Ottawa by regional representatives in different parts of the country, as part of the quarterly Projection Exercise (Smart, 1999, provides a detailed account of this activity). In this highly collaborative operation, a team of staff economists uses a complex computer-run mathematical model of the Canadian economy to consolidate and interpret information about different economic indicators and then inscribes the resulting analysis and policy advice in a document known as the *White Book*, addressed to the Bank's senior decision-makers. Below, a Deputy Governor describes how information on the views of outside groups is integrated into the knowledge-making of the Projection Exercise, referring to a document known in the Bank as the *Green Book*, a member of the genre set linked to the Monetary Policy Framework:

> The regional representatives do a lot of work meeting with various businesses, associations, government, universities—to interact and exchange views. The reps gather the views of people in the regions about their predictions of economic growth, inflation, and so on. And then they feed back this information to us in a formal way [as opposed to the more informal, ongoing flow of information communicated to the Bank's Research Department through weekly conference calls], four times a year, during the Projection Exercise. So that in addition to the staff's work in putting together the *White Book*, there's also a process where we bring in the reps from the regions to tell us what people out there appear to be thinking about, and the reps work with the Research Department to quantify this information—they quantify what they call "the balance of opinion" on different issues—for example, on what people think sales volumes are going to be over the next twelve months, or the trend in inflation, say. **. . .** The reps will give us [i.e., the Governor and his senior colleagues] a presentation on this, and they'll also produce a document we call the *Green Book*. The reps' job in all of this is to tell us what they think business people and others out there across the county are thinking, **. . .** and it's very useful information.

Acting as a site for organizational learning

A third primary function of the genre set in the activity of the Communications Strategy is to act as a site for organizational learning. In the pages that follow I examine two kinds of organizational learning: first, the acquisition of economic knowledge relevant to the Bank's mandate for directing monetary policy—most notably, knowledge of how the Canadian economy

functions and how monetary policy interacts with the economy; and second, the development of genre knowledge—specifically, rhetorical knowledge about the nature of the different audiences for the Communications Strategy's genre set and about audience-specific tactics for using the genre set effectively. We will be looking at what these two types of learning entail and, in the case of genre knowledge, at how the learning occurs within the Bank. In this analysis, I will be drawing on what Gavriel Salomon (1993, p. xiv) refers to as the "weak" version of distributed cognition theory, where although the collective thinking-in-activity of a social group may be privileged, individual cognition is also recognized as significant and seen to interact with collective cognition (as opposed to the "strong" version of the theory in which the existence of "solo" cognition is denied or ignored).[18]

In its ongoing attempts to learn more about the nature of the Canadian economy and about the ways in which monetary policy acts upon the economy, the Bank is constantly monitoring published research produced by university economists and economists in private-sector "think-tanks" for relevant empirical findings, theories, economic models, and forecasting methods. A Deputy Governor talks of this relationship: "With the academic literature, it's not just a question of arguing with it; it's important to us in that it provides a window onto the world, an economic window. We have our own research, of course, and research from other central banks, but the academic window is very important too. It's a shared enterprise, learning more about the economy." He goes on to discuss the specific example of "inflation targeting," that is, central banks' use of specific inflation-control targets as the basis for directing monetary policy:

> When the Bank started [using inflation-control targets as the centerpiece of monetary policy] in the early '90s we had nothing to go on except the New Zealand experience. It was only when the academic literature came out three or four years later that we understood much better—it gave us a perspective—that what we did intuitively was absolutely the right thing to do. Now there's been an explosion of literature on this, and it's been very helpful to us in understanding why what we did in 1991 was absolutely the right thing to do.

The Deputy Governor elaborates on the relationship with academic economists, first describing a conference the Bank had recently hosted and then mentioning a strategy for encouraging academic research on topics of particular concern to the central bank:

> We just had another conference, leading up to the next decision-point [on setting out, in collaboration with the Canadian Federal Government, a five-year sequence of inflation-control targets]. . . . Two issues on our minds as we try to reach a decision are downward nominal wage rigidity and the zero interest-rate bounds. And we had a number of papers on both these issues, some by our own people and others were invited papers from academics. . . . One of the advantages of commissioning outside research by academics, two advantages really, is that it gets some interesting work done for us, and more broadly, it may also encourage Canadian academics to do research in areas we're interested in, areas relevant to monetary policy.

Similarly, the Bank is continuously engaged in trying to learn from its exchanges with people working in the financial markets about what is known as the "transmission mechanism" for monetary policy—the process through which monetary policy acts upon the economy through the financial markets (see the Bank of Canada Web site—http://www.bank-banque-canada.ca/en/monetary/index.htm—for a description of the Monetary Policy Transmission Mechanism). As the Chief of the Communications Departments explains,

> On the transmission side [i.e., the implementation of monetary policy], the Bank is always willing to be persuaded that some of our operational assumptions could perhaps be improved by more information from the markets—in terms of the "real-world" risks that accompany one course of action versus another. For the Bank, monetary policy acts through the markets, and so anticipating how the markets will respond to a given monetary policy action, or lack of action, is very much at the heart of day-to-day policy management. The Bank is always trying to learn more about how the financial markets react, and there are people working in the markets who are knowledgeable about this.

A Deputy Governor elaborates on the Bank's organizational commitment to this particular object of learning:

> And a good deal of our monetary-policy work is about learning more about how the [Canadian] economy works and how monetary policy is transmitted to the economy. **. . .** Each of the links in the chain of the transmission mechanism—short-term interest rates, long-term rates, spending, consumption, wage increases, and so on—is very uncertain. Now we certainly do have a view here in the Bank, based on our own research and experience and also the research of others, but we can't really say that there's a lot of strong empirical evidence for each element in the chain. **. . .** And so we're always looking to the views of people in the [financial] markets to see what we can learn.

He goes on, summing up, "If you see that others have views on the economy that you don't, then you want to learn about that too—they just might be right about things. You definitely can't risk ignoring them." What we see articulated here is the commitment on the part of an organizational community-of-practice to learn from its communicative interactions with outside groups.

With regard to the second type of organizational learning related to the Communications Strategy's genre set—developing rhetorical knowledge about the functioning of the genre set itself—the community-of-practice is continually attempting to learn more about the audiences for various genres and to devise effective rhetorical tactics for communicating effectively with these different audiences. For example, the frequent lunch meetings at which senior Bank staff host guests from different outside groups are viewed as an opportunity for this kind of learning. Below, the Chief of the Communications Department provides us with a sense of this:

> There's quite a lunch program for journalists, business people, and other groups—labor, government officials, and so on—who are invited in. It's usually with the Governor, the members of the Governing Council. **. . .**

> They're very informal lunches; basically they're just chats—a chance for the
> Bank to get across some general perspectives on the economy, but especially
> to listen to what their guests have on their minds. It's quite a good
> opportunity to hear what people are saying directly. Basically, it's trying to
> get to know the whole constituency out there a little better.

Another example of the ongoing effort by the community-of-practice to develop genre
knowledge related to the Communications Strategy is the attempt to learn, rhetorically, from the
experience of communicating with the media and the financial markets. The Chief of the
Communications Department provides an illustration of this, describing the production of two
yearly reports:

> At the end of the year we [i.e., the staff in the Communications Department]
> produce a roll-up report that evaluates our success in actually getting our
> messages through to the media over the year, identifying the main occasions
> when we were trying to communicate key messages—and did they actually
> show up in the media coverage? And there's a parallel effort in [the] Financial
> Markets [Department] to evaluate the same events from the point of view of
> the reactions in the markets, a lot of which doesn't appear in the media, but
> rather in the behavior of the markets, or things that market participants
> might tell our analysts. The Bank has systematized all this now, and we're
> doing it on an annual basis as a means of gauging our success in
> communicating. We put a lot of effort into our communications and we need
> to know how we're doing with it and learn to do it better.

A Deputy Governor describes the larger organizational role of the Communications Department
in facilitating this kind of learning, in this particular case with regard to the genre knowledge
needed to communicate effectively with the media specifically:

> The Communications Department keeps a watch on the media—do our
> messages get through clearly. What kind of feedback did we get? And they
> also advise us on *how* to send our messages; they advise us on this, and they
> help with the relationship with the media—help us manage the relationship
> with the media. If you want to communicate with someone, you have to know
> where they're coming from, what they're looking for, what's important for
> them, what our common interests are and how can we maximize the value of
> the relationship for both sides? And certainly, our Communications
> Department helps with this—they advise us on this, with the media.

For individual staff economists who wish eventually to advance to senior levels in the
organization, learning to participate competently in the community-of-practice associated with
the Communications Strategy is particularly important. As a Deputy Governor puts it, "If
economists want to get ahead in the Bank, they better be prepared to communicate with the
outside world as well as inside." Developing this ability means acquiring the genre knowledge
needed to operate in a new activity system and genre set. Typically, economists who are at the
point in their careers where they are ready to advance in this way have already developed
considerable expertise in using the genres embedded in the activity of the Monetary Policy
Framework, but now need to learn to function effectively in the activity of the Communications
Strategy, with its very different genres. The Chief of the Communications Department describes

this transition as a process of moving beyond expertise in the "vacuum-packed research and analysis" of the Monetary Policy framework to competence with a more communicatively and politically nuanced discourse. He offers an illustration of what this transition might involve:

> Let's say a staff economist is out giving a public presentation and gets a question about the Bank's view on the current level of unemployment. The economist *could* give a technically correct answer and say that unemployment isn't explicitly represented in the Bank's models of the economy at all, and so they can't address that question. *Or* they *could* say—and this would be a more intuitive, a more communicative approach—"Well, yes, of course unemployment is extremely important, but as you know, employment is a natural outgrowth of a successful economy, and price stability [i.e., inflation-control] is essential for that." It's the instinct to provide an answer that's small "p" more politically acceptable rather than a technically correct one, which could almost be like throwing a grenade into a crowded room because it's not the right approach for that particular audience. **. . .** It's that transition from the world of vacuum-packed research and analysis to the real world of dialogue and winning respect for the institution, showing competency, increasing credibility.

This brings us to the question of how this type of genre knowledge is attained. To what degree do individuals acquire the knowledge needed to operate in a new genre set explicitly, through formal instruction or coaching, and to what degree do they acquire it implicitly, through day-to-day participation in professional practice? In addressing a similar question, Jean Lave and Etienne Wenger (1991) point to the significance of the "situated learning" that occurs continuously, though for the most part tacitly, in communities-of-practice—and that engages all members, veterans as well as newcomers, through their ongoing involvement in organizational activity. Lave and Wenger view this kind of learning as an integral part of the "situated negotiation and renegotiation of meaning" (p. 51) associated with ordinary everyday social interaction, and as a natural accompaniment of other forms of social cognition, for "learning, thinking, and knowing are relations among people engaged in activity in, with, and arising from the socially and culturally structured world" (p. 51). According to Lave and Wenger, a second factor prompting situated learning in organizations relates to their dynamic character—organizations are constantly reinventing themselves in response to changes in "activity and the participation of individuals involved in it, their knowledge, and their perspectives" (p. 117).

With Lave and Wenger's claim for the prevalence and force of situated learning as a backdrop, I would now like to look at some homegrown theory posited by the Chief of the Communications Department, with regard to the question of whether staff economists being trained for an external communications role acquire their genre knowledge through formal, explicit training or through more tacit forms of experience. First, he explains the imperative for the Bank's staff economists to develop the genre knowledge required to participate competently in the activity of the Communications Strategy:

> We're expecting everyone to become better at communicating. Among other things, it's a willingness to listen, to put a human face on what before might have been, in the "Old Bank," a more centralized, big-brother-knows-best

> approach. And this is built right into the performance appraisal system. **. . .** If people want to rise in the ranks, beyond the point of being a good technician, then they need to see how communications works, and what it is that allows someone to move up the ladder.

One the one hand, the Chief explains, the Bank has taken a formal approach to promoting this kind of genre knowledge:

> The Bank has had a leadership development program now for a number of years. It's an attempt to become a little more systematic at developing the qualities that will provide the Bank with a good supply of future leaders, and communication is a key part of this. **. . .** The Communications Department helps in communications training, media training—arranging courses for people in the Bank who are going to be called on to give speeches, presentations.

A sense of what this type of formal training might involve is provided by the Senior Assistant to the Governor, as she describes a course she is planning to take outside the Bank:

> It's a three-day course. Apparently they'll be talking about media relations, how to deal with Parliamentarians, promoting greater understanding in the public, Internet technology, and how to manage change. And they also have a "special" at the end: "transparency versus creative ambiguity" (laughs)—I'm very intrigued by that; I think we're getting into philosophical questions here.

At the same time, though, the Chief of the Communications Department has his doubts about the sufficiency of such formal training, as he explains: "It's impossible to send every new person who might go out and meet the public outside for training. Maybe training can help somewhat, but **. . .** I think it's really more of an internal communication issue." In elaborating on the last point, the Chief goes on to convey a personal theory of his that is similar to the conceptualization of situated learning discussed earlier:

> I think the change here in the Bank has happened through a combination of new institutional procedures and culturally assimilated values. Yes, there have been formal efforts to provide media training, to teach the tricks of the trade**. . . .** But there's still another kind of change required. **. . .** And I think it's something that people have to pick up, through their work, more by osmosis than through a training course that will suddenly turn a person into someone who can go out and communicate effectively to the public. You're not going to do a miracle transformation with someone a year before they get to be a Deputy Governor. It's got to be building all along. To see that there's your professional inside work and that this is different from what you do when you're communicating outside—I think it's a cultural thing, something that has to be learned implicitly around the Bank, in people's work experiences.

And as the Chief points out, however, regardless of how the development of genre knowledge related to the Communications Strategy occurs, the organization holds definite expectations regarding people's success in achieving this particular kind of learning, with career rewards and other consequences at stake: "We're expecting everyone to become better at communicating, in

the sense of listening and responding. It's about a willingness to listen to people, putting a human face on what before might have been, in the Old Bank, a more centralized, big-brother-knows-best approach. And all of this is now built right into the performance appraisal system."

In a final observation, the Chief touches on another aspect of situated learning within a community-of-practice, what Jean Lave and Etienne Wenger (1991) refer to as the growth of a "knowledgeably skilled identity": "Where it's really hit home is with people who want to move up in the organization, become a Chief, an Advisor, a Deputy Governor—they're seeing what's necessary to do that, through watching others and gradually getting involved themselves and taking on the role." From this perspective, learning to be effective in using the genres of the Communications Strategy demands that a new aspect of the one's social and professional identity be developed, so that *learning to do or act* and *learning to be* are inseparable. (See Smart, 2000, for a discussion of this dimension of situated learning as a factor in developing the ability to operate in a new genre.)

And how would the Chief evaluate the Bank's overall success in fostering the kind of genre knowledge that members of the community-of-practice need in order to participate effectively in the activity of the Communications Strategy? "I think that now, among the staff generally, there's a better sense of relating to the audience, recognizing that there is one, indeed that there are many of them. And a sense of recognizing that for a public-policy institution to be accountable, you have to be able to explain what you're doing in a way that makes sense to a lot of different groups of people."

Conclusion

This chapter has reported on an ethnographic study of the activity and discourse used by the Bank Canada in carrying out its communicative interactions with other players in the Canadian public-policy sphere. We have seen how a technology-mediated set of discourse genres serves to orchestrate the organizational thinking and rhetorical action that underlie the Bank's Communications Strategy. On the basis of this account, one derived from my own observations and from my informants' reports of their locally constructed work-world, I wish to propose five theoretical claims.[19] These theoretical claims are of the kind that, to borrow from Clifford Geertz (1973), "hover over" the findings from my study. In this respect, the claims are analogous to Anselm Strauss and Barney Glaser's "grounded theory" (Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1998)—the schema of concepts, themes and motifs that can emerge from the careful analysis of qualitative data. Here, then, are the five claims:

- A genre set, functioning as an intrinsic part of an organizational activity system, may comprise a number of spoken and written genres that, mediated by a range of technologies and built environments, function together, often interactively, to prompt, shape, coordinate, and apply the collaborative intellectual and discursive work that allows the organization to accomplish its mandate or mission.

- Within an organizational activity system, a genre set is linked to various intersubjectivities— domains of shared focus, perception, and understanding that cognitively connect the

members of a community-of-practice. A central area of intersubjectivity is genre knowledge—the rhetorical awareness of the ways in which the genre set functions. Four keys aspects of genre knowledge relate to the goals of the activity system, the division of intellectual and discursive labor, a vernacular of shared terms, and the discursive construction of outside groups as audiences.

- Within organizational activity, genre sets may function either to build active disciplinary knowledge by encouraging a diversity of views and internal debate or to produce public information and a unified rhetorical position to be communicated to the world outside the organization.

- In its evolution, a genre set reflects—and contributes to—processes of continuous change within the activity of an organization, with changes in activity, discourse, and technology occurring dialectically in complex patterns of causality.

- Given the emergent, dynamic nature of an organizational activity system, all the members of its community-of-practice are continuously engaged in learning as an inevitable consequence of performing their everyday rounds of work. Two central areas of learning are the acquisition of knowledge about the external world needed by the organization in order to accomplish its mandate and the development of genre knowledge.

Clearly, however, a qualitative researcher cannot with any degree of legitimacy move from presenting the findings of one study of a single organization and the grounded theory derived from these findings to asserting the authority of this theory in other organizational sites. Rather, I would hope that the theoretical claims presented above might serve as a heuristic resource for researchers wishing to examine genre sets employed in other professional organizations to accomplish intellectual and discursive work. Elliot Eisner (2001) argues eloquently for the heuristic use of theory that has been derived from qualitative inquiry in particular local settings:

> [Theory] distills particulars in ways that foster generalizability. Although theory loses some local color when particulars are left behind, theory makes distinctions and packages thematic relationships so that they will travel well; when we distill, we come away from a research site with ideas that can sensitize us to situations and events like the ones from which the theory was derived. . . . The generalizations derived from qualitative case studies are essentially heuristic devices intended to sharpen perception so that our patterns of seeking and seeing are more acute. We don't use the generalizations drawn from the specific case to draw conclusions about other situations, but rather we use them to search those situations more efficiently. (p. 141)

If additional qualitative studies of genre sets in other professional organizations were contributed to the literature, the next step in the process of disciplinary theory-building, as I see it, would be to compare findings across these studies, with a view to identifying recurrent patterns that could allow us to make new and broader theoretical claims about the functioning of genre sets in organizational activity and discourse. Such empirical/theoretical work would, I believe, contribute significantly to strengthening our field.

References

Bakhtin, Mikhail (1981). *The dialogic imagination: Four essays* (Michael Holquist, Ed., Carlyn Emerson & Michael Holquist, Trans.). Austin: University of Texas Press.

Bakhtin, Mikhail (1986). *Speech genres and other late essays* (Carlyn Emerson & Michael Holquist, Eds., & Vern W. McGee, Trans.). Austin: University of Texas Press.

Bazerman, Charles (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison: University of Wisconsin Press.

Bazerman, Charles (1994a). *Constructing experience*. Carbondale: Southern Illinois University Press.

Bazerman, Charles (1994b). Systems of genres and the enactment of social intentions. In Aviva Freedman and Peter Medway (Eds.), *Genre and the new rhetoric* (pp. 79-101). London: Taylor & Francis.

Bazerman, Charles (2001) Nuclear information: One rhetorical moment in the construction of the information age. *Written Communication 18*, 259-295.

Beaufort, Anne (1999). *Writing in the real world: Making the transition form school to work*. New York: Teachers College Press.

Berkenkotter, Carol & Huckin, Thomas (1995). *Genre knowledge in disciplinary communication: Cognition/culture/power*. Hillsdale, NJ: Lawrence Erlbaum.

Berkenkotter, Carol (2001). Genre systems at work: DSM-IV and rhetorical recontextualization in psychotherapy paperwork. *Written Communication 18*, 326-349.

Bowker, Jeoffrey & Star, Susan Leigh (1999). *Sorting things out: Classification and its consequences*. Cambridge, MA: MIT Press.

Brown, John Seely & Duguid, Paul (2000). *The social life of information*. Boston: Harvard Business School Press.

Carlson, Patricia (2001). Information technology and organizational change. *Journal of Technical Writing and Communication Volume 31*, 77-96.

Cole, Michael & Engeström, Yrjö (1993). A cultural-historical approach to distributed cognition. In Gavriel Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations* (pp. 1-46). Cambridge, UK: Cambridge University Press.

Devitt, Amy (1991). Intertextuality in tax accounting: Generic, referential, and functional. In Charles Bazerman & James Paradis (Eds.), *Textual dynamics of the professions: Historical and contemporary studies of writing in professional communities* (pp. 336-357). Madison: University of Wisconsin Press.

Dias, Patrick, Freedman, Aviva, Medway, Peter & Paré, Anthony (1999). *Worlds apart: Acting and writing in academic and workplace settings*. Mahwah, NJ: Lawrence Erlbaum.

Eisner, Elliot (2001). Concerns and aspirations for qualitative research in the new millennium. *Qualitative Research 1*, 135-145.

Engeström, Yrjö (1992). *Interactive expertise: Studies in distributed working intelligence*. Research Bulletin 83. Department of Education, Helsinki University.

Engeström, Yrjö & Middleton, David (1998). *Cognition and communication at work*. Cambridge, UK: Cambridge University Press.

Feenberg, Andrew (1999). *Questioning technology*. New York: Routledge.

Fishman, Stephen & McCarthy, Lucille (2001). An ESL writer and her discipline-based professor: Making progress even when goals don't match. *Written Communication 18*, 180-228.

Freadman, Anne (1994). Anyone for tennis? In Aviva Freedman and Peter Medway (Eds.), *Genre and the new rhetoric* (pp. 43-66). London: Taylor & Francis.

Freedman, Aviva & Smart, Graham (1997). Navigating the currents of economic policy: Written genres and the distribution of cognitive work at a financial institution. *Mind, Culture, and Society 4*, 238-255.

Geertz, Clifford (1973). *The Interpretation of Cultures*. New York: Basic Books.

Geertz, Clifford (1983). *Local Knowledge*. New York: Basic Books.

Geisler, Cheryl (2001). Textual objects: Accounting for the role of texts in the everyday life of complex organizations. *Written Communication 18*, 296-325.

Geisler, Cheryl et al. (2001). Future directions for research on the relationship between information technology and writing. *Journal of Business and Technical Communication 15*, 269-308.

Giddens, Anthony (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.

Giltrow, Janet (2002). Meta-genre. In Richard Coe, Loreli Lingard, & Tatiana Teslenko (Eds.), *The rhetoric and ideology of genre* (pp. 187-205). Cresskill, NJ: Hampton Press.

Giltrow, Janet & Valiquette, Michele (1994). *Genres and knowledge: Students writing in the disciplines*. In Aviva Freedman and Peter Medway (Eds.), *Learning and teaching genre*. Portsmouth, NH: Heinemann/Boynton Cook.

Glaser, Barney & Strauss, Anselm (1967). *Discovery of grounded theory*. Chicago: Aldine.

Goodwin, Charles (1997). The blackness of black: Color categories as situated practice. In Lauren B. Resnick, Roger Säljö, Clotilde Pontecorvo, & Barbara Burge (Eds.), *Discourse, tools, and reasoning: Essays on situated cognition*. Berlin: Springer.

Haas, Christina (1995). *Writing technology: Studies on the materiality of writing*. Mahwah, NJ: Lawrence Erlbaum.

Henderson, Kathryn (1999). *On line and on paper: Visual representations, visual culture, and computer graphics in design engineering*. Cambridge, MA: MIT Press.

Hutchins, Edwin (1995). *Cognition in the wild*. Cambridge, MA: MIT Press.

Johnson-Eilola, Johndan (1997). *Nostalgic angels: Rearticulating hypertext writing*. Norwood, NJ: Ablex Publishing.

Lave, Jean (1988) *Cognition in practice: Mind, mathematics and culture in everyday life*. Cambridge, UK: Cambridge University Press.

Lave, Jean & Wenger, Etienne (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.

Luff, Paul, Hindmarsh, Jon & Heath, Christian (2000). *Workplace studies: Recovering work practice and informing system design*. Cambridge, UK: Cambridge University Press.

Miller, Carolyn (1984). Genre as social action. *Quarterly Journal of Speech 70*, 151-167.

Miller, Carolyn (1994). Rhetorical community: The cultural basis of genre. In Aviva Freedman and Peter Medway (Eds.), *Genre and the new rhetoric* (pp. 67-78). London: Taylor & Francis.

Nardi, Bonnie & O'Day, Vicki (1999). *Information ecologies: Using technology with heart*. Cambridge, MA: MIT Press.

Norman, Donald (1993). *Things that make us smart: Defending human attributes in the age of the machine*. Reading, MA: Addison-Wesley.

Orlikowski, Wanda (2001) Improvising organizational transformation over time: A situated change perspective. In JoAnne Yates and John Van Maanen (Eds.), *Information Technology and organizational transformation: History, rhetoric, and practice* (pp. 223-274): Thousand Oaks, CA: Sage Publications.

Orlikowsky, Wanda & Yates, JoAnne (1994). Genre repertoire: Examining the structuring of communicative practices in organizations. *Administrative Science Quarterly 39*, 541-574.

Paradis, James, Dobrin, David, & Miller, Richard (1985). Writing at Exxon ITD: Notes on the writing environment of an R & D organization. In Lee Odell and Dixi Goswami (Eds.), *Writing in nonacademic settings* (pp. 281-307). New York: Guilford Press.

Paré, Anthony (2000). Writing as a way into social work: Genre sets, genre systems, and distributed cognition. In Patrick Dias & Anthony Paré (Eds.), *Transitions: Writing in academic and workplace settings* (pp. 145-166). Cresskill, NJ: Hampton Press.

Paré, Anthony & Smart, Graham (1994). Observing genres in action: Towards a research methodology. In Aviva Freedman and Peter Medway (Eds.), *Genre and the new rhetoric* (pp. 146-154). London: Taylor & Francis.

Polanyi, Michael (1966). *The tacit dimension*. Garden City, NY: Doubleday.

Russell, David (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication, 14,* 504-554.

Salomon, Gavriel (1993). Editor's introduction. *Distributed cognitions: Psychological and educational considerations*. In Gavriel Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations* (pp. xi-xxi). Cambridge, UK: Cambridge University Press.

Schatzki, Theodore, Knorr Cetina, Karin & Von Savigny, Eike (Eds.). (2001). *The practice turn in contemporary theory*. London: Routledge.

Schryer, Catherine (1993). Records as genre. *Written Communication 10*, 200-234.

Sellen, Abigail & Harper, Richard (2002). *The myth of the paperless office.* Cambridge, MA: MIT Press.

Smart, Graham (1993) Genre as community invention: A central bank's response to its executives' expectations as readers. In Rachel Spilka (Ed.), *Writing in the Workplace: New Research Perspectives* (pp. 124-140). Carbondale: Southern Illinois University Press.

Smart, Graham (1998a). Mapping conceptual worlds: Using interpretive ethnography to explore knowledge-making in a professional community. *The Journal of Business Communication 35*, 111-127.

Smart, Graham (1998b) *Knowledge-making in a central bank: The interplay of writing and economic modeling*. Unpublished Ph.D. dissertation. McGill University, Montreal.

Smart, Graham (1999). Storytelling in a central bank: The role of narrative in the creation and use of specialized economic knowledge. *Journal of Business and Technical Communication 13*, 249-273.

Smart, Graham (2000). Reinventing Expertise: Experienced writers in the workplace encounter a new genre. In Patrick Dias & Anthony Paré (Eds.), *Transitions: Writing in academic and workplace settings* (pp. 223-252). Cresskill, NJ: Hampton Press.

Strauss, Anselm (1987). *Qualitative analysis for social scientists*. New York: Cambridge
        University Press.

Strauss, Anselm & Corbin, Juliet (1998). *Basics of qualitative research: Techniques and
        procedures for developing grounded theory*. Thousand Oaks, CA: Sage Publications.

Suchman, Lucy (1987). *Plans and situated actions: The problem of human-machine
        communication*. Cambridge, UK: Cambridge University Press.

Van Maanen, John. (1988). *Tales of the field: On writing ethnography*. Chicago: University of
        Chicago Press.

Wertsch, James (1997) *Mind as action*. New York: Oxford UP.

Wertsch, James (1991). *Voices of the mind: A sociocultural approach to mediated action*.
        Cambridge, MA: Harvard University Press.

Winsor, Dorothy (2001). Learning to do knowledge work in systems of distributed cognition.
        Journal of Business and Technical Communication 15, 5-28.

Yates, JoAnne & Orlikowski, Wanda J. (1992). Genres of organizational communication: A
        structurational approach to studying communication and media. *Academy of Management
        Review, 17*, 299-326.

Yates, JoAnne & Orlikowski, Wanda (2002). Genre systems: Chronos and kairos in
        communicative interaction. In Richard Coe, Loreli Lingard, & Tatiana Teslenko (Eds.).
        The rhetoric and ideology of genre (pp. 103-121). Cresskill, NJ: Hampton Press.

Zachry, Mark (2001). Communicative practices in the workplace: A historical examination of
        genre development. *Journal of Technical Writing and Communication 30*, 61-76.

Notes

[1] I wish to express sincere thanks to my informants at the Bank of Canada: Pierre Duguay, Chuck Freedman, Paul Jenkins, David Longworth, Jill Moxley, Lea-Anne Solomonian, Gordon Thiessen, Ianthi Vayid, and Bruce Yeman. Without their interest in my research and their generosity in sharing their views and experiences, no ethnographic study would have been possible. I also would like to thank Janet Alsup, Samantha Blackmon, Michele Pittard, and Steve Wellinski, colleagues in a reading/writing group at Purdue University, for their insightful comments on several early drafts of this chapter. Finally, I am grateful to the two editors of this collection, both for their patience in extending post-deadline deadlines and for their useful suggestions on the chapter.

[2] Here, following the practice in Applied Linguistics, I am using the term "text" to refer to both written and spoken utterances.

[3] I borrow the phrase "activity-based genre theory" from Mark Zachry (2001, p. 62).

[4] Given my goals for the research, the sets of questions I sent to the people to be interviewed were not standardized, but rather differed somewhat from one person to another, depending on the individual's role in the Bank. In all the interviews, I used the set of questions sent in advance to the informant as a starting point and a heuristic, and I freely took up new lines of inquiry that seemed relevant to themes I saw emerging during the two days I spent at the Bank.

[5] This set of characteristics is derived from the work of theorists such as Yrjö Engeström (1992), David Russell (1997), Charles Bazerman (1994a), Edwin Hutchins (1995), Lucy Suchman (1987), James Wertsch (1997), Charles Goodwin (1997), Jeoffrey Bowker & Susan Leigh Star (1999), Donald Norman (1993), Dorothy Winsor (2001), and Jean Lave & Etienne Wenger (1991) as well as from earlier work of my own, including a piece co-authored with Aviva Freedman (Smart, 1998, 1999, 2000; Freedman & Smart, 1997).

[6] This observation on the embedding of values and interests in technological tools is inspired by the work of theorists such as Andrew Feenberg (1999) and Johndan Johnson-Eilola (1997).

[7] Donald Norman (1993) describes the need for and role of such tools in human activity: "The power of the unaided mind is highly overrated. Without external aids, thought, memory, and reasoning are all constrained. But human intelligence is highly flexible and adaptive, superb at inventing procedures and objects that overcome its own limits. The real powers come from devising external aids that enhance cognitive abilities. How have we increased memory, thought, and reasoning? . . . [T]hrough the development of tools of thought—cognitive artifacts—that complement abilities and strengthen mental powers" (p. 43).

[8] See also Schatzki, Knorr Cetina, & Von Savigny (Eds.), 2001, on the relevance of practice theory for the study of human cognition, discourse, and action.

[9] To this juncture in the chapter, I have been using the term "technology" to include a broad range of constructed human artifacts such as computer-based information systems and designed physical environments; from this point on I will be more specific, distinguishing between "digital technologies" and "built environments."

[10] The lectures, speeches, and presentations in this list of written genres are events in which the speaker delivers a prepared text more or less verbatim in front of a live audience.

[11] I certainly would not claim to have identified all the genres actually in play within the activity of the Bank's Communication Strategy—it is just the most accurate representation I have been able to infer from a particular body of data. If I have misrepresented the genre set, I suspect it has been on the side of under-counting the genres. And of course, given the plasticity of genres and the ever-changing character of a genre set, what exists now, in April 2002, may be somewhat different from what existed in June 2000.

[12] The quotations from Bank of Canada staff included in this chapter have been edited for false starts, hesitations, fillers, and redundancy. As well, a space with three periods (. . .) indicates that verbal material from an utterance has been omitted in the quotation.

[13] The concern here—and one that is of vital importance for the Canadian economy—is to avoid widespread currency speculation and consequent turmoil in the financial markets.

[14] In referring to the Canadian economy here as if it were a material reality, I am choosing, for the sake of brevity in this discussion, to sidestep the view that the "economy" is actually a discursive construct established through the practices of professional economists working in particular organizational sites. As I have argued elsewhere, the economists in any given organizational site employ the distinctive construct created through their discourse—and referred to as "the economy"—as an analytical tool, using its structure of categories (such as commodity prices, exports, and government expenditures) and inter-relationships to interpret empirical data (see Smart, 1998a, 1998b, 1999, 2000; Freedman & Smart, 1997).

[15] As an institution covered by federal bilingualism legislation, the Bank of Canada issues all its major publications in both English and French.

[16] While the lock-up was an innovation introduced to the Bank of Canada as part of the Communications Strategy, the event was not invented by the Bank. Other organizations in Canada and elsewhere had previously used lock-ups, including, for example, the Canadian Department of Finance prior to the official release of its annual budget.

[17] As with a number of the genres that have emerged in the Bank with the development of the Communications Strategy, the media-analysis report was imported from outside the organization. As the Chief of the Communications Department explains, "Some government departments have this kind of media analysis done every day for the Minister and his staff."

[18] The weak version of distributed cognition theory, with its allowance for individual thought and agency, is more compatible with the perspectives presented in this chapter such as, for example, the structuration theory of Anthony Giddens (1984) and its invocation in the work of Charles Bazerman (1994a, 1994b) and Carolyn Miller (1994).

[19] While the primary data underlying these theoretical claims come from my research at the Bank of Canada, I have also worked as a free-lance writing consultant with a number of other organizations, including Nortel, the Atomic Energy Control Board of Canada, the Government of the Northwest Territories, and TFN (an Inuit training organization), and in all these sites I have observed work activities, recorded field-notes, conducted interviews, and collected documents (all of this occurring, of course, in the relatively free-wheeling days for researchers before IRB's and formalized "human subjects" concerns). And I have seen many instances in these organizations where the use of sets of discourse genres was consonant with the theoretical claims I am advancing here.

Structure and Agency in Medical Case Presentations

Catherine F. Schryer, Lorelei Lingard*, Marlee Spafford**, and Kim Garwood***

Department of English
University of Waterloo
Waterloo, Canada M5S 1A1
cschryer@watarts.uwaterloo.ca

*Faculty of Medicine and the Centre for
Research in Education
University of Toronto
Toronto, Canada M5S 1A1
lorelei.lingard@utoronto.ca

**School of Optometry
University of Waterloo
Waterloo, Canada M5S 1A1
mspaffor@sciborg.uwaterloo.ca

***Hospital for Sick Children
Toronto, Canada M5S 1A1
kim.garwood@utoronto.ca

Abstract

This study investigated the role that medical case presentations play in the renegotiation or reconstruction of agency that occurs between medical students and physicians. Medical case presentations perform a dual function in teaching hospitals. They constitute formalized ways that physicians convey complex information about patients, and they are educational vehicles which medical students use to demonstrate their medical problem-solving abilities. This study observed and transcribed 16 oral case presentations performed by third-year medical students in a children's hospital. As part of an interview protocol, two transcripts, one from a less and one from a more expert student, were turned into scripts, dramatized and videotaped. Ten faculty and 11 students were interviewed and asked to identify the differences between a more or less expert student performance. Data were analyzed using modified grounded theory and statistical strategies. Using a combination of dialectical social theories—specifically structuration theories (Giddens and Bourdieu) and activity theory (Vygotsky and Engestrom)-- as well as rhetorical theories of genre (Bazerman, Russell and Schryer), this study concludes that genres such as case presentations function as mediating tools that allow participants to negotiate agency across generations and across levels of expertise as sets of strategic choices. This renegotiation or reconstruction of agency, however, is not unproblematic. Genres have ideological consequences, and, through medical case presentations, medical students are learning to classify in quite specific ways, behaviors that could negatively affect communication with their patients.

> **Medical student (13):** Every time you interview a patient, you're trying to make a movie out of this patient. And so like a story…so she was this this year and that that year, but what really happened in between? So it sort of helped me to be more curious. Cause sometimes you feel like you're invading a person's privacy, but if you look at it that way, like making a movie, you really have to go frame by frame. And it helps you, because if you view it that way, if you roll it out, like roll your interview out like a roll of film, you immediately see what's missing. And you just fill the spots right in…no matter how chaotic you are, you end up filling all the spaces.

> **Medical student (5):** Effective to me means that I actually feel comfortable, when I go home that night, that I've relayed everything that I was told properly to staff…A secondary thing is that , effective for me is showing that I'm effective. Showing that I can take this information in and begin to digest it for the staff. That I'm, you know, about a million steps behind, but on the same path

The voices in these excerpts taken from a study of case presentations conducted by medical students in a children's hospital dramatize contradictory issues related to agency, structure and power. The first voice acknowledges the social power and personal agency that she acquires as she learns how to practice medicine. As a doctor and even as medical student, she can intervene in a "person's privacy." However, as both voices attest, to acquire this power, medical students must follow already established "paths" and tell expected stories. In effect, to be recognized as physicians, medical students must be socialized into the "habitus" (Bourdieu & Wacquant, 1992, pp. 126-28) or ways of perceiving, behaving and communication characteristic of their profession. Consequently, in an apparently contradictory move, to establish their own agency, or their ability to intervene in the world (Giddens, 1984, p. 9), these neophyte practitioners must immerse themselves in the social practices of their discipline.

In this paper we explore this contradiction as it is present in the traditional debate regarding the roles of individual agency and social structures. However, we posit that, particularly in research into professional communication and education, we need models that focus on the dialectical interaction between structure and agency and the mediating tools that professions develop to allow this interaction. In particular, we focus on rhetorical theories of genre as offering a way to conceptualize these mediating tools. In our study,[1] the interactions that occurred between medical students and physicians during the genre of medical case presentation dramatized for us the ways that social agents enact the sometimes conflictual negotiation of agency from one generation to the next. In our view far more is involved in this interaction than just the reconstruction of expertise. Attitudes and perceptions are also embodied, and the genre of case presentations is itself an ideological tool that affects the negotiation.

Case Presentations

Medical professionals use case presentations to communicate the salient details of patient cases to one another. Conducted by physicians for physicians, case presentations occur primarily on hospital rounds and communicate the presenter's argument about what ails the patient and how to address this ailment. As is common with institutional genres, the structural features of the oral presentation are standardized and constitute shared knowledge among users of the genre. In the case presentation, data from the medical interview and physical exam are selected, ordered, inter-related, and emphasized according to medicine's two controlling goals: the identification and the treatment of disease.

Besides being central to the activities of medicine, the case presentation also does double duty as an educational tool. As an educational vehicle, it has a dual role on the threshold of the healthcare community. It is like "a revolving door: both a method of gate keeping—constraining

communicative utterances and sifting out speakers in conflict with community values and goals—and a method of gaining access—generating communication that will succeed in the community and announce the neophyte speaker as kindred" (Lingard, 1998, p. 77).[2]

Prior to their immersion in the work of the hospital, students are provided with guidelines regarding case presentations. They are instructed that a case presentation must adhere to the following order:

- Chief Complaint (CC)
- History of Present Illness (HPI)
- Past History
- Family History
- Social History
- Physical Exam
- Diagnostic Impression
- Management Plan

They are also provided with detailed instructions about the kind of information required under each heading and have had some experience working with simulated patients, who are actors pretending to have different disease conditions. However, little prepares students for the rhetorical complexity of dealing with patients and reporting on those interactions while knowing that they are being evaluated for the performance of those reports.

Agency and Structure

Agency on the surface seems like an uncomplicated concept–the individual ability to act, to choose or to decide. However, the concept of individual action is caught up in a theoretical and philosophical controversy. The key binary terms in the debate are agency and structure. Agency refers to the capacity for freedom of action in the light of or despite social structures; structure refers to the social forces and constraints that affect so much of our social lives. However, poststructuralists, such as Foucault (1979), and feminist literary theorists, such as Smith (1993), have forever disabused us of not only the possibility of the totally free agent but even of desiring such agency. Smith, reflecting not only Foucault but a history of feminist research, points out that the agent of autobiography, the "I" is based on a notion of individuality that is uniquely Western. Tracing the historical development of the concept of the self, Smith points out its origins in the Renaissance, its ideological commitments to social isolation and pure rationality, and its rejection of the material body and emotions. Speaking of the body/mind dichotomy that underlies the Western concept of self, Smith notes

> ...this self is conceived to be persistently rational. As such it is an ahistorical or transcendent phenomenon and remains autonomous and free. From this autonomous site the self comes to identify, classify, and know the world in a

> monologic engagement that established individual consciousness as the
> center and origin of meaning (p.7).

Smith asserts, in fact, that the "I", the totally free agent is a mythic construct and a very dangerous one. Behind the voice of the "I" lies normative assumptions of "race, gender, sexuality, and class identification" (p.10). She asserts, for example, that in the traditional autobiography, the voice of the free agent is white, male and upper class.

However, just as feminist researchers and researchers in professional communication have decried the existence of the totally free agent so they have also challenged the most radical of the structuralist or poststructuralist positions that textual or social structures totally determine all forms of human action. As many feminist scholars have pointed out, it is exceedingly ironic that just as marginalized groups are beginning to articulate their positions, some theorists, notably Foucault, have challenged the very possibility of authorship. Furthermore, some specific organizational studies (Paré, 2002; Schryer, 2000) have noted that workplace writers are not mindless dupes simply filling in the forms of their required texts. Rather workplace communication can be filled with strategic action and even resistance to certain textual requirements. In fact, for many scholars in professional communication, theoretical approaches that focus too heavily on either social structures or personal agency fail to reflect the complex interactions between agents and their workplaces and the mediating tools that communicators use to negotiate this interaction.

Two approaches that do provide ways to conceptualize the interactions of agents and their social contexts include structuration theory and activity theory. Structuration theorists such as Giddens (1984, 1993) and Bourdieu (1992) see agents and social structures as existing in a dialectical relationship and focus on the product of that relationship—social practices. Giddens (1984) observes that "the constitutions of agents and structures are not two independently given sets of phenomena, a dualism, but represent a duality" and that the "structural properties of social systems are both medium and outcome of the practices they recursively organize" (p.25). For Giddens, social structures, such as already existing workplace practices, shape the behavior of workplace participants. In our study, for example, student physicians were expected to relay their medical knowledge regarding their patients using the format of the case presentation and specialized medical terms. However, as Giddens also makes clear, these social practices act as both a resource and constraint for their users, and they can only exist if their users reproduce them. For example, the medical students in our study are faced with a difficult rhetorical situation. They have to present their understanding of a case to medical experts who know far more about medical practice they do. The case presentation format provides them with a known structure that they can deploy to negotiate this situation (a resource) and at the same time excludes perceived non-medical ways of speaking or perceiving (constraints). At the same time, of course, the case presentation as a set of social practices would not continue to exist unless physicians continued to activate it. As Giddens makes clear, it is by acting as an agent, using the organized practices, associated with an organization that one becomes both socialized and an agent capable of intervening in the social world. For researchers in professional communication, Giddens' perspective explains much of the complexity that they find when they explore actual

communication practices in workplace settings. Yates and Orlikowski (1992), for example, echo Giddens when they observe that "genres can be viewed as social institutions that both shape and are shaped by individuals' communicative actions" (p. 300).

Bourdieu adds useful dimensions to a dialectical approach to issues of structure and agency. Like Giddens and other dialectical theorists such as Vygotsky, Bourdieu sees the social and the individual as inextricably linked. Like Giddens, Bourdieu sees social structures as powerful, already structured structures that affect social agents. However, he conceptualizes social structures and agency in ways that dramatize clearly the operations of power in organizational contexts. Bourdieu (Bourdieu & Wacquant 1992) offers the dynamic and parallel concepts of social structures as "fields" and agency as "habitus" (pp. 26-28). The concept of 'field' or 'market' or 'game' is his way of conceptualizing disciplines, organizations, or social systems. For Bourdieu, society is not a seamless totality, but rather an "ensemble of relatively autonomous spheres of play" (p. 17). A game, market, or field is a "structured space of positions in which the positions and their interrelations are determined by the distributions of different kinds of resources or capital"— cultural (knowledge), economic (money), social (personal connections) or symbolic (recognition) capital (p. 14). Within fields, agents are struggling to acquire these forms of capital so as to advance their own position. However, agents also struggle to maintain the position of their own fields. For example, traditional medicine struggles to keep "alternative" medical practices outside of the realm of its field and deny such practices any form of currency. Certainly during our study we observed medical students struggling to acquire the ways of speaking and culture capital of their field.

Bourdieu also effectively conceptualizes agency as "habitus." He observes that "habitus" or individual socialization is "a structuring and structured structure," that issues out of the "historical work of succeeding generations" (p.139). This on-going structuring process affects both schemas of perception (and thus thought) and actual practices. He asserts that "Far from being the automatic product of a mechanical process, the reproduction of social order accomplishes itself only through the strategies and practices via which agents temporalize themselves ..." (p. 139) Through the case presentation we observed medical students being socialized into the ways of seeing, problem solving and behaving characteristic of medical practice. At the same time we observed that these agents were behaving in definitely strategic ways. They were not simply replicating the structure of the case presentation; rather they were using it as an occasion for regularized improvisations. They were acquiring forms of cultural and symbolic power by their strategic choices, choices that were always limited by the necessity of adjusting their practices to the expectations of their teachers, the attending physicians. In effect, too, these strategic improvisations were also shaping their future actions, their habitus, as future doctors who would certainly treat patients, but might also train another generation of physicians. Agents, thus, are the activators of social structures and they operate through strategies and practices. It is this notion of strategies and a related concept of strategies as networks of regularized improvisations that best describes the kind of agency mediated by genres in workplace environments.

Activity theory and activity system theory provide additional insights to explain the complex, dialectical interaction of agents and their social structures. In its inception in the work of Vygotsky (1978), activity theory emerged as a counterbalance to simplistic notions of socialization which either envisioned individual agents as self-contained pre-formed entities (psychological models) or as entities totally at the mercy of their environments (behaviorist model). Instead, Vygotsky envisioned agents as learning through using tools in purposeful, goal directed activities. He saw that these tools, both physical (hammers, pencils) and cultural (language), pre-exist their users and mediate the interaction between agents and their social environments. By using tools, human agents internalized the values, practices and beliefs associated with their social worlds. At the same time as they become experienced users, agents can, in the midst of purposeful activity, affect their social contexts or even modify their tools. Certainly in our research, we saw that, by using the mediating tool of case presentations, medical students were internalizing the values and practices of medicine while involved in purposeful activities that would lead to their own ability to affect future social contexts i.e., their ability to deal with their own future patients.

In his work, Leont'ev (1978) further refined and operationalized Vygotsky's insights by recognizing that activity itself is a collective phenomena or a system, and as a collective phenomena could be divided into a hierarchy of three levels. He uses the metaphor of the medieval hunt to describe this hierarchy. At the top level is the total activity system itself, the purposeful activity in which all participants engage. The hunt, of course, is the activity system in which all the participants are engaged and which co-ordinates their individual or sub-group actions. Actions are Leont'ev's second level in the hierarchy. Beaters, for example, during a hunt beat the bushes to drive the animals towards the hunters. Their action is purposeful –to drive the animals forward—but is part of a larger system—the hunt itself. Finally, agents also act at the level of operations. These beaters are using tools to make as much noise as possible. To provide another analogy—a truck driver transports goods (activity system) by driving (action) using the gears and steering wheel (operations). In our research medical students were engaging in learning medicine (activity system) through case presentations (action) using specific linguistic choices (operations). Leont'ev also points out that operations become unconscious over time so that drivers, for example, are mostly unaware of the operations of shifting gears or using the steering wheel. However, as Russell (1997b) observes, learning an operation can itself become an action and part of an activity system as in learning how to drive. At this point many of the later unconscious movements and assumptions can be overt. In our teaching hospital setting, medical students were using and learning a new (for them) tool—case presentations. In time, this tool will become part of their professional repertoire and thus the operations of the case presentation will become tacit. However, at this point many of the features of the presentation are foregrounded and far less tacit than they will later become.

Engeström (1987, 1993, and 1999) and other researchers (Cole, 1999; Scribner, 1985; Wertsch, 1981) have extended Vygotsky and Leont'ev's work into a model for the analysis of complex interactions between agents and social structures in professional and workplaces settings. While retaining the concepts of tools mediating the socialization of agents, they have expanded the

analytical concepts within the notion of system to account for more of the dialogical interactions that occur between social agents and between social agents and their settings. Engeström (1993) defines an activity system as a system "that incorporates both the object-oriented productive aspect and the person-oriented communicative aspect of human conduct", and he suggests that a human activity system, "always contains the subsystems of production, distribution, exchange and consumption (p.67)." His visual model of an activity system shows how multiple participants interactively use mediating instruments or tools such as genres to achieve their goal directed outcomes (1999, p.31).
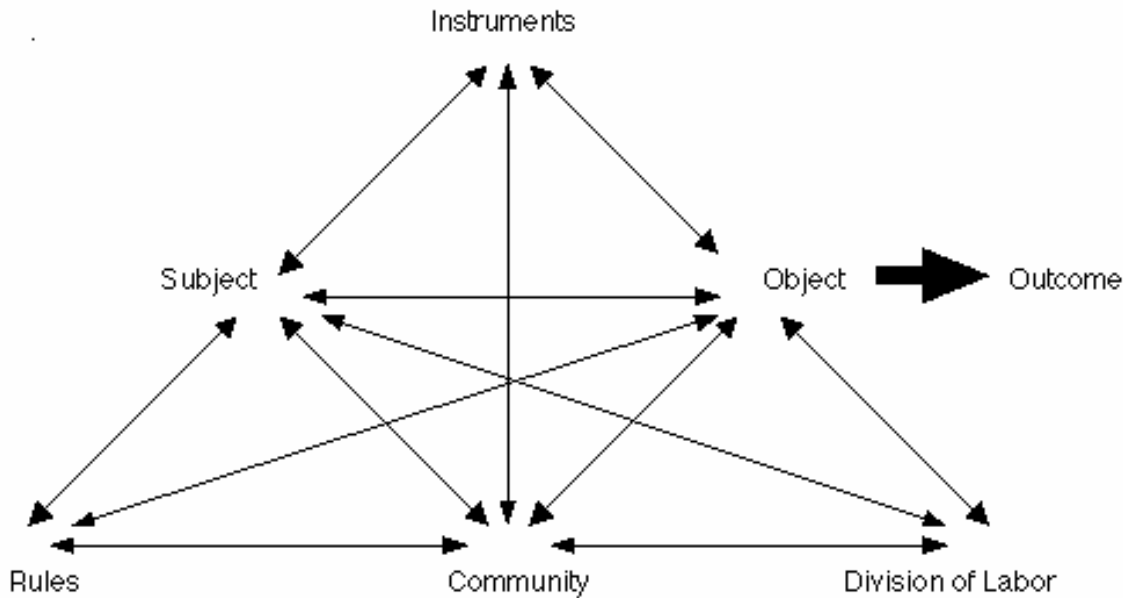

Figure 1. Engeström's (1999, p. 31) model of an activity system

In our research setting, the Subjects are medical students and instructors; the Rules include overt and tacit conventions regarding medical practice and medical presentation techniques; the Community includes medical practitioners, past, present and future; the Division of Labor reflects the different status between physicians and students but also the hierarchy within health care which assigns diagnosis to doctors rather than other medical staff such as nurses; the Mediating Artifact is the case presentation itself, a genre intended to model and demonstrate information gathering and diagnostic techniques; the Object is twofold—the transfer of synthesized information about the patient and the learning of the ability to synthesize and present information; and the Final Outcome includes new intellectual tools for the student as well as patterns of collaboration within the team of medical practitioners.

Furthermore, activity system theorists have developed interesting approaches to help account for change and the ways that agents themselves, after they have internalized their social tools, can affect their social settings. Most workplace settings are characterized by multiple and even overlapping activity settings. As participants in those systems, agents can and often do bring

rules and resources from one system into another and in this way can introduce change or innovation into a system. Furthermore, according to Engeström, activity systems are characterized by contradictions, and change sometimes enters systems because of those contradictions. In his work, for example, on a health clinic, Engeström (1993) noted the internal contradiction that physicians experience as "gatekeepers and cost-efficient producers… and as healers or consultants" (p.72). In our study we noted several contradictory roles: medical students must behave both like students and physicians, a difficult balancing act; physicians must use the case presentation as both a way to collect information about patients and as a way to assess students.

To date, many researchers exploring the interactions of agents in social settings have found activity systems theory illuminating. Engeström (1993) himself has used his theoretical tools to analyse healthcare settings. Hutchins has explored team work in navigation (1993), and much recent work has focussed on explaining technical innovation and change in workplace settings (Engeström,1999; Kuutti, 1999; Capper, 1999).

Genre Research

Researchers in professional writing and genre theorists have also long recognized the mythic dimensions of the totally free agent. Winsor's (1996) work on the discourse of engineering, Bazerman's study of scientific discourse (1988), and McCarthy's (1991) exploration of psychiatric record keeping – all illustrate the way existing discourse practices constrain the organizational and stylistic choices of professionalized writers. It is fair to say, in fact, that most genre researchers have focussed on demonstrating the way contextual and textual structures have influenced writers or agents. Beginning with Miller's (1984) insight that genres co-ordinate forms of social actions, the rhetorical and North American genre school has done an admirable job demonstrating the way social and contextual structures shape the way writers and readers cope in organizations. Paré & Smart (1994) and Smart (1993), for example, have examined the way existing genres shape the reading strategies of banking executives. And if North American rhetorical genre theorists have focussed on the effect of social, contextual structures, then linguistic-influenced genre researchers have explored the textual structures associated with genres.   Swales (1990) and Bhatia (1993), for example, have described the textual features of genres as diverse as scientific articles and international business letters. The intent of much of this research is to reveal often tacit textual structures so that English as a Second Language speakers can access the resources of Western texts.

To a large extent genre researchers have focussed so far on the social structures that influence text production rather than on the complex interactions that occur between agents and between agents and their social settings.

However, recent research has begun to focus on this interaction. Using activity system theory, Dias, Freedman, Medway & Paré (1999) demonstrate that the activity systems and thus genres of schooling and workplaces differ. Reflecting the purposes of schooling, educational genres typically create the circumstances wherein "epistemic" or knowledge-making tasks are evaluated

on an individual basis (p.44). As Dias et al. explain, "Within the classroom context each paper is graded in comparison to all others, and the institution has a vested interest in a quality spread" (p.62).Workplace genres, on the other hand, mediate the interactions of agents in different ways. In workplace settings, for example, managers will intervene in writing processes as "the institutional goal is to elicit the best possible produce from each employee each time writing is undertaken" (p.62). Furthermore, professional and workplace communicators often face political situations wherein they have to juggle competing goals while using proscribed templates. In short, Dias et al. conclude that the activity systems of education and workplaces differ so radically, that educational institutions cannot claim to be teaching workplace communication. However, besides demonstrating the incommensurability of workplace and school activity systems and genres, Dias et al. also document the complex ways that newcomers to an organization interact with social structures through genres and thereby acquire the ability to act within that social setting. In their study of social workers in hospital settings, for example, they note that social workers have to learn the genres of medical practice in order to partially resist them.

Building on previous work in genre and activity systems theory, Bazerman and Russell have also contributed important insights into the interactions between agency and social structures. Bazerman (1994) has noted that genres are, in fact, parts of interrelated systems that connect the past to the future. So, for example, in our study, the medical students interviewed patients (a highly regulated event), consulted files, and transferred information to notes and to patient records. As a result of their case presentation, patient records might be adjusted, consultation letters or phone calls might ensue and the students themselves would receive a mark on their transcripts—all generic events. Bazerman (2002), like Bourdieu, notes that participation in these genre events is identity or habitus forming. As he observes, "genre shapes intentions, motives, expectations, attention, perception, affect, and interpretive frame. It brings to bear in the local moment more generally available ideas, knowledge, institutions and structures that we recognize as germane to the activity of the genre" (p.14). In his major studies, Bazerman (1988, 1999) focuses on how well-placed, expert users (Newton, Edison) develop a self-conscious sense of agency as they manipulate the genre systems that shape them.

Russell, on the other hand, focuses on the difficult balancing act that newcomers face as they appropriate what are, to them, new genres. Using activity and genre research, he suggests genres "help mediate the actions of individuals with others in collectives (activity systems) to create stabilized-for-now structures of action and identity" (1997b, p.514). Russell demonstrates the "double bind" (p.533) that students face. Professional identities and forms of agencies are woven into genres such as the case presentation, and yet to write or speak those genres students must eschew other ways of speaking that might seem more comfortable or familiar to them. As Russell (1997a) acknowledges, "Agency is distributed in streams of activity as participants appropriate voices in the networks of disciplinary practice" (p.230). Some students (see Casanave 1992) may even resist the voices and ideological positions of the genre they are being asked to assume and thus refuse the agency the genre affords them. However, Russell points out that genres are not monolithic structures: they are not totally predictive. Rather, quoting Schryer

(1993), he notes these mediating tools are only "stabilized-for-now" and, in fact, are reproduced by their users using a range of operations to accomplish the goals of the activity. Because they are involved in multiple activity systems, users can bring over resources from one system to another although, as Russell notes, this kind of innovation rarely happens when newcomers are appropriating a new genre. In fact, observing a genre being internalized can provide researchers with an opportunity to see the internal workings of a generic situation (Russell, 1997 b, p. 515). At this point, the identity expectations built into the genre and users' strategic choices become far more overt and open to scrutiny. Once these expectations and choices become operationalized and part of their users' common sense they will become tacit and hard to access. In our study, for example, most of the physicians we interviewed could not remember ever having learned how to do case presentations although they viewed presentations as an important part of their daily practice as physicians.

These dialectical theories of structuration, activity and genre form the theoretical background to our study of the appropriation and internalization of the genre of case presentation by medical students. Like Giddens and Bourdieu, we saw that students and the attending physicians were accessing a range of strategies as they together negotiated this event called, the case presentation. We noted as well that these events were regularized, that is, that these social actors were enacting both tacitly and overtly some regularly occurring features. Their behavior was being structured. At the same time we observed that these agents were acting strategically and improvisational. Their choices were never entirely predictable. They were acting as agents within the confines of the resources and constraints of the genre although physicians had obviously more access to agency than did students. We noted, too, the implications for students of acquiring the habitus or identity of physicians. They were acquiring one of the genres of medical practice, a genre that would endow them with future agency—the power to intercede in people's lives – and yet the path to that agency required them to negotiate a series of contradictions. We saw them trying to balance the contradictory demands of two activity systems—one dedicated to the future--medical practice-- and the other to the present and the past--schooling. In our view the genre of case presentations operated as a mediating tool that helped these students and their instructors traverse a deeply problematic and contradictory phenomena – the renegotiation of agency between generations. We saw, as well, that in this renegotiation certain often contradictory ideological positions were being reconstructed that the medical practitioners themselves might want to question and challenge.

The Study

The study itself consisted of a multi-disciplinary, research program investigating the role of case presentation in the socialization of the healthcare professional. The study explores: 1) How novices learn the strategies associated with the situated language practice of case presentation and 2) How this language acquisition shapes novices' developing "habitus" or professional identities.[3]

Setting

The study was conducted within the context of the third-year pediatric clerkship at an urban teaching hospital. The 3-week inpatient component of the clerkship involves students in patient care activities where students function as part of a medical team consisting of a faculty pediatrician, a senior (third year) resident, a junior (first year) resident, and 1-3 other students. [4] Students are responsible for admitting a new patient to the ward every 3-4 days on their "call" shifts, when they remain in hospital overnight. The students interview and examine the patient and present their findings via case presentations to the pediatrician or the team the next day on "rounds", which usually occur at the nurse's station, in the hallway outside the patient's room, or in a small conference room.

Data Collection

Data were collected in two phases: field observations and interviews.

Phase 1- Field observations: After the project received ethics clearance, 11 students and 10 faculty participated in the observational phase of the study. Students included 5 women and 6 men, while faculty included 5 women and 5 men. Nineteen oral case presentations and the teaching exchanges related to them were observed and audio-recorded. Transcriptions were rendered anonymous, resulting in 380 pages of teaching exchanges regarding case presentation.

Phase 2- Interviews: Eleven students and 10 faculty were interviewed (most interview participants overlapped with observational participants). A 45-minute interview script was developed during the analysis of observational data. The script consisted of open-ended questions about the nature and purpose of case presentation in the clerkship, as well as two video clips of representative case presentations based on those observed during phase one of the study. The two presentations were by the same student with different faculty: an early, flawed attempt and a later, more sophisticated attempt. Chosen for their representation of various student strategies and faculty responses, these presentations were dramatized with gender and age altered to minimize the possibility of recognition by participants (see *Less Expert and More Expert Videos*). Interview respondents were asked to comment on the strategies used by both the student presenter and the faculty teacher in the videos. Interviews were transcribed and rendered anonymous, yielding 175 pages of textual material for analysis.[5]

Data Analysis

Data analyses involved modified grounded theory [6]and statistical strategies. Using a grounded theory approach, observation transcripts were individually read by four researchers for emergent themes, and discussions were convened to develop, apply, revise, and confirm a coding structure. One researcher applied the coding structures to the complete data sets using NVivo qualitative data analysis software, returning to the group at regular intervals to report on difficulties or emerging patterns in the computer analysis.

In order to conduct non-parametric and parametric statistical analyses[7] of the case presentations, word counts of the 16 case presentations were conducted. All words were counted except those spoken by or to the observer about the project, words identifying speakers, and words added by the transcriber (e.g. loud beep in background). Non-parametric analyses (Kruskal Wallis & Wilcoxon) were conducted of the overall number of words spoken by three groups – Students, Doctors and Others (residents, other students etc). For each transcript, the total number of words spoken was divided by 4, and the number of words attributed to each of the three groups was then tracked in each quartile. Parametric analysis (Greenhouse-Geisser) was conducted to compare the group word counts across and between the four quartiles.

Results and Discussion

I. The Case for Regularized Interaction

At one level, the case presentations that we observed provided evidence of the effects of social structures as they all enacted a carefully regularized interaction between the students and their doctor/mentors. We noted two patterns of regulation.

A. Pattern One: Case Format

Most of the case presentations followed the normal organization of history, followed by physical exam results, followed by a discussion of possible diagnoses and case management. Students who did not fill in or follow the pattern were reprimanded or required to fill in the missing information. In the following excerpt, for example, the student attempts to move from presenting case history to presenting lab results but is stopped by the doctor because the student has failed to provide a full history.

> **S6.** He was well after discharge for 5 days. Then he started having vomiting once a day until October 12, which was yesterday, where he vomited 3 times in one afternoon, and he seemed to have a fever…. So they returned to the hospital ER. In the emergency room, he was afebrile, he wasn't toxic, he was well looking, and he had normal labs, except for the following: he had an increase in…

> **Dr3:** Sorry, …Let's just maybe stop there. Just in terms of anything else in this past history that we want to know, and then we'll hear what his labs were. That's when we'll say what we think is going on and what we would do if we're seeing him for the first time. Ok? So tell me the rest of his story. Is there anything else? You mentioned something about his development.

The interviews from both the students and doctors emphasized the importance of attending to organization or "flow." During the interviews we showed participants video tapes of simulated case presentations, based on some of the actual case presentations that we observed (see *Less Expert Video* and *More Expert Video)*,[8] and asked them to comment on the strategies used by both students and doctors. Upon viewing the two simulated case presentations during the interview phase of the study, Doctor 7 commented on the "less expert" case: "So he's trying to

organize it in a certain way, but he's not really doing it in a proper and full way. I think…he's jumping from one thing to another too quickly." Another doctor, Doctor 9, also critiqued the less expert case presentation for its failure to attend to organization. He noted that, although the student clearly knew the overall form of the case presentation, his organization within sections was at fault. He observed, "I find his (the student's) presentation of the current illness disorganized, speedy." Most of the doctors[9] interviewed agreed that one of the salient reasons that the more expert case presentation impressed them was that the student had a better command of the organizational structure of case presentations. As Doctor 7 explained, referring to the more expert student, "This person seemed to be a bit more organized or a bit more knowledgeable of what he's going to present, so it come across. And the time frame, it is easier to understand what's going on with this child in terms of the history." Doctor 11 concurred noting that the more expert student was better organized and following a "template."

Students also recognized the importance of the case presentation structure. All could list the expected structure. As student 2 observed, "We sort of learn the general approach of…identifying the patient, chief complaint, history of present illness, past medical history, social history et cetera, et cetera." They also shared with physicians an understanding of the purpose of the structure. The same student explained, "It just sort of helps you to organize your thoughts better… to make a story of what might seem like sort of a chaotic bunch of events. Because without a structure, it's really hard to make sense of anything." All the students confirmed our judgment that the "more expert" video, in fact, represented a more expert performance of a case presentation. Most mentioned that one of the most salient differences was that the more expert case was characterized by "flow" (Students 2, 8,10,11,14) and an attention to organization (Students 2, 7, 8,11,13,14).

Consequently, we have here an example of an overt, recognizable discourse structure that students are expected to appropriate and use. It is clear, too, that, although the students recognize the constraints of the structure, they also see those constraints as guiding their performance. The organization in fact helps them generate their cases and keep them on track. It functions as both a constraint and a resource.

B. Pattern Two: Control of Time

As we observed a number of case presentations, we noted several other more tacit patterns of regularized interaction between the presenting students and the mentoring doctors. The following graph (see Figure 2), the result of a word count across 16 transcripts (see Appendix A for actual numerical results), visually represents the average amount of time students, physicians, and others actually occupied during case presentations. As the results suggest, students and doctors control about equal amounts of time (as measured by number of words).

Percent Words Spoken By Groups
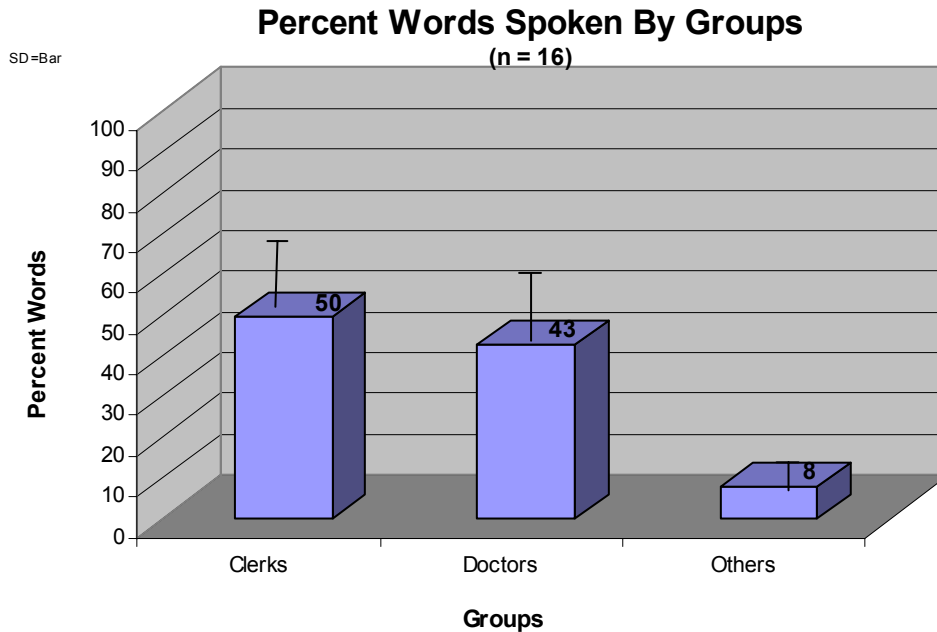### (n = 16)

Figure 2. Percent words spoken by doctors, students (clerks) and others during case presentations

Neither students nor the attending physicians expressed awareness of this regular pattern, a pattern that perhaps reflects the fact that this genre mediates two activity systems—one dedicated to education and the other to medical practices.

However, a closer look at the interplay between students and doctors reveals an even more interesting pattern   In our numerical analysis we divided each case presentation into 4 equal quartiles. To a large extent these quartiles correspond to the organizational structure of the case presentation. So, for example, the first two quartiles tend to correspond with time devoted to providing the history and physical exam results of the patient, while the last two quartiles overlap with discussions regarding possible diagnoses and case management. As the following graph (see Figure 3) indicates, from an external perspective, case presentations have an almost dance-like regularity. The students, on average, speak most in the first quartile (~80%) and less each successive quartile to a low of ~27% in the final quartile. The doctors, on the other hand, speak ~20% of the words in the first quartile and increasingly more in successive quartiles to a high of ~60% in the final quartile. According to the Greenhouse Geisser Test, this pattern of interaction is statistically significant in two ways. Each group changes significantly across the quartiles. In addition, the quartile changes vary significantly among the groups (see Appendix B).
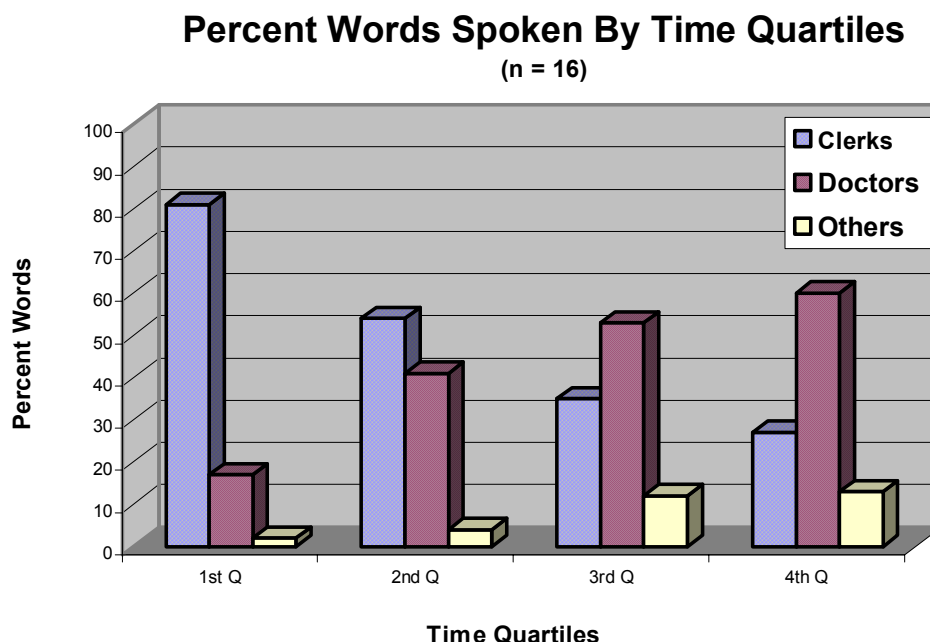
Percent Words Spoken By Time Quartiles

(n = 16)

Figure 3. Percentage of words spoken by students (clerks), doctors and others across the 4 quartiles of case presentations.

This graph suggests that students do, in fact, begin with control over the case presentation when they are presenting information about history or physical exam results, but they appear to lose actual "air" time (as defined by number of words spoken) to doctors when the more difficult diagnostic and case management work tends to occur. Again, this division of time/ space might be entirely appropriate for a situation controlled by an apprenticeship genre wherein students are learning difficult diagnostic tasks.

These results help illustrate the highly regularized nature of case presentations. The genre expectations of both presenters and receivers appear to co-ordinate the organization of complex patterns of information and the actual division of time/ space or agency between the participants. These participants appear to self-regulate; the social structures woven into the genre seem to create patterns of regularized activity.

II. The Case for Strategic Action

Besides being sites of regularization, case presentations are sites of strategic action on the part of both instructors and students. The "air" time occupied by instructors was filled by a host of teaching and learning strategies. From an activity systems perspective these "strategies" help to operationalize the activity of the case presentation. Some of the most prevalent teaching strategies included "modeling language", "quizzing", "pointing to an absence" and "pet topics". The following chart defines each strategy and offers an illustrative example. Each of these strategies occurs numerous times throughout the transcripts.

A. Instructor Strategies

Strategy	Definition	Examples
Modeling Language	Instructor provides student with required, specific terms	Dr 10: So what you might say, then when they saw her in the emergency room was that she was in "moderate respiratory distress." Student 10: Right
Quizzing	Short bursts of questions designed to see if student has specific knowledge	Dr 8: Okay, so there—there are the first generations, and the big second generation we use is cepheroxin. And we talked about this the other day. What does cepheroxin do better than..? Student 7: What does it..? Dr 8: Do better than? Student: Do better..? Dr 8: Than-why did you choose cepheroxin for this boy, rather than, um ceph(?) Student: It's …the..coverage …of (pause) staph? Dr 8: No actually, enceph and cephzolin and keflex have very good, um, good staph coverage. Student: It's h-flu? Dr 8: It's h-flu. Right.
Pointing to an Absence	Instructor notes missing information	Dr 7: Now why did they do a liver function? Student 8: He had a full septic workup. Dr 7: Yes, but—but why? Was this child so ill-looking? Did he have metagismis? He wasn't that febrile. So what was the reason for the liver function? Student: Don't know.
Pet Topic	Instructor launches into a long digression which may or may not be directly relevant to the case.	Dr 7: The smoking, not only for asthma, but also for recurring otitis media, it's a major factor. So you always have to ask if the Parents smoke in the car. They say they don't smoke in the house. They smoke on the balcony of the apartment, and the smoke will come inside. They say they smoke in the basement, but not upstairs. None of it is acceptable.

From the attending physician's perspective, these interventions into the case presentation are necessary. They are charged with the joint task of ensuring that patients are receiving good care and that students are acquiring their professional skills. However, from the student's perspective

these interventions were, in fact, possibly necessary but certainly interruptive. Such interruptions rarely occur during a case presentation conducted between practicing physicians. Of course, practicing physicians do interrupt each other's case presentation but for different reasons. They might want clarification on a certain disease condition, but they would not interrupt each other to check on the knowledge basis of the presenter (unless something happened to challenge the ethos of the presenter such as the presence of a consultant with specialized knowledge).

Attitudes towards interruptions differed between the students and the attending doctors. The students, as revealed in the interviews, had a complex attitude towards interruptions. During the interviews we asked the students to describe the features of an effective versus an ineffective case presentation. All the students mentioned that they knew they were doing an ineffective case presentation if the attending physician interrupted frequently to ask for more information or for clarification, especially early in the presentation. As one student (C8) explained:

> Certainly if you are interrupted in the first couple of sentences, then it's a bad sign. If they ask you for details that you didn't already ask, then that means that you didn't cover something that was obviously important to the supervisor. And…if you're also, if you're interrupted—anytime you're interrupted you probably are giving information that's not pertinent to the situation, or the supervisor, or supervisors, are bored.

Several of the students also mentioned that they knew they were doing a good job if their presentation received the right kind of interruptions. Towards the end of a presentation, if an instructor begins asking questions that go beyond the case and a discussion ensues, then the student can interpret this interruption as evidence that he or she had wielded the genre effectively. As student 13 explained, "So if you, if you can really get a good discussion about management, that's sort of beyond the case…then you know you've done a good job."

During the interviews, the attending doctors rarely, if ever, mentioned interruptions as a characteristic of ineffective case presentations. Only after watching the videos of the "less expert" and "more expert" case presentations, did they talk about the kinds of interruptions that occurred on the videos, and they did not arrive at any consensus regarding strategies for interrupting students. Several mentioned that they tended to wait until appropriate times to interrupt (usually between sections of the case presentation); while others thought it was important to stop presentations as soon as they went off track. However, it is unlikely that the physicians view interruptions in the same negative light as students. The students clearly see interruptions as sites of evaluation and signs of failure whereas instructors see them most often as teaching instances.

These contradictory perceptions reflect perhaps the two activity systems at work here, the fact that this one genre is mediating the work of teaching and medical practice. However, this data also indicate that students view interruptions as possible challenges to their attempts to develop a sense of agency or control over presenting cases. They know they have mastered the medical voice when either they are not interrupted or the interruptions occur for the right reasons.

B. Student Strategies

The students find themselves in a contradictory situation. They are quasi-responsible for patient care and thus neophyte physicians, and they are also students who are being evaluated for their skills. Most importantly, they must use the same genre to demonstrate their abilities as both student and physician. In fact, in our data we noted two sets of strategies that students tended to enact during case presentations: One set reflected their status as students and the other their emerging status as physicians. We called one set of strategies Strategizing as a Student and the other Strategizing as a Student/Doctor (see also Lingard, Garwood, Schryer & Spafford, 2002). The following set of strategies includes the kinds of actions or agency that students deploy in response to the evaluation activity present in their case presentations.

1. Strategizing as a Student

Strategy	Definition	Example
Proving Competence	The student attempts to prove his or her expertise through detailed knowledge or through reference to research.	**Dr.5:** Why did you treat the fever? Are we treating her? Or are we treating the family? **Student 5:** I guess I was worried about giving extra medication and side effects. I know that … in terms, of, uh, fever management …um.. with the exception of very high fevers. I don't think there's any risk to the child, unless they have a history of febrile convulsions, or lower seizure threshold…So, it's for comfort…and so that she can sleep, and so that she can actually get the proper intake and eat and drink…Um…I know there's a big debate over suppressing fever. I know there's issues with… the sort of telos of doing that.
Seeking Guidance	The student seeks direction or permission to continue.	**Student 6:** That was just in terms of the development of it. Um, I don't know if you wanted to know anything else associated with vomiting. Or if you want to stick with developmental. **Dr 3:** No, no, tell me whatever else you think is important.
Deflection Self-defense or Pre-emptive	The student seems to feel under attack and either reacts to defend himself or herself or sees the attack coming and wards it off.	*Self –Defense* **Dr 5:** And they determined that she had ARDS, is that what you said? **Student 5:** Oh, that's what…I guess it would be, um, infant respiratory distress. **Dr 5.** What did you mean by—you said—if I'm correct—what did you mean by ARDS? Student 5: That she had to have cerfactin, so

		she had to be intubated. She had acute respiratory distress. I didn't mean adult… *Pre-emptive* **Student 6:** There were no pregnancy complications with X. He was a C-section delivery, he was a little less or above 5 lbs. and he was at term. So, a little underweight but at term. Um, something that I actually should have asked about more about, because she said that he apparently had jaundice after he was born.

As experts, practicing physicians would rarely feel the need to use this range of strategies as their competence seldom explicitly comes into question.   However, students are highly aware that they are being assessed and evaluated. In the interviews, all students were asked what they considered the purpose of case presentations. All mentioned the important role that case presentations played in terms of processing and transferring knowledge about a patient, but all were also intensely aware of themselves as novices being evaluated through their case presentations. One student (C 11) noted that, "Clearly, the purpose of these presentations, for the student, I think, is simply to show off, whether he can—he or she can look good. And do well, and, uh, you know, get a good mark or whatever." Students knew too that they needed to achieve a good evaluation they had to prove their competence by demonstrating their effectiveness and defending themselves.

One student (C 5) reported:

> Effective to me means that I actually feel comfortable, when I go home that night, that I've relayed everything that I was told properly to staff…A secondary thing is that , effective for me is showing that I'm effective. Showing that I can take this information in and begin to digest it for the staff. That I'm, you know, about a million steps behind, but on the same path…

This student's last comment—their recognition that they are "about a million steps behind, but on the same path" – clearly indexes the student's acknowledgement of the kind of student-shaped agency he or she can safely assume. As another student (C7) put it, students had to demonstrate confidence but without being "confrontational." In preparing for their case presentations, students also indicated that they were well aware of the defensive strategies that they would need. In talking about her most effective case presentation of the term, one student (C5) observed:

> It (the case presentation) was a child who had, um, chronic asthma…And I had done a lot reading, and I had also spent an extensive amount of time with the family. I had taken a history over two hours…Um, so I'd spent enough time to have answers for basically any peripheral question about where they worked, lived; details about whether there were carpets in the

> home…And then I'd gone and done some reading. And I, just remember every
> question that I was asked, I had an answer that I could defend. I was
> challenged, and I could defend it. We went in (to the patient's room), the
> findings were as I said, and…we left the room and there was just the sense
> of, wow, you know, nothing more to that than what she (the student) said.

In preparation for her evaluation the student is deploying the successful student strategies of proving competence and pre-emptive deflection. As other student and faculty commentary indicated, the reactive self-defense is a less successful strategy. When we played sections of re-enacted case presentations for faculty and students, the "less expert" video showed the student defensively responding to the attending physician's comments about his use of terminology. Some students viewed this scene as confrontational and several observed that the student should have just acknowledged what he did not know. One student (C13) stated that she had learned "not to bluff, but to say I know this much, and set the limit." This student has, in fact, learned an important form of agency suitable for the student role that she must perform.

2. Strategizing as Student/Doctor

Besides being students, these students are also moving along the path towards being doctors. As one student (C5) explained, her ambition at this point in her career was to be "a competent student doctor". In our transcripts we identified a series of strategies that attending physicians used and encouraged students to use.

Strategy	Definition	Example
Summarizing	A summary of the important details of case. Summaries can occur between the major sections of a case or towards the conclusion.	**Student 7:** So in summary, he's a 5-year old boy with a previous pneumonia, a 7-day history of fever and right orbital pain, erythema, photophobia and swelling. **Dr 8.** Anyone have…Are there any questions? Anything we didn't cover?
Relevance	The presenter knows what is relevant to a case, both the pertinent positives and the pertinent negatives.	**Dr.8:** Well let's just be clear. Venous gas, don't even look at the PO2 measurement. It's not relevant—they'll give you a range… **Student 10:** Oh, okay **Dr 8**: It's not important. It's not important…that's not the correct word. **Intern 1:** (interrupts): Relevant **Intern 2:** (interrupts): Giving any information. **Dr 8:** It's not relevant. It's not giving you any information.
Controlling Turns	The presenter controls the pace of the presentation by	**Student 2:** And, uh, family history. The, uh, father is a university professor, and the mother is an ophthalmologist. And both of

	moving from one section of the case presentation to the next with little interruption.	them are in good health , uh, and they both live in the downtown area in an apartment. And there's a sister of 3 years of age, who is also in good health. **Dr 1:** Good **Student 2:** And, uh, sleep history. Uh, 17 to 20 hours of sleep per day. Which seems pretty normal. Social history. Basically the only thing worth mentioning is uh her sister goes to daycare for half a day, uh, each day and uh, they're not aware of the health of any of the other children at the day care… **Dr.1.** Okay.

a. Summary Strategies

Summaries occur at different levels of the case presentation and demonstrate the kinds of contradictions that students must negotiate in order to assume the agency associated with medical practice. In their commentary, both students and doctors talked about the ability to move into swift, accurate summaries at various levels of the case presentation. At an advanced level, the entire case presentation is a summary of a patient's condition. As one Doctor (10) explained, part of her training included learning how to do the three-line presentation. In her view, students should be aiming towards the three-line presentation. She observed, "And that's what people are trying to because…that's the way I communicate with my colleagues, that's what you need to get to." However, this type of summary is extraordinarily difficult for students to accomplish, especially if the case is complex. The three-sentence summary assumes that students can figure out the whole story of the case, and they often do not have the expertise to do so. In fact, students are often caught in a dilemma when presenting cases. They are frequently told "not to focus too soon" (Doctor 5) in presenting possible diagnoses of their case. At the same time, they are advised to present only "relevant" information. Knowing what is relevant depends greatly on the student's ability to guess the possible diagnoses of a case. The ability to produce the three sentence summary depends on the experience of having handled and presented a large number of cases and therefore having better prediction strategies on hand.

Students, however, could be expected to try their hand at summaries at various locations in the case presentation. Several of the attending doctors (e.g., Doctors 5 and 11) noted that they wanted the case to begin with a concise synopsis of the problem. Doctor 10 observed that he wanted cases to conclude with summaries that stated something like "so I think that this patient has this, because of this, but it could be that." Students also recognized the importance of doing summaries during a case. For instance, in discussing the video of the effective case presentation shown during the interview, one student (13) observed that the effective case presenter provided brief summaries at the end of each mini-section. She explained, "Because sometimes if you throw details at people, they don't have a whole picture, and you just sort of need to wrap that up for them at the end."

However, both doctors and students recognized the difficulty of the summary and acknowledged that students could only try their hands at summaries and should not expect success. One student, when asked to explain why residents (more advanced learners) performed excellent case presentations, answered, "Because they know what is relevant." In other words, right from the beginning, the student has to pick out the salient details from a patient's case and shape them into an account that convinces the attending doctor that the student has a strong sense or "impression" of the possible diagnoses. As one doctor explained:

> It's cause they are so junior that they have no experience, and they don't know – it's a very challenging thing too. They don't know the differential diagnosis. So it's very hard to ask questions to rule in, rule out different things. And you know, I would say also just a summary at the end, and an impression—I mean, that's another important thing, so obviously a lot of students do not do that. So they finish off, and then, to summarize, they say, so I think this patient has this, because of this, but it could be that. But I would say most students don't do that, I think they are probably afraid …some of them had no impression.

From the students' perspective, the summary is a seemly simple yet complex strategy. To really provide summaries they must have a strong sense of the possible diagnoses. Yet they lack the necessary experience. However, the students who are advanced in their socialization do figure out this strategy of creating the "impression" that they have a strong sense of the possible diagnoses. Often too they create this impression through a great deal of behind the scenes work wherein they consult research sources and confer with the resident interns in their teams. As students, they are rarely encouraged to arrive at swift diagnoses but their summaries depend on conveying a sense that they could arrive at a reasonable range of diagnoses, and they need this range to make their summaries coherent and convincing. These results speak to the complex and even contradictory tactics that students must use to negotiate the recognition of their agency not just as students but as medical practitioners.

b. Relevance Strategies

The ability to develop convincing summaries includes the strategy of recognizing pertinent positives and pertinent negatives. Pertinent positives refer to relevant positive information about a patient such as the presence of fever or a cough; pertinent negatives refer to the salient absence of symptoms or findings. For example, the absence of a rash could be significant. In almost every case presentation we heard the attending doctors calling for "just the positives" or just the "significant negatives" or just the "pertinent findings."[10] Consequently during the interviews we asked both doctors and student what this command meant. Students clearly understood the meaning of the command. As one student (C5) explained,

> If it's pertinently not there—in the—in the case of someone who's got a cough, if their chest is clear, that's pertinent. In the case of someone who's had a fever and night sweats, if they do have swollen lymph nodes, that's a pertinent positive.

Both students and attending doctors also understood the intent of the strategy. As one doctor (8) explained the command, it meant, "Everyone's getting exhausted, you're being way too comprehensive, and we do need to push you to learn to be concise." However, learning how to be concise is more difficult than it seems because again being concise means having a felt sense of what is relevant to the case. As another doctor (5) notes regarding the command, "And I think, what you're trying to tell people in that term, is don't give a lot of unnecessary details if it's not going to add to the story." Students, however, are keenly aware of the contradiction that they often do not know what is relevant or what is unnecessary. As another student (16) noted, knowing what is relevant comes

> with experience, because…as every chief complaint and situation has certain things that you want to focus on…And certainly as we're going through studentship, there are certain pediatric problems or certain surgical problems we haven't been exposed to and we don't know what are the pertinent positive and negatives and we learn that.

The complex and contradictory strategies that students must deploy to convince their evaluators that they are effective student/ doctors are evident in the following exchange between a student (11) and one of the researchers. The researcher has just asked him to explain how students cope with the command "not to focus too soon" or to arrive too quickly at a diagnosis. He explains that by requesting that students not focus too soon, attending physicians mean the following:

> **Student 11.** Tell us the story in an unbiased manner, including all the pertinent positives and negatives, without keeping the known diagnosis, or the working diagnosis in mind. Unbiased….and uh, filter out the time-wasting—parts of the story. And so basically, just tell us what we need to know to make an accurate diagnosis.
>
> **Interviewer:** Okay. And when you're doing that filtering,…what's the process like in your mind. Like, how do you do that—how do you filter?
>
> **Student:** With a diagnosis in mind, try and recall the things that are necessary to make the diagnosis. So the points, of the part of an illness that have these…things, positive or negative aspects to the disease. And so thinking about those, you think, well does the patient actually have these characteristics, rather than what does the patient have.

This excerpt reveals a clear contraction—the student knows that he must present in an unbiased manner but that he must also have a diagnosis in mind that will help him filter or bias his report. Our data does not reveal whether students are conscious of this contradiction or not. But savvy students appear to have figured out that they must have a defined range of possible diagnoses in mind even though they cannot come right out and state them, especially at the beginning of the presentation.[11] As another student (14) put it, focusing too soon could lead the doctor astray and the student could be accused of "editorializing" or interpreting the data. At the same time, students should have a range of diagnoses ready to frame their presentation. Otherwise the story they are telling would not make sense; it would not be leading in any particular direction, and they could not make on the spot judgments about what information is relevant or not. This same

student succinctly described the difference between an effective and ineffective student case presentation.

> So…if the person came in with chest pain—now I pretty much think this is a heart issue. I think that—and they're having a heart attack, we should probably do an EKG, we need enzymes—well, that's not history. The history is, the patient had chest pain for 24 hours, they had shortness of breath…and then you with that information, in your impression and plan, you can say, this sounds to me like a heart thing. At the end, after you've done the case presentation.

The agency that students have in this situation is constrained but real and filled with strategic action. They have to frame the case in such a way that their listeners know that the student has a good idea as to what the range of diagnoses could be but they must hold off on their tentative conclusions until they have presented all the relevant information and explored all potential possibilities.

c. Controlling Turns

From the students' perspective, it is important to move through the case presentation as quickly, efficiently and effectively as possible as they view most interruptions as expressions of negative evaluation. The obvious place for interruptions occurs between the sections of the case presentation. If a student has not organized his or her case effectively or has not conveyed an impression of knowing the relevant information, they will be stopped and questioned or be required to redo a section of the case. These interventions slow down the case and can cause tension for all involved. In our observations we noted that some students consistently announced the next section of the case presentation and then attempted to move swiftly into that section. In the following excerpt, for example, the student announces that she is moving into a description of a child's social development (a sub-section of the physical exam), completes that section, and then attempts to move into the next section but is stopped by the attending physician. Throughout the transcripts we noted this ongoing tension over control of turns between students and their instructors.

> **S.5.** …The review of systems was unremarkable, with the exception of tubes in both ears, which I think one side has fallen out and one side has loosened. I discussed that a lot with her mother, Ok, so general description---

> **Dr.7.** One sec. before you go on to the physical exam, what other questions did you ask since this child has asthma? What are the pertinent things--

Throughout the presentations students repeatedly announced where they were in the narrative of the case presentation. Those who could use effectively the strategies associated with case presentations such as summarizing and having a felt sense of relevancy could sound and behave more like physicians. As they acquired this habitus, they could speed up the case and control more often the transition from one section to another. In other words, as they began to sound like medical practitioners, the interruptions changed in number and quality.

III. The Case for Improvisation

Besides being regularized events that co-ordinate the strategic actions of both instructors and students, there is no doubt that the participants in this genre are also improvising as they move through the turns of the case presentation. In their interviews,

students mentioned that, although they acknowledged the necessity of the case presentation structure, they actually adjusted that structure according to the rotation, the setting and the instructor they were facing. Most students reported that they watched closely the doctor who was evaluating them and adjusted their presentation accordingly. One student (7) noted that when she noticed the attending physician getting bored or impatient she had a range of improvisational strategies at hand. She would interrupt her presentation and ask whether they wanted to keep hearing about a particular problem or she would move onto something else or she would refocus the story or summarize it on the spot. Other students kept track of physician expectations. Student 5 reported that:

> Some staff are very into the psychosocial context of the patient—the patient as a whole person. "Did you ask about how mom's paying for parking? About how Dad's, uh, you know, coping with missing work?...You tend to sort of mirror what they want. And I think you can do that, within limits. But it depends on how quick you catch on.
>
> **Interviewer:** And what in your view are the features of an effective presentation?
>
> **Student 9:** I guess it depends on who you're presenting to. For example, for internal medicine, morning report, you have to present it in a different way than if you're the emerg physician transferring a patient over. …So if it's like morning report, for example, well you'd say, "I have a 41 year old man, presenting with abdominal pain". So that's how you'd it for morning report, because it's more of a teaching kind of presentation. Versus if you were the emerg physician, you'd like "I have a 41 year old man, with suspected triple A". So you'd give the diagnosis right way, and it's just very pertinent facts. Well, for other things, you'd present more detail. So it depends on the scenario.

Several students noted that they adjusted their presentations according to the rotation. In this excerpt we hear a very savvy student explaining his reporting practices to the interviewer.

This student has obviously figured out the importance of context in terms of selecting his reporting style. He knows when to report more like a physician and when to report more like a student/physician. The student physician has to structure the story as if he or she does not know the diagnosis and is providing a full, unbiased account that culminates in a diagnosis or differential diagnosis. The student faces two challenges. Choosing the data to present relies on knowing the diagnosis yet the physician in some contexts will not tolerate a conclusion that appears unproven. This student/ physician, like other savvy students, adjusts his practices according to the scenario that he faces and actively uses the resources and constraints of his

situation to his advantage. Savvy students, of course, are well on their way to acquiring the cultural (education) and symbolic capital (recognition) that will help endow them with the agency that characterizes medical practitioners.

Attending physicians also improvised their reactions to and interventions into case presentations according to a number of factors. Several mentioned that their expectations changed depending on whether they perceived the presentation as a "work" or teaching situation. On the weekends, for example, during emerg service, physicians did not want long, explanatory presentations—just brief, relevant summaries. Some talked openly about adjusting their strategies of intervention according to the skill of the student. Doctor 5 indicated that he used the team as his mode of intervention. If he believed information was missing, at the end of a section, he would turn to the team and ask them if there was any further information that they needed. This was his coded way of indicating to the student that he or she had missed vital information. He found that the team almost inevitably asked the necessary questions and he could then just guide the interaction. Other physicians talked about the value of role modeling. They would stop a case presentation in order to role-model medical problem solving either by asking the student a series of guided questions or by doing a talk-aloud analysis of a problem. These strategic interventions, however, were rarely planned – they occurred as a reaction to specific cases. The following excerpt displays this role-modeling style of intervention. The student (13) is trying to figure out if a child has bronchiolitis or pneumonia. The doctor intervenes.

> **Dr. 10.** … I think these are the most common things. There's possibly bronchiolitis, or pneumonia, and it could be –like a viral—well I mean viral pneumonia and bronchiolitis are pretty sort of similar in this age group. But things like adeno. You know virus, virus stuff, but RSV. There's no influenza around yet. So something viral versus something bacterial. And I think it would be important to review this x-ray and just to make sure given the high white count and the high fever and the fact that she was on antibiotics before that she's not…doesn't have a bacterial prosis. And I think it's a reasonable thing to do, is to cover…while we're just doing that, but if the MP swab comes back positive and there's no infiltrate on the x-ray, then I think it would be reasonable to stop the antibiotics.

In this excerpt the physician is clearly modeling a medical model of problem solving. He is considering options, weighing possibilities, indicating the importance of future evidence and then presenting a "reasonable" plan of action. This kind of improvization has real salience for the observing and participating student as it is his or her case. The practice matters here in a way that may not be captured by classroom instruction.

As part of our interview protocol, we asked all the participating physicians to talk about the way that they had been taught to do case presentations, a practice which all asserted was crucial for getting the work of medicine done, especially in hospital settings. None could remember ever having been taught explicitly how to do presentations. All asserted they had learned by experience, and the practices associated with case presentations had become second nature to them. However, as we have demonstrated, the case presentation is an intense site of situated teaching and learning for its participants. While students are learning how to do case

presentations, many of the common sense operations of medical practice become overt for this short period of time.

IV. What Are They Learning?

At the beginning our study we asked how the acquisition of the genre of case presentation shaped its users' professional identity or habitus (ways of interpreting, responding and classifying). What kinds of ideological assumptions are involved in this development of a professional identity and are being internalized as participants are using this genre? And what does this habitus have to do with questions of structure and agency?

Through case presentations students are learning how to tell a particular kind of story, a story that once they have mastered it provides them with a powerful form of agency. As noted earlier, the case presentation follows a general structure of chief complaint, history of present illness, past history, family history, social history, physical exam, diagnostic impression and management plan. Schryer has noted in earlier work (1994, 1999, 2000, 2002) that genres have chronotopic orientations to the control of time and space; they express in their structures, characteristic attitudes towards the control of space/ time. The medical case presentation begins in the patient's present time with the focus on some indications of illness (chief complaint). The case presentation shifts back and forth between the patient's past (past, family, and social history) and the present (history of the present illness and examination findings). The physician brings all this information to bear on his or her present diagnosis. In other words, the physician moves the story from the patient's time/ space into the medical time/space. Finally, the case presenter presents a plan to intervene in the patient's life world and consequently affect the patient's future. The rest of the case presentation is, in fact, a well-ordered argument to intervene in the patient's life processes by developing management plans. Few other genres in our society have as much influence as does the medical case presentation or its written equivalent, the medical record.

As also noted in earlier work (Schryer 1994; 2000; 2002), genres, such as case presentations, because of their chronotopic orientation are inherently ideological. For example, in the process of creating the case presentation, the physician turns the patient's story into a medical story. Both the students and their physician/ teachers acknowledged the necessity of this transformation. One doctor (7) stated categorically that

> I don't want to hear the story as if the parents told the story too. And that's what I don't want to hear from a student, and sometimes that's what you get. Like the mother went to the grocery story, and then went to the nursery to pick up this kid, and on the way home the kid vomited twice, and had a fever of 37.6, and mother measured it again 3 hours later, it was 38.7, she measured 4 hours later and it was 39.9, and the kid vomited again a second and third time, and she decided to call the doctor, and the doctor said this, and… that's sort of the way a parent will present a story. I don't want to hear that…I wanted sifted material, organized material.

In comparing the two simulated case presentations, Doctor 11 critiqued the less expert student because he presented almost a "verbatim transcript of what he heard or took during the interview…and that there wasn't enough understanding of presenting problem…" One savvy student (13) at the end of her rotation clearly understood and conveyed the process wherein a patient's story is transformed into the medical story. She realized that interviewing a patient was like making a movie.

> Every time you interview a patient, you're trying to make a movie out of this patient. And so like a story…so she was this this year and that that year, but what really happened in between? So it sort of helped me to be more curious. Cause sometimes you feel like you're invading a person's privacy, but if you look at it that way, like making a movie, you really have to go frame by frame. And it helps you, because if you view it that way, if you roll it out, like roll your interview out like a roll of film, you immediately see what's missing. And you just fill the spots right in…no matter how chaotic you are, you end up filling all the spaces.

The medical story is a powerful, efficient mechanism for transferring information about a patient to other healthcare professionals. After all, a complex series of life events can be reduced to the three-sentence summary. But the medical story is not the patient's story. And it is possible that, as in all transformations, not only are important elements lost in the translation but the transformation itself involves objectification. The processes of a person's life become, in fact, objectified. The person becomes a movie, a "case." The person becomes nominalized.

In the process of creating the case presentation, the student also learns to transform the patient's language into medical terminology. Earlier research by Schryer (1993; 1994) noted the important ontological distinction between symptoms and signs in medical discourse. Symptoms encompass the language that patients use to describe what ails them; signs encompass the language that healthcare professional use to indicate what they believe actually ails the patient. Signs describe what the physician actually sees or witnesses. Thus the language of signs has far more medical ontological reality than the language of symptoms.

We see this linguistic transformation at work both in the transcribed observations of the case presentations and in the interview data.

> **Student 5:** And she was past 34 weeks. So I guess…she would have been overweight.

> **Doctor 5:** We don't use the term overweight. We tend to talk about LGA.

> **Student 5.** Well, the mom being, the mom being an M.D. gave me some terms that I took at face value.

> **Doctor 5:** But sometimes you have to step back and say, well Mom may not know.

As the interaction above indicates, the language of patients or their parents is not to be trusted, even if the parent is a doctor herself. LGA refers to "large for gestational age" and, like much medical terminology, has a greater sense of precision then the more ambiguous term "overweight" as LGA refers to a specific point of reference, average weight according to gestational age.

However, breaks in communication can occur as a result of this transformation. If the student/doctor has to return to the patient or the family and explain management of the problem, he or she will have to remember to undo the transformation and return to the linguistic register used by the patient. For some physicians because of time constraints or because of the power associated with medical terminology, this return to a more accessible register may not occur.

Throughout the interviews we heard both physicians and students assert the importance of using accurate terminology. Students knew that they had to use medical terminology to sound convincing. More importantly physicians knew that students had to use this terminology to reflect their understanding of medical practice. One physician (8) explains "And I often say to students, for example, if the parent uses a word like seizure, or they use a medical word, it's important for you to clarify what they mean because it's a medical word, it's a diagnosis, it's not a symptom or sign or something that they (the student) actually saw." Through using terminology, students are learning in a deeply salient way medical methods of classifying phenomenon. However, inherent in this development of an efficient "habitus," or the development of the improvizational strategies that students will need to be practicing physicians, is a devaluing and distrust of language produced by patients. This devaluation of language and lack of trust could again have hidden costs associated when physicians have to return to explain management issues to patients.

Finally, although the genre of case presentations is a powerful and effective mechanism for transferring information between healthcare professionals, it is taught in a way that could have negative implications for practitioners. While they are learning to present cases, students can be interrupted at any time. Sometimes these interruptions are extended and aggressive if the physician is not hearing the expected medical story. Once the expected medical story is being told, interruptions decline. It is possible that in addition to learning the case presentation student/physician are also being taught strategies of interruption to elicit the medical story. Research reports (see Roter & Hall, 1993, and Wissow et. al., 1998) have observed that physician-patient interactions can be marred by interruptions. Ironically, this professional tendency could have its roots in one of the central practices in the medical profession.

Conclusions

This research project into the workings of one genre—the medical case presentation—in a situated learning situation demonstrates some of the important features of the interrelationship between genres, social structures and questions of agency.

- Genres such as the case presentation, because they are regularized, create the time/ spaces where participants exercise a range of strategic choices. Both the students and their physician/ instructors deployed a wide range of techniques. The ground or path of the genre, however, provided them with the sense of structure they needed to insert those choices at appropriate moments. Because of the presence of the genre, these participants were able to negotiate their way through a complex and contradictory situation.

- Genres facilitate improvisation. Just like a good piece of "jazz" the genre lays down the line that the participants, once they understand the structure or conventions, can use to negotiate their own agency. Participants rarely know exactly what they are going to do or say. But the genre gives participants enough structure to develop a felt sense of what is appropriate to say or do at particular moments. Thus participants can develop over time a sense of agency as they figure out more and more of the appropriate choices for that generic situation.

- A constellation of strategies characterize genres. Not all participants in a genre use all the strategies associated with a genre. Participants select strategies that are appropriate to the genre but also appropriate to themselves. However, some strategies are clearly outside the genre (such as using incorrect terminology). Because social actors belong to multiple activity systems they can bring strategies from one system to another and perhaps even gain some cultural capital for doing so. However, novices who are learning acceptable strategies rarely have an opportunity for such innovation.

- In sites of situated learning, such as medical apprenticeships, professional genres can themselves become places of struggle to establish agency. Such situations are characterized by the overlapping activity systems of schooling and the profession. Students in our study had to learn how to negotiate the resulting contradictions. As these students attempted to control the turns and the "air time" associated with case presentation, they were trying to establish their own command of this genre. The attending physicians, of course, are unwilling to grant them this agency unless they feel certain that the student has truly mastered the medical story.

- Genres have ideological consequences. Learning how to use a genre, means being genred. It means learning how to see the world from the perspective of that genre's characteristic structure, register and syntax. Through the medical cases presentation, doctors learn to classify the world in very specific ways, ways that could negatively affect communication with their patients.

In conclusion, our study has led us to see that interactions between structure and agency are complex and that dialectical theories are needed to account for that complexity, especially when agency is being negotiated across generations and levels of expertise. Social structures definitely affect agents, but individuals working in professional fields have access to agency as sets of strategic choices. That agency, however, is mediated through the genres they use to accomplish their field's goals or purposes.   As they acquire the genres of their fields, they also acquire the forms of agency associated with that field, but the acquisition of that agency has ideological consequences which could require critical examination.

References

Anspach, R. (1988). Notes on the sociology of medical discourse: The language of case presentation. *Journal of Health and Social Behavior, 29*: 357-75.

Arluke, A. (1977). Social control rituals in medicine: The case of death rounds. In R. Dingwall, C. Heath, M. Reid M, & M. Stacey (Eds.), *Health care and health knowledge* (pp. 108-125). London: Croom Helm.

Atkinson, P. (1988). Discourse, descriptions and diagnosis. In M. Lock & D. Gordon (Eds.), *Biomedicine examined* (pp. 57-97). Dordrecht: Kluwer.

Bazerman, C. (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison, Wisconsin: University of Wisconsin Press.

Bazerman, C. (1994). Systems of genres and the enactment of social intentions. In A. Freedman and P. Medway (Eds.), *Genre and the new rhetoric* (pp. 79-101). London: Taylor and Francis, London.

Bazerman, C. (1999). *The languages of Edison's light*. Cambridge, MA: MIT.

Bazerman, C. (2002). Genre and identity: Citizenship in the age of the internet and the age of global capitalism. In R. Coe, L. Lingard & T. Teslenko (Eds.), *The rhetoric and ideology of genre* (pp.13-37). Cresskill, NJ: Hampton Press.

Bhatia, V. K. (1993). *Analyzing genre: Language use in professional settings.* London: Longman.

Bourdieu, P. & Wacquant, L. (1992). *An invitation to reflexive sociology.* Chicago: University of Chicago Press.

Capper, P. H. (1999, May 18-20). *Understanding competence in complex work contexts*. Paper delivered to the Symposium on Assessing Against Workplace Standards. Cambridge University, England.

Casanave, C.P. (1992). Cultural diversity and socialization: A case study of a Hispanic woman in a doctoral program in sociology. In D.E. Murray (Ed.), *Diversity as a resource: Redefining cultural literacy* (pp.148-182). Alexandria, VA: Teachers of English to Speakers of Other Languages.

Cole, M. (1999). Cultural psychology: Some general principles and a concrete example. In Y. Engeström, R. Miettinen, and R-L Punamaki (Eds.), *Perspectives on activity theory* (pp. 87-106). Cambridge: Cambridge University Press.

Dias, P., Freedman, A., Medway, P., & Paré, A. (1999). *Worlds apart: Acting and writing in academic and workplace contexts.* Mahwah, NJ: Laurence Erlbaum.

Engeström, Y. (1987). *Learning by expanding. An activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit.

Engeström, Y. (1993). Developmental studies of work as a testbench of activity theory: The case of primary care medical practice. In S. Chaiklin and L. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp.63-103). Cambridge: Cambridge University Press.

Engeström, Y. (1999). Activity theory and individual social transformation. In Y. Engeström, R. Miettinen, and R-L Punamaki. (Eds.), *Perspectives on activity theory* (pp.19-38). Cambridge: Cambridge University Press.

Foucault, M. (1979). *Discipline and punish: The birth of the prison*. Trans. A. Sheridan. New York: Vintage.

Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.

Giddens, A. (1993). Problems of action and structure. In P. Cassell (Ed.), *The Giddens reader* (pp. 88-175). Stanford: Stanford University Press.

Hunter, KM. (1991). *Doctor's stories: The narrative structure of medical knowledge.* Princeton: Princeton UP.

Hutchins, E (1993). Learning to navigate. In S. Chaiklin and L. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 35-63). Cambridge: Cambridge University Press.

Kuutti, K. (1999) Activity theory, transformation of work, and information systems design. In Y. Engeström, R. Miettinen, and R-L Punamaki (Eds.), *Perspectives on activity theory* (pp.360-376). Cambridge: Cambridge University Press.

Leont'ev, A.N. (1981). *Problems of the development of mind*. Moscow: Progress.

Lingard, L. (1998). *The rhetoric of genre as initiation: Socializing the novice physician*. Unpublished dissertation. Simon Fraser University, Burnaby, British Columbia, Canada.

Lingard L.A, & Haber R.J. (1999). What do we mean by "relevance"? A clinical and rhetorical definition with implications for teaching and learning the case-presentation format. *Academic Medicine, 74*, S124-27.

Lingard, L., Garwood G., Schryer, C.F. & Spafford, M. (in press). A Certain Art of Uncertainty: Case Presentations and the Development of Professional Identity. *Social Science and Medicine*.

McCarthy, L. (1991). A psychiatrist using DSM-III: The influence of a charter document in psychiatry, In C. Bazerman and J. Paradis (Eds.), *Textual dynamics of the professions:*

Historical and contemporary studies of writing in professional communities. (pp.358-378). Madison, WI: University of Wisconsin Press.

Miller, C. R. (1984). Genre as social action. *Quarterly Journal of Speech, 70,* 151-167.

Paré, A. & Smart, G. (1994). Observing genres in action: Towards a research methodology. In A. Freedman and P. Medway (Eds.), *Genre and the new rhetoric* (pp.146-154). London: Taylor and Francis.

Paré, A. (2002). Genre and identity: Individuals, institutions and ideology. In R. Coe, L. Lingard and T. Teslenko (Eds.). *The Rhetoric and ideology of genre* (pp. 57-71) Cresskill, NJ: Hampton Press.

Roter, D. & J. Hall (1993). *Doctors talking with patients/patients talking with doctors: Improving communication in medical visits*. Westport, CT: Auburn House.

Russell, D. R. (1997a). Writing and genre in higher education and workplaces: A review of studies that use cultural-historical activity theory. *Mind, Culture and Activity, 4* (4), 224-237.

Russell, D. R. (1997b). Rethinking genre in school and society: An activity theory analysis. *Written Communication, 14* (4), 504-554.

Schryer, C. F. (1993). Records as genre. *Written Communication, 10,* 200-234.

Schryer, C. F. (1994). The lab versus the clinic: Sites of competing genres. In A. Freedman and P. Medway (Eds.), *Genre and the New Rhetoric* (pp.105-124). London: Taylor and Francis.

Schryer, C.F. (1999). Genre time/space: Chronotopic strategies in the experimental article. *Journal of Advanced Composition, 19* (1), 81-89.

Schryer, C. F. (2000). Walking a fine line: Writing "negative news" letters in an insurance company. *Journal of Business and Technical Communication, 14* (4), 445-497.

Schryer, C.F. (2002). Genre and power: A chronotopic analysis. In Coe R., L. Lingard and T. Teslenko (Eds), Th*e rhetoric and ideology of genre* (pp.73-102). Cresskill, NJ: Hampton Press.

Scribner, S. (1985). Vygotsky's uses of history. In J. V. Wertch (Ed.), *Culture, communication and cognition: Vygostkian perspectives*. New York: Cambridge University Press.

Smart, G. (1993). Genre as community invention. In R. Spilka (Ed.), *Writing in the workplace: New research perspectives* (pp. 124-140). Carbondale and Edwardsville: Southern Illinois University Press.

Smith, S. (1993). *Subjectivity, identity and the body: Women's autobiographical practices in the twentieth century.* Bloomington and Indianapolis: Indiana University Press.

Swales, J. M. (1990). *Genre analysis: English in academic and research settings.* Cambridge: Cambridge University Press.

Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Wertsch, J. V. (Ed.), (1981). *The concept of activity in soviet psychology.* Armonk: M.E. Sharpe.

Winsor, D. (1996). *Writing like an engineer: A rhetorical education.* Mahwah, NJ: Lawrence Erlbaum.

Wissow, L.S., Roter, D., Bauman, L.J., Crain, E., Kercsmar, C., Weiss, K., Mitchell, H., & Mohr, B. (1998). Patient-provider communication during the emergency department care of children with asthma. *Medical Care, 36* (10), 1439-50.

Yates, J. & Orlikowski, W. (1992). Genres of organizational communication: A structurational approach to studying communication and media. *Academy of Management Review, 17* (2), 299-326.

Notes

[1] This study was funded by the Social Sciences Research Council of Canada.

[2] See also Lingard and Haber (1999).

[3] The larger study investigates the role of the case presentation in four healthcare professions: medicine, optometry, social work and dentistry. The current study focuses on medicine.

[4] In some instances the team's membership was expanded by elective students and additional residents.

[5] In reporting the data, gender may also have been altered to provide a further level of anonymity.

[6] Our use of grounded theory was modified as we first identified emergent themes but then allowed our theoretical orientations to affect our interpretations of those themes.

[7] Non-parametric analysis was used when the data was not normally distributed; parametric analysis was used when the data was normally distributed.

[8] Our classification of these videos was confirmed by participants' reactions. All of our participants (except one doctor) judged the more expert video as indeed representing a better student case presentation.

[9] The only dissenting doctor thought both presentations were not adequate.

[10] This pattern of commands has been witnessed in previous research (Lingard and Haber, 1999).

[11] Other researchers (Arluke, 1977; Anspach, 1988; Atkinson, 1988; and Hunter 1991) have also described this phenomenon.

Compound Mediation in Software Development: Using Genre Ecologies to Study Textual Artifacts

Clay Spinuzzi

Division of Rhetoric and Composition
University of Texas at Austin
Austin, TX 78712
Clay.Spinuzzi@mail.utexas.edu
http://www.cwrl.utexas.edu/~spinuzzi

Abstract

Traditionally, technical communicators have seen the texts that they produce -- manuals, references, instructions -- as "bridging" or mediating between a worker and her tool. But field studies of workers indicate that the mediational relationship is much more complicated: Workers often draw simultaneously upon many different textual artifacts to mediate their work, including not only the official genres produced by technical communicators manuals but also ad hoc notes, comments, and improvisational drawings produced by the workers themselves. In this chapter, I theorize these instances of *compound mediatiation* by drawing on activity theory and genre theory. I describe an analytical framework, that of *genre ecologies*, that can be used to systematically investigate compound mediation within and across groups of workers. Unlike other analytical frameworks that have been used in studies of technology (such as distributed cognition's functional systems and contextual design's work models), the genre ecology framework highlights the interpretive and cultural-historical aspects of compound mediation that are so important in understanding the use of textual artifacts. The analytical framework is illustrated by an observational study of how 22 software developers in a global corporation used various textual artifacts to mediate their software development work.

Among those who study workplace communication, technical communicators are particularly interested in how textual artifacts help to mediate work. Indeed, to a great extent technical communication involves developing texts to mediate between workers and their tools – for instance, manuals that explain how workers can use a particular tool to perform given tasks (Paradis, 1991). Traditionally this has been taken to be a relatively simple (albeit often difficult) task: One determines what sorts of tasks a worker performs, then describes those tasks in such a way that the worker can understand. The mediational relationship is conceived as a "bridge" between the worker and her tool.

But field studies of workplace technical communication have recently complicated the picture. In practice, workers appear to make use of many diverse textual artifacts in complex, coordinated, contingent ways to get their work done. These texts range from official to unofficial (Spinuzzi, 2002b), specialized to mundane (Johnson, 1998; Winsor, 2001), and are often pressed into service in unpredictable, idiosyncratic ways (Henderson, 1996; Johnson-Eilola, 2001). In particular, studies based on user-centered design methods have helped technical communicators to examine how textual artifacts co-mediate work (Johnson, 1998; Raven & Flanders, 1996).

In this chapter, I use the term *compound mediation* to refer to the ways that people habitually coordinate sets of artifacts to mediate or carry out their activities. For instance, in the activity of software development, a developer might simultaneously use software manuals, existing code, online language references, and scratch paper as she writes new code. Each artifact – and each type of artifact – helps to shape the activity and enable people to perform their many actions. In fact, one can argue that artifacts become useful to a given set of workers only through the ways in which those workers intermediate or juxtapose other artifacts (see Hutchins, 1995a; Spinuzzi, 1999).

Although technical communicators are fundamentally concerned with compound mediation (for instance, documentation mediates between a reader and tools), few technical communication researchers consistently use analytical frameworks for examining compound mediation. That does not mean that such studies are poor – many are excellent studies (Haas, 1996; Henderson, 1996; Mirel, 1988; Mirel, Feinberg, & Allmendinger, 1991) – but since they do not apply analytical frameworks for studying compound mediation, they miss chances to systematically compare mediatory systems, improve an analytical framework, or scale up to examine larger numbers of artifacts.

Recently, a variety of frameworks have been developed for exploring compound mediation, such as contextual design's *work models* (Beyer & Holtzblatt, 1998; Coble, Maffitt, Orland, & Kahn, 1996; Page, 1996) and distributed cognition's *functional systems* (Ackerman & Halverson, 1998, 2000; Hutchins, 1995a, 1995b; Rogers & Ellis, 1994). Those who research workplace communication, particularly those coming from backgrounds in rhetoric and technical communication as I do, find such frameworks to be valuable for at least three reasons. First, since such analytical frameworks have been formalized, they are easier to approach systematically. They provide common concepts and terms. Consequently, they can be standardized, giving researchers criteria for what to study. Thus an analysis based on an analytical framework can be held up to standards of reliability and validity. Second, once articulated, frameworks can be examined and incrementally improved by various researchers. They become objects of study themselves (as in this paper) and therefore can be studied more critically. Consequently, later researchers might improve on the reliability, validity, and analytical power of existing frameworks. Third, since analytical frameworks are developed to offer a systematic analysis, they tend to be scalable. For instance, work models can be applied to very small numbers of artifacts (say, in an office cubicle) or very large numbers (say, across an entire company). Yet, as I've argued elsewhere (Spinuzzi, 2001b), these frameworks tend to focus on managerial or computational perspectives rather than the interpretive issues that centrally concern rhetoricians and technical communicators.

One analytical framework that does address these interpretive issues, the *genre ecology*, is currently in the process of being developed and formalized. Based on genre theory and activity theory, the genre ecology framework highlights the interpretive and cultural-historical aspects of compound mediation. In this paper, I illustrate this framework by using it to analyze data I collected during an informal[1] field study of software developers. Finally, I discuss possible future development opportunities for this framework.

The Genre Ecology Framework

The genre ecology framework was developed by technical communicators specifically for describing and investigating compound mediation (Spinuzzi, 2001b, 2002b; Spinuzzi & Zachry, 2000; Zachry, 1999). Genre ecologies have roots in earlier frameworks such as genre sets (Devitt, 1991) and genre systems (Bazerman, 1994), but they also draw from information ecologies (Nardi & O'Day, 1999; Zachry, 2000) and distributed cognition's tool ecologies (Hutchins, 1995a; see also Freedman & Smart, 1997). What sets genre ecologies apart is the focus on contingency, decentralization, and stability (Spinuzzi & Zachry, 2000) as these dynamic ecologies gain, adapt, and discard genres.

Like frameworks such as contextual design's work models and distributed cognition's functional systems genre ecologies provide a descriptive model of compound mediation. But whereas work models provide an agent-centric managerial view and functional systems provide an artifact- or system-centered computational view, genre ecologies provide a community-centered interpretive view. Genre ecologies highlight idiosyncratic, divergent understandings and uses of artifacts and the practices that surround them as they develop within a given cultural-historical milieu.

In the next section, I briefly go over the genre ecology framework's pedigree in activity theory and genre theory.

Activity Theory and Compound Mediation

Activity theory is a cultural-historical psychology concerned with labor activity. In this account of how people coordinate and enact cyclical, objective-driven activities, activity is conceptualized as inherently social and intricately bound up with joint (community) labor (Leont'ev, 1978; Leontyev, 1981; Engeström, 1990, 1992; Nardi, 1996a).

A central concept in activity theory is the *activity system*. Activity theory posits that in every sphere of activity, one or more *collaborators* use *artifacts* (including physical and psychological tools) to transform a particular *objective* with a particular outcome in mind (Figure 1). For instance, a software developer (a *collaborator*) may use various artifacts to transform an existing software program into a newer program (the cyclical *objective*). She does so to achieve various outcomes.

Yet the developer's activity does not spring from herself alone. It is intimately related to her *communities*, including the company where she works and the larger community of her profession; her relationships to these communities are mediated by *domain knowledge*, including the habits she has developed for using various artifacts, work regulations, and ethical guidelines. Similarly, the relationship between the community and the object is mediated by the *division of labor* within that community: software developers write code, often helped by managers, software documentors, and others in various ways. So the developer's job is intimately tied to the cultural-historical milieu in which it is performed.

Artifacts

Collaborators

Object(ives) ——→ **Outcome**

Domain Knowledge
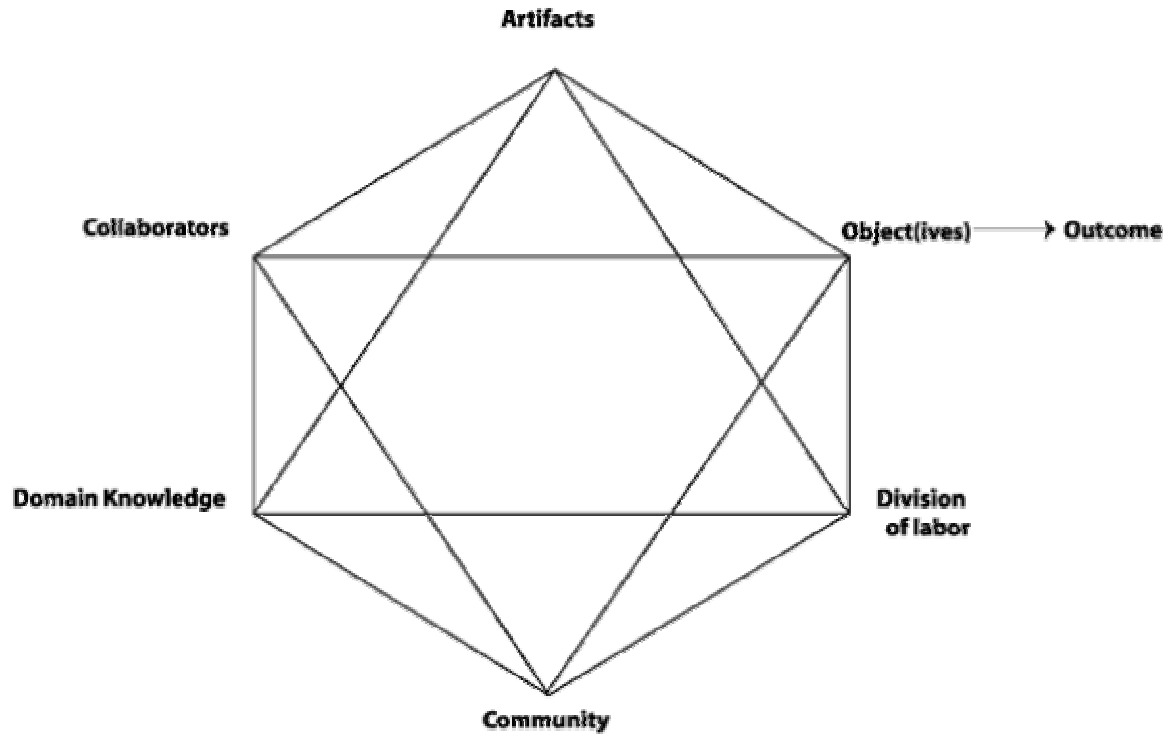
Division of labor

Community

Figure 1. An activity system, in which collaborators (human actors or organizations) engage in mediated relationships to transform their objectives.

Although Figure 1 may seem to imply that an activity is mediated by a single artifact, activity theorists have begun to explore how *compound* mediational means can collectively mediate activities. Susanne Bødker's work in human-computer interaction, for instance, illustrates how artifacts relate to one another, being situated in a "web of artifacts" (1996, p.161; see also 1997) that jointly mediate activity. Others using variants of cultural-historical theory have advanced similar concepts of compound mediation, using different terminology (Bazerman, 1994; Cole, 1996; Freedman and Smart, 1997; Hutchins, 1995a; Orlikowski and Yates, 1994).

Genre Ecologies

To discuss how such groups of artifacts mediate activities, I turn to Edwin Hutchins' "ecologies of tools." Hutchins found that the many artifacts used on a naval vessel (such as astrolabes, compasses, sextants, and calculators) are arrayed and employed by multiple workers to transform data. He sees these transformations as part of a computation in which "each tool creates the environment of the others" (p.114). There tools are connected in multiple, complex, and often nonsequential ways. Furthermore, they co-evolve: changes in one lead to changes in others. For instance, functions sometimes move around from astrolabe to quadrant to cross staff to sextant (p.113-114); such movement is made possible by the tools' interconnections in the ecology. The ecology itself — not its individual tools — is the mediator of the activity.

The genre ecology framework is based on this notion of tool ecologies. But rather than focusing on the functional aspects of tools, it focuses on the interpretive aspects of *genres* of tools, i.e., artifact types that are cyclically developed and interpreted in ongoing activities. In any given activity system, artifacts become familiar to workers over time, so much so that workers begin to interpret artifacts as instantiations of genres. These genres of artifacts collectively mediate the workers' activities, and in doing so they become interconnected with each other in mediational relationships. Such interconnected genres can be considered *genre ecologies* (Spinuzzi, 2002b; Spinuzzi & Zachry, 2000; Zachry, 1999).

To illustrate how the genre ecology framework can be applied to workplace studies to examine complex issues of interpretation, next I analyze the results of an informal workplace study in terms of genre ecologies.

Overview of the Study

I conducted this study at Schlumberger Oilfield Services as a member of the Usability Services for Engineering Research (USER) team. The study, conducted over 10 weeks during the summer of 1997, involved observations of and interviews with 20 software developers and interviews only with two additional developers.[2] I collected these observations and interviews to inform the design of an information system meant to provide quick access to information on library routines and datatypes, the "building blocks" of Schlumberger's programming code.

Background: Questioning the Usability of Code Libraries

Schlumberger is a multinational corporation that provides information tools for the oil industry. In 1997, Schlumberger's oilfield software consisted of more than 30 million lines of code dedicated to analyzing and interpreting the seismic and drilling data that were collected by Schlumberger equipment at drilling sites around the world. This code is developed in-house, and software developers continue to generate more code as they maintain and develop products. Schlumberger encourages developers to reuse existing chunks of code from the corporation's code libraries — collections of commonly useful datatypes and routines (explained below) that are accessible to all developers working on a given project. Yet developers sometimes have a difficult time finding appropriate code in the libraries. Consequently, they "reinvent the wheel," writing new code that is sometimes not as efficient or well-tested as the existing code in the libraries. Since the code libraries can change daily, printed reference guides and even static online guides quickly become out of date. In-house quantitative studies on code-sharing suggested that developers are often not availing themselves of the routines in the code libraries (McLellan, Roesler, Fei, Chandran, & Spinuzzi, 1998).

Schlumberger's library code contains two related types of code: datatypes and routines. *Datatypes* are units for storing information; these units can contain complex combinations of integers, floating-point numbers, characters, and other kinds of data. These datatypes are manipulated through *routines*: chunks of instructions that involve transforming the data stored in

datatypes. Developers can use a library's datatypes and routines within a given code library in any program that explicitly refers to that library.

In the study, I concentrated on the artifacts that developers used as they comprehended (interpreted) and produced (wrote) code. As I argue below, the developers' comprehension and production of code was mediated by the ecologies of genres that surrounded their work.

The Study: Investigating Software Development

In the study, I investigated how developers used tools as they wrote code, with a particular interest in how the USER team could modify or introduce tools to better support program comprehension and production. To better examine how the developers interpreted (comprehended) and used these tools in their activities, I turned to activity theory and genre theory for a suitable framework. I originally conducted this study with the following research questions:

- How are developers currently finding appropriate library code to use? That is, how do developers find out about the datatypes and routines that currently exist in Schlumberger's libraries?

- How do the developers use artifacts (such as search tools, features of the code, communication media, and manuals) when comprehending and producing code?

These questions led me to examine how groups of artifacts jointly mediate activities. To answer these questions, I used the analytical framework of the genre ecology. Below, I discuss the research sites I visited, the participants I observed and interviewed, and the methods I used as I investigated the sites.

Research Sites

Schlumberger consists of a number of related large business groups. I visited three of these groups (hereafter sites Alpha, Bravo, and Charlie) during the course of my research. These groups used similar, but different, interrelated genre ecologies. (In a closer analysis, one might study each site as a separate activity system that shares strong commonalities with the others because they all engage in the more general activity of Schlumberger software development.) These three business groups, originally separate organizations, were acquired by Schlumberger at different times during the last decade. Much of their code is "legacy code" that dates from that pre-Schlumberger time.

At each site, I observed and interviewed a group of software developers roughly proportional in experience and gender makeup to the total population of the site. Interview questions and observations focused on the artifacts that they used as they produced and comprehended code, particularly in how they characterized their interaction with these artifacts.

Site Alpha maintained a compilation of seismic processing systems that had been unified into a seismic data interpretation system. This system was mainly written in FORTRAN, although some new additions were being written in C. Developers worked on a UNIX platform. I observed two developers at work and interviewed two others. These developers, like most at Site Alpha, were oriented towards internal users: that is, they wrote code that was primarily used by Schlumberger employees and had contact primarily with Schlumberger engineers.

Site Bravo maintained a variety of data management products used to interpret oilfield data. This system was mainly written in C and C++, although two of the developers I interviewed were porting (i.e., translating) an existing product to Java. Like the developers at Site Alpha, these developers worked on a UNIX platform. I observed eleven developers at work here. These developers, like most at Site Bravo, were more oriented to outside customers: they tended to review the system's user manuals to find out how their code was "supposed" to work (from the users' standpoint) and spent more time on user-oriented details such as the user interface.

Participants

The 22 participants drawn from the three sites constituted a complex division of labor, partly defined by the phases in the production cycle (development, maintenance/debugging, and documentation). The interviewed developers had a wide variety of experience. Nevertheless, developers tended to have strong commonalities within and across the three sites. As I argue below, the developers' work was mediated by the genre ecologies at the three sites as they attempted to find suitable code and to comprehend and produce code.

Site Charlie maintained products for extracting, processing, and interpreting data on location (i.e., as it is collected at the drilling site). This system was written primarily in C and C++. Unlike the other two locations, Site Charlie was a "Windows shop": Developers worked on Microsoft Windows NT workstations rather than UNIX workstations. I observed seven developers at work here. These developers, like those at Site Alpha, were oriented toward Schlumberger employees who used their software in the fields.

This study was approved by a human subjects committee before research began.

Methods

For 20 of the participants, I used the following methods:

Opening interview. In audiotaped interviews, I asked each developer a series of questions meant to explore his or her background with software development, Schlumberger, and the code with which they were working (see appendix).

Observation. After completing the opening interview, I silently observed the developer as he or she worked, taking field notes. I particularly focused on artifacts that developers used as they attempted to find and use existing code. Observations lasted 30 minutes to an hour, but averaged

about 45 minutes. The observations allowed me to compile a list of some of the artifacts used in the participant's labor and the domain knowledge associated with them. The observations also gave me insight into the object of the labor (the code), the community, and the division of labor.

Closing interview. At the end of the observation period, I conducted a stimulated recall interview in which I asked the developer about (a) the artifacts that I had seen him or her using and (b) artifacts that he or she did not use in that session. Interviews were audiotaped. The closing interview allowed me to round out the list of artifacts, as well as discuss the other parts of the activity system in which each participant labored.

I was not able to observe the other two developers at work, but did conduct the opening interview and also asked them about artifacts they had used when finding information. After conducting the interviews and observations, I (a) categorized each developer's work as developing, maintaining/debugging, or documenting; (b) listed the artifacts I had observed them using and categorized the artifacts within genre categories; and (c) listed questions that developers used each artifact to answer, based on the interview responses.

Results and Analysis: Mediation Within and Across Genre Ecologies

Using the data from the interviews and observations, I constructed Figure 2, which shows the overall activity system[3] of the developers. Bear in mind that this figure describes a general activity system that extends across sites. In the following analysis I explore the more specific activity systems of the individual sites, drawing out some of their differences. Of the most interest, though, is the abundance of genres in the ecology and their complex interconnections.

As Figure 2 shows, the developers operated within a complex activity system with a variety of artifacts, domain knowledge governing the use of those means, and a complicated division of labor. In the analysis below, I focus on these three elements. But the different sites were also activity systems in their own right: Their activities differed significantly in artifacts, domain knowledge, and objectives. Some of these differences are mentioned in the brief descriptions of each site above; others are drawn out in the analysis.

The genres in Figure 2 have complex relations with each other, forming an ecology of genres that developers employ to find specific types of information about the code that is the object of their work. As Figure 3 depicts, these genres are connected – and jointly mediate the activity – in a variety of different and complex ways.
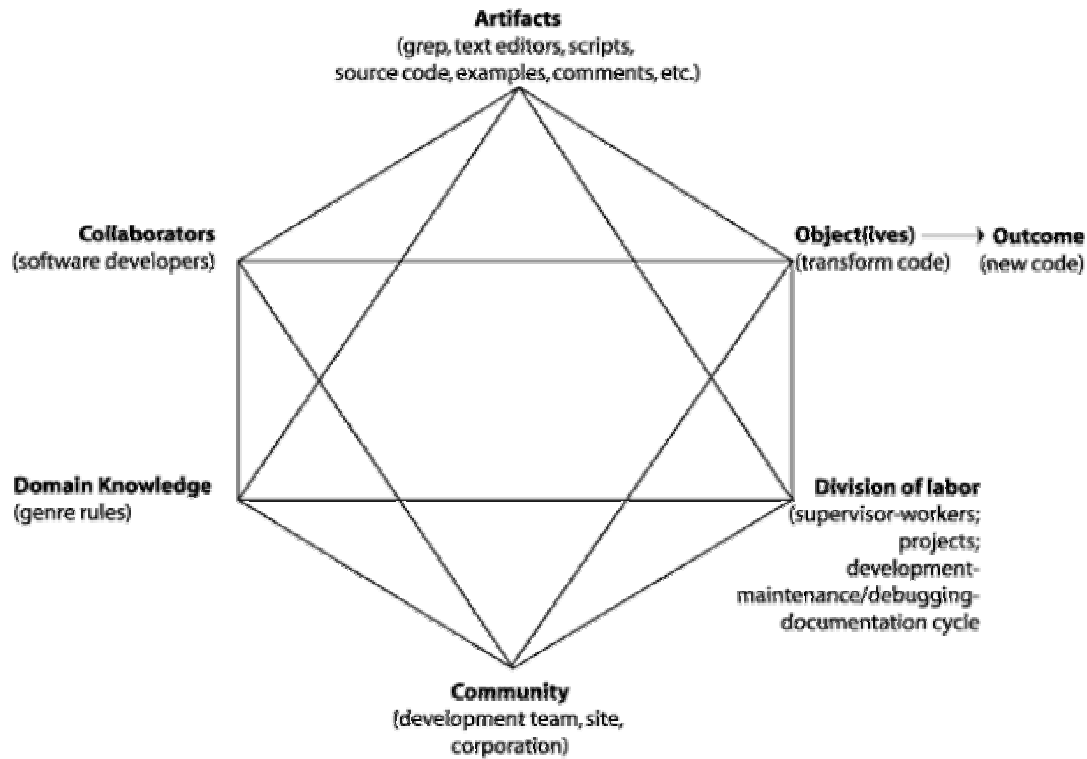
Figure 2. The software developers' general activity system. Activity systems could be depicted for each site as well.
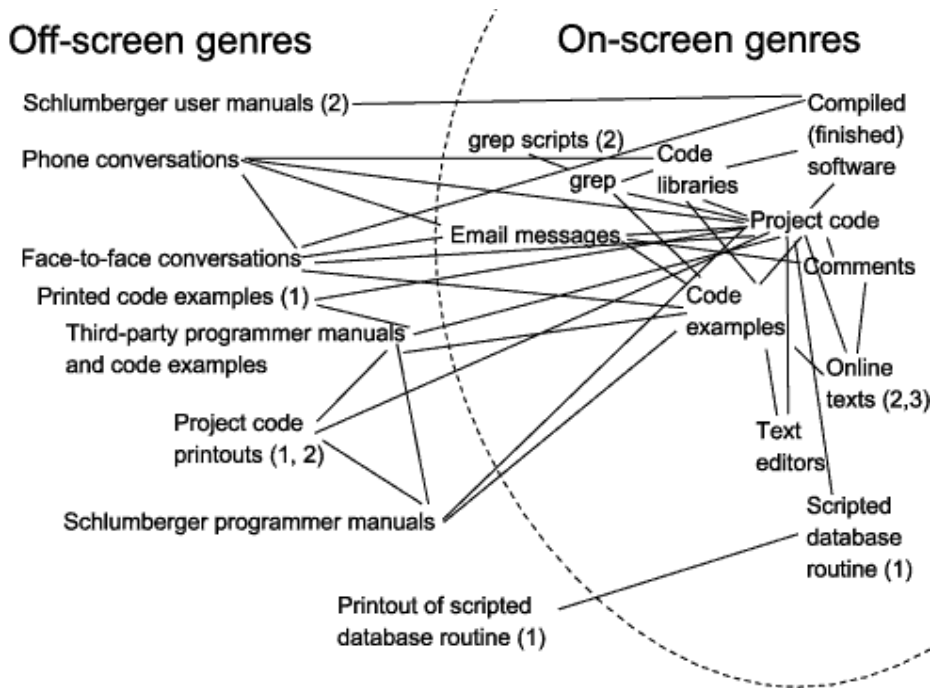
Figure 3. The genre ecology of the developers' activity system. Numbers in parentheses mean that the indicated genres are only used in the ecologies of specific sites: (1) corresponds to Site Alpha, etc. Lines indicate mediational relationships among genres.

Genres within the dotted circle are on-screen genres (i.e., they exist on the computer screen).

At all three sites, the elements of the activity system (Figure 2) were substantially the same. The artifacts, for the most part, were materially the same, available across all sites, and organized in generally the same ways. The object of the activity (the code) was more or less the same — in fact, much of it was shared among sites. The division of labor was at least formally the same across sites. Yet within these different sites (communities), the domain knowledge (including the unwritten rules, habits, and practices governing artifacts) was sometimes quite different. Consequently, developers sometimes perceived artifact types or genres as having different uses, possibilities, and levels of importance at different sites. These genres were constrained by the characteristics of the genres and the code, as well as the historical development of practices and the interrelationships of genres at the various sites.

Genre Ecologies at the Three Sites

Figure 3 shows the genre ecologies at the three sites. The three ecologies were similar — thus the single diagram. Numbers in parentheses mean that the indicated genres were only used in the ecologies of the enumerated sites. For instance, developers used grep (a software tool used to find strings of characters in text files) at all sites, but they used grep scripts only at Site Bravo.

The lines indicate mediational relationships among genres. That is, if two genres are connected by a line, I observed those two genres being used in conjunction: one mediated actions performed on the other. For instance, developers at all sites interpreted project code by consulting third-party programmer manuals, code examples, and comments, so in Figure 3 these genres are all linked to the project code by lines. On the other hand, developers did not use Schlumberger's user manuals to help them interpret comments, so these genres are not linked.

Figure 3 gives us a partial idea of what genre ecologies looked like at the three sites. However, it is just a partial idea; a more extended study might turn up dozens or hundreds of genres and might make it practical to analyze subgenres (such as subgenres of online texts). In addition, the diagram gives us an informal method of identifying genres that were densely connected. (For instance, the object of the developers' work was the project code, which in the diagram is connected to nearly every other genre in the ecology. On the other hand, Schlumberger user manuals were used for only one purpose, to understand the finished software.)

Below, I compare some of these genres between ecologies and within ecologies. I start by showing how individual artifact types can be considered genres. Then I show how these and other genres interact to jointly mediate activities.

The Generic Nature of Artifacts: Inter-Ecology Comparisons

In this analysis I discuss how developers at the three sites, although using the same materials, used them in quite different ways. I analyze these artifacts in terms of genre.

Figure 3 depicts the three sites' genre ecologies "overlapped" as it were. Most of the genres were available at all three sites and connected to other genres in similar ways. But the exceptions were telling ones: They suggested that similar genres were perceived as having different affordances, different uses, and different degrees of usefulness at the three sites, partially because of how these genres interacted with other genres in the ecologies. Below, I discuss two examples — the grep utility and comments embedded in the code — and use them to demonstrate how different artifacts interact in mediating the activity system.

Grep and Grep Scripts: Interpreting and Using a UNIX Utility

The grep utility is a program that searches for specified strings of text within sets of files. For instance, to find the name "reversestr" in the file "somefile.c" which resides in a given part of the system, a software developer might type this command at the system prompt:

```
grep "reversestr" /home/jones/project/fileio/somefile.c
```

This command is terribly powerful, since it allows developers to quickly identify points at which a given routine or variable is being used. But at the same time, it takes considerable time to formulate and type such a command. In response, some developers at Site Bravo had augmented grep's capabilities by assembling *scripts*, or collections of commands that invoke grep for specific files in specific directories: A developer who tired of repeatedly entering each command in Figure 4, for instance, might collect them into a single file and run them all at once by typing the file's name at the command line.[4] So, for instance, a developer might assemble a script of grep commands for a certain project and call the script "pgrep." Then, to search the appropriate files for a certain string of letters — say, the routine name "reversestr" — the developer could type *pgrep reversestr* at the command line, and grep would search each file in turn.

```
grep $1 /home/jones/project/fileio/*.c

grep $1 /home/jones/project/screenio/*.c

grep $1 /home/jones/project/fileio/*.h

grep $1 /home/jones/project/screenio/*.h
```

Figure 4. A (fictional) grep script similar to those used by developers at Site Bravo. In each invocation, $1 is automatically replaced with the string to be found.

Six developers were observed using grep; in the interviews, 12 discussed using grep for finding information in the libraries.

The grep utility was used repeatedly and cyclically by developers to accomplish repeated actions within their activities. And the repeated use gave rise to stabilized-for-now rules (habits) for operating it. These rules were not simply embedded in the software: Developers used grep with strikingly different rules at the three locations. Rather, the rules were demonstrably affected by other available genres, the search environment, and the community's domain knowledge. Grep mediated activities in different ways at the different sites, even though the functional qualities of grep were the same at all three sites.

Grep use at Site Bravo. For instance, developers at Site Bravo tended to create grep scripts that searched specific files stored in specific paths[5] related to the developer's current project. These scripts were not simply passed from one developer to another — as one developer told me, each developer knew enough about grep and various scripting languages to create these scripts for him- or herself, and in any event each developer worked with different paths, so the scripts had to be different for each developer. And, the developer pointed out, a grep script was an obvious solution to the limitations of grep, something that (he assumed) would occur to any competent software developer. Yet this "obvious solution," although widespread at Site Bravo, was unheard-of at the other two sites. Although developers at each site had access to the same tools (grep and some scripting language), grep was a qualitatively different artifact at the three sites; it had different uses and meaning because the practice of scripting had only developed at Site Bravo. (Unfortunately, this 10-week study did not allow me enough time to collect historical data that might suggest why the sites developed different rules.)

To illustrate the qualitative differences of grep across sites, I contrast Site Bravo's practice of scripting with that of information searching at Site Charlie and Site Alpha.

Grep use at Site Charlie. Site Charlie's developers used grep extensively, but only for searching files in a particular directory. Developers conducted searches across paths using a separate tool, a Windows-based text editor. Many of Site Charlie's developers preferred grep because it is faster than the text editor, but none had assembled grep scripts — although those scripts, like individual invocations of grep, would theoretically be faster than the text editor's search feature. When asked, developers at Site Charlie indicated that the idea of grep scripts simply hadn't occurred to them — and that they probably would not write grep scripts in the future. The initial, intensive labor involved in writing the script seemed like too much trouble compared with the less intensive but repeated labor of using the text editor.

Grep, then, was interpreted and used differently at Sites Bravo and Charlie. At Site Bravo, developers automated repeated tasks such as searching multiple baselines. This automation required initial investment but minimal interaction each time the baselines were searched. That is, the Site Bravo developers were willing to devote substantial time to devising grep scripts, believing that the initial effort would pay off in easier searches. Site Bravo's developers had introduced a new genre into the ecology, that of grep scripts, and in consequence grep had become more useful to them.

At Site Charlie, on the other hand, developers made little initial investment and engaged in moderate to heavy interaction each time the baselines were searched. Site Charlie developers devoted no time to devising scripts; rather, they used a text editor, a tool that required considerably more interaction each time it was used to search for strings. Rather than introducing another genre into the ecology, Site Charlie's developers distributed the task of searching between grep and another existing genre, the text editor.

Grep use at Site Alpha. At Site Alpha, developers used grep to search specific directories, but did not develop grep scripts. In fact, practices of baseline-wide searching did not become apparent in either the observations or the interviews, except in one case: one developer did demonstrate an analogous script for searching a database of code, using database commands rather than grep scripts. This script allowed him to find the desired code within the code archives rather than actual paths. The database script was simple, but this developer had to type it each time, since he had not created a permanent electronic version. To aid him, he printed the script and taped it to the desk beside his keyboard.

At Site Alpha, then, this developer conceived of searches in a third way. Searches entailed moderate initial investment (typing out and printing a script) and moderate interaction (using the script to guide the developer's own actions each time). By introducing a new genre into the ecology, the printed script, this Site Alpha developer had found yet another way to mediate his searches.

The data above suggest two things. One is that, to paraphrase Hutchins, genres embody distributed cognition. That is, a genre — such as, say, a grep script — is a material solution to a problem once faced by its originator, a solution that was successful enough to be used repeatedly by others.[6] When workers apply a genre to a problem, in a sense the problem is being partially solved by those who developed the genre. Over time, the genre becomes familiar enough to its users that it is perceived as obvious (and in some cases trivial).[7] That effect is difficult to see when one is embedded in the community using the genre. The developers at Site Bravo, for instance, were familiar enough with grep scripts to consider them an "obvious" solution, not an innovative answer to a difficult problem. At the same time, rules for use are not "designed into" these artifacts. At the three sites, many of the material tools did not vary, but the domain knowledge did, and that variation resulted in artifacts that were qualitatively different, that is, perceived as having quite different uses and possibilities.

The second thing the data suggest is that interactions among genres can influence genre use. For instance, all three sites faced the same problem: how to find code across multiple paths. Although all three had the same basic tools (grep, text editors, databases), each site adapted a different tool to occupy this ecological niche. In doing so, they made compromises in terms of initial investment and effort per use.

Comments: Interpreting and Using Notes Embedded in the Code

Comments are non-program text that developers embed in both library and project code. (In this study, developers only used comments embedded in the project code.) Comments do not have

any effect on how the computer runs the program. They are generally assumed to be notes that developers include to help later developers interpret the code (see Takang, Grubb, and Macredie, 1996; Tenney, 1988), although in this research I found many comments that had other uses. Figure 5 shows C-style comments embedded in the code between the character combinations /* and */. When asked about how they comprehend routines and datatypes in the libraries, eleven developers mentioned looking at the comments to aid comprehension — although, as I explain below, developers at the three sites used comments in quite different ways.

Comment use, like grep use, differed by site. For instance, at Site Alpha and Site Bravo, developers tended to read, write, and maintain multiline comments as a rule. Developers used these comments as notes for interpreting code, but also to signal plans for maintenance, as in the comment shown in Figure 5. (The product name has been changed to protect confidentiality.)

```
/* Product A is using a GDM attribute to indicate the deviation status */

/* of a well even though they are using the GDM8 model. To improve the */

/* the communication of this information to Product A we are adding this */

/* GDM9 attribute to the GDM8 model as a private extension. But, we */

/* only do this if we are still using GDM8. Once we switch to GDM9, */

/* an error message will be issued. */
```

Figure 5.   Multiline comment used by Site Bravo developers to coordinate work.

Such comments were common in the Site Alpha and Site Bravo code. They provided important resources for interpreting the code in relation to future changes as well as coordinating work. Developers at these sites often remarked on the utility of these comments both for sharing information with others and for reminding themselves of changes. These developers were scrupulous about documenting code with comments.

On the other hand, developers at Site Charlie were far less likely to write or read multiline comments. At this site, developers had continually maintained and updated legacy code dating from the early 1980s, but they had not updated comments dating from that time, subverting the comments' usability as an interpretive tool. One developer explained that he found comments to be useless:

> **P16**: Well, people put in comments and make changes and they never keep
> up with the comments. ... That's about like if you're gonna drive down the
> road, and you're wantin' to get out on the street, and you see someone
> comin' down the road, they've got their blinker on, okay, are you going to
> trust that that car is going to turn?

The attitude expressed by this participant was pervasive throughout Site Charlie. Rather than being helpful aids to interpretation, comments were perceived as actually misleading. Some

developers actually regarded multiline comments as *evidence of poor coding* rather than tools for interpreting code or coordinating work:

> **CS:** ... you said that ... you try and make [your code] very clear for the other people who are going to be maintaining it after you. Do you put in a lot of inline comments in your code?

> **P18:** If it's necessary. Not too many comments. Because, uh, to me, if you look at the program that has lots of comments, it means the program wasn't structured right. If you have meaningful variable names and meaningful data structures set up, organization in your program, you don't need to have that much comments. You need to have enough comment not to clutter the code. Because you can have so much comment to confuse the user. You know, have more comments than code.

At Site Charlie, criteria for "good code" — interpretable and structured code — went far beyond explicit criteria such as robustness and efficiency. This low regard for comments at Site Charlie gave rise to interesting uses of artifacts, uses that were not found at other sites. For instance, one developer set his text editor to change the color of comments in the code he maintained – visually eliminating them from the code.

> **P20:** But [the editor's feature of displaying text in different colors is] nice especially in things like the comments. Now for me, it, it's probably not, useful in the way that it was intended, see I use it to almost get rid of the comments, I make them a light grey color so they don't stand out, so it's easy to glance and see where the code is, and not be distracted trying to, you know, with something that's a comment.

Another developer used comments primarily as landmarks for navigating through the code, rarely if ever reading them to understand the code's workings:

> **P21:** Well, when it's your own code, and you see it every day for hours, you're not reading comments anymore. ... But I use them for locating my code, really. If I have 50 lines of code without a comment I get lost. It takes me a while to actually read the code and find out what it's doing. But if I have comments I can separate it into sections, and if I know it's the second section in the function, I can go right to it. ... They're just markers for sections of code.

Like grep, then, comments were qualitatively different genres at the three sites — not because of inherent characteristics of the comments themselves or because of a different function of the work at each site, but because the production, comprehension, and use of comments depended on their history within the different activity systems and with the different genre ecologies that mediate them. The genres developed to support different kinds of work, that is, to support different sorts of usability by interconnecting with different interpretive habits at the three sites. At two of the sites, comments had been historically valued and maintained, and consequently developers saw the value in reading, believing, and producing them. Comments had become central to some of the actions carried out at those sites. But at Site Charlie comments had been

historically disregarded, and consequently developers found ways not to read them, or to read them in entirely different ways, as placemarkers and as indicators of code quality.

Furthermore, these developers at Site Charlie avoided maintaining and producing multiline comments, ensuring that future developers at this site would continue not to use such comments to comprehend or produce code. So comments at Site Charlie constituted a quite different genre from those at Sites 1 and 2. What is a useful comment? One that provides resources for interpreting and maintaining code? Or one that provides code separations and allows developers to evaluate code quality? The answer depends more on one's activity system than on the structural qualities of the comment itself.

Up to now I've selected single genres and shown how they mediated work differently in different activity systems. At this point, I turn my attention to intra-ecological comparisons, that is, how different genres in the same ecology relate to each other.

Ecological Relations Among Genres: Intra-Ecology Comparisons

Much research into computer program production and comprehension suggests that programmers interpret and use their programs in a way that can be explained in terms of genre. As I've discussed elsewhere (Spinuzzi, 2002a), over the last two decades several theoretical models have been developed that view program comprehension and production as an interrelated set of habits and hypotheses that programmers form, not to communicate with the computer itself, but to signal their logic and intentions to other programmers. (For instance, I quoted P18 earlier as saying that "if you look at the program that has lots of comments, it means the program wasn't structured right"; even though a program might run on a computer, it may not meet the criteria of "good code" because it is not impressive, elegant, or usable for other programmers.)

These models of programming tend to use terms such as "schema" (Rist, 1989, 1991), "beacons" (Brooks, 1983; Wiedenbeck, 1986, 1991), and "plans" (Soloway and Ehrlich, 1984; Boehm-Davis, Fox, and Philips, 1996; Pennington, Lee, and Reder, 1995).[8] They tend to portray programmers as sectioning code into interpretive rather than structural units and examining or producing those units cyclically rather than linearly. Although this is not the place to go into a detailed analysis of such models, they describe programming as an activity that involves the development and refining of stabilized-for-now interpretive strategies for understanding code — that is, strategies associated with genre (Schryer, 1993; cf. Bakhtin, 1986; Bazerman, 1994; Russell, 1997).

Thinking of code as a set of genres in an ecology of work activity helps us to understand a common activity of software developers: examining one piece of code to understand another. The project code becomes an indirect mode of communication for the developers, a sort of narrative that developers can use to find useful library code and understand how it is used.

Using code examples with libraries. Looking at the library code allowed developers at all three sites to learn certain (abstract, definitional) things about the routines and datatypes — for instance, the arguments to be passed to the routines, the makeup of the datatypes, and the specifics of inner workings such as memory usage. These were all data that developers tend to use when they (a) knew the exact name of the routine or datatype to examine, (b) were just learning the inputs of the routines, or (c) needed to know specific information about the inner workings of the code.

But library code gave little information about the uses to which the routines and datatypes could be put. And workers at all three sites found that they needed contextualization of the code far more often than they needed specific information:

> **P14:** Yeah. Examples are important because basically they're, they're kind of a parallel proof of concept. Or they show what the boundary conditions, what you can do and can't do. Because just the definitions are not appropriate alone. When you want a certain function to do something, definitions are great. If you're scanning through this here, you want to know the constraints of it. But if you want to know its usage, the usage scenarios, you gotta have examples.

Here, P14 discusses using code examples — concrete examples in living code as well as abstract examples in a book — in conjunction with other genres such as code libraries and programmers' references (which provide the dead specimins, the "definitions" and "constraints" of functions). The various genres are different resources with different roles in the ecology. Developers used each genre to co-mediate the others, bringing the ecology's genres to bear in different combinations on the object, the code.

Using code examples with search genres. In addition, looking at project code provided developers with a sort of reverse search mechanism. The project code was co-mediated by a variety of search genres, providing a flexible set of configurations for carrying out various kinds of searches. Recall that if developers were to use search genres such as grep scripts, text editor commands, or database commands to locate code, they needed to know the exact name of a routine or datatype when searching for it in the library code. But if developers did not know the exact name — a situation that happened more often than not — they tended to look in the project code for an example, a stretch of code that did something similar to the task they wanted to accomplish. They found examples of procedures in the code, procedures that included calls to library functions that they found useful in their own code. Code examples complemented the other search genres: Rather than looking up a function to find scenarios in which it was used, developers looked up scenarios to find functions they might use.

The labor of finding information was complex. Developers sometimes had to work both ways, from examples to formal definitions and from formal definitions to examples. On one hand, an interesting routine in example code might lead the developer to search the project code and libraries for a formal definition of the routine. On the other hand, a formal definition in a code library, manual, or technical specifications might lead the developer to search the project code

for examples. If only one of these genres was available, it would be less usable, because developers used the genres together – as part of an ecology – to comprehend the code.

In fact, part of the reason for Schlumberger's "code bloat" or expansion of redundant code (McLellan, Roesler, Fei, Chandran, & Spinuzzi, 1998) was that this co-mediation was not always sustained. Developers often relied on examples that did not always fit their tasks, and consequently they did not find the more appropriate routines and datatypes. Furthermore, developers sometimes used these examples to avoid writing code: They would sometimes copy an example, paste it in the spot where they wanted new code, then modify the example to meet their needs. Such code would sometimes contain references to routines and datatypes in the code libraries. The developers did not necessarily need to know what routines and datatypes originated in the library; in fact, they often seemed to be unclear as to exactly where some routines and datatypes originated. One developer at Site Charlie, for instance, who had been on the job for only a few months, revealed to me that he did not always understand the code he produced. Rather, he programmed as a bricoleur: He found similar stretches of code, pasted them into the proper spot, and tweaked them until they worked. This nonhierarchical programming style has been observed by researchers into program production and comprehension — and it can be a very successful strategy (e.g., Lange & Moher, 1989; Rosson & Carroll, 1996; see Lay, 1996 for a feminist perspective). Indeed, this bricoleur strategy should sound familiar if we think about the code in terms of genre. Students learning to write memoranda, for instance, often start out by simply copying an example's memo heading.

Project code, then, was often approached as narrative descriptions of routines and datatypes. By examining project code, developers at all three sites gained practical (although not always detailed) knowledge of relevant library code. Code was used for other things, of course — such as building programs. But these developers had developed certain ways to coordinate project code and comments to mediate their various activities related to searching, comprehending, and producing code.

Of these genres, developers mostly worked with the project code and the comments embedded within it. For the most part, they were not interested in the libraries' abstract descriptions of datatypes and routines. Rather, they wanted to see how the routines and datatypes had been used in concrete ways, for concrete purposes. Once they had seen routines and datatypes used in one or more examples in the project code — in familiar contexts, dealing with familiar problems — they generally did not need more abstract description. To use a literary analogy, developers preferred to learn vocabulary from the code's many narratives rather than from the dictionary definitions supplied in the libraries. These narratives provided context for understanding other genres, such as library code.

Although code examples helped developers by providing narratives of code-in-use, they could also inhibit code development in the long term: Copying and modifying examples could propagate mistakes and misunderstandings in the code and contribute to "code bloat" (McLellan, Roesler, Fei, Chandran, & Spinuzzi, 1998). Code examples mediated the use of libraries (and

vice versa); yet, if the examples were copied, they subverted the very purpose of libraries by introducing repeated, unneeded code.

Implications for Supporting Schlumberger's Software Developers

This informal study illustrates some of the insights that we can gain from using the genre ecology framework in studies of textual artifacts. This framework, with its focus on interpretation and its attention to compound mediation, has potential for helping technical communicators to analyze the complex interconnections among texts. In particular, the framework allowed me to compare inter-ecological relations (that is, how the same type of artifact mediates an activity differently in different ecologies) as well as intra-ecological relations (how artifacts within an ecology jointly mediate an activity).

Using the analytical framework, I was able to systematically examine the many genres that developers used to mediate their work, particularly in terms of interpretation. This informal study suggests that software development is interpretive, contingent, and especially co-mediated by a variety of textual artifacts – to a much greater extent than is typically acknowledged in studies of programmers. Furthermore, software development is exposed as a fundamentally collaborative activity that develops differently within different cultural-historical milieus and that reflects the values emergent in those milieus. Genres such as comments, for instance, indicated and shaped the values that their communities had developed over time.

Based on this analysis, the USER team was able to gain insights into how Schlumberger's developers marshall various genres to jointly mediate their programming activity. Partly in response to this study, Schlumberger's Usability Services for Engineering Research (USER) team designed three information systems to help better mediate the activity.

An automated, webbed data reference was designed to supplement the traditional printed documentation. Developers found the traditional documentation to be inadequate for developers' work because it became out of date more quickly than it can be written. In contrast, the automated reference was designed to be recompiled from the library code each night, ensuring that the online reference would always be up to date (McLellan, Roesler, Tempest, & Spinuzzi, 1998). This reference, then, was a version of the familiar reference manual genre, but one that avoided the chief drawback of that genre.

A set of complex, well-commented example programs were designed to be distributed with the code. These programs were to provide a sort of detailed narrative illustrating the use of key datatypes and routines (McLellan, Roesler, Tempest, & Spinuzzi, 1998). These examples were similar to the examples that developers already used, but were designed to exhibit consistent and preferred code sharing practices. Features that had been found to inhibit use at these sites (e.g., inconsistencies in programming style) were muted or eliminated. In this case, the genre of example code was adapted to encourage desired coding practices.

A software mining tool was developed (McLellan, Roesler, Fei, Chandran, & Spinuzzi, 1998). This tool drew on the success of genres such as automated searches and online internal documents, as well as software metrics tools and visualization tools. The software mining tool automatically scanned a product's entire baseline and created a database containing quantitative and qualitative data about the code. Developers and project managers could then query the database to get a different view of the code: Rather than looking at ground-level code or the one-line slices returned by grep queries, these users could produce a variety of reports and graphs detailing how various aspects of the code are used in the existing code. And these reports and graphs were rendered rapidly, meaning that users could form and test hypotheses about the larger system on the fly. The software mining tool combined contextualization (a feature of the example code) with text searches (a feature of grep and text editors). And it combined these with other features to provide levels of detail that were not available to developers before. Thus developers could be led to specific code without getting lost in the details. The software mining tool, then, was designed to supplement other search genres.

Future Directions

As I've argued here and elsewhere (Spinuzzi, 2001b), unlike other analytical frameworks for studying compound mediation, the genre ecology focuses on interpretation within cultural-historical activities. Consequently, I see it as uniquely suited for helping us to examine how textual artifacts jointly mediate activities – whether we are technical communicators, rhetoricians, information designers, or workplace researchers of other stripes.

As I noted earlier, analytical frameworks offer three key advantages to researchers: standardization, critical reflexivity, and scalability. But since the genre ecology framework is in its infancy, it has yet to realize these advantages. In this last section of the paper, I want to suggest some ways in which genre ecologies might be further refined in these terms.

In terms of standardization, although it is based on solid principles, this framework may benefit from more standardized heuristics. For instance, elsewhere (Spinuzzi, 2002) I suggest that genre ecology diagrams could be more useful if they were to become more formalized – if, for instance, researchers collected quantitative data about artifact use and were able to reflect those data in elements of the diagram such as distance between nodes. Standardization could lead to stronger reliability and validity.

In terms of critical reflexivity, the framework would benefit from more comparative studies with other frameworks. I have started this work (Spinuzzi, 2001b), but more can be done in comparing the framework with other frameworks grounded in cultural-historical theory such as actor-networks (Miettinen, 1999; Engeström & Escalante, 1996) and functional systems (Hutchins, 1995a; Nardi, 1996b). More critical reflexivity should lead to a more mature framework with increased analytical power.

Finally, the genre ecology framework is scalable in that it can address ranges of artifact types: It can be used to examine a relatively small number of textual artifacts, as in this study, or larger

numbers of artifacts. But the framework should become more scalable as it is refined and systematized, and particularly as that systematization leads to computer modeling of genre ecologies. (Edwin Hutchins' [1995a] work in modeling functional systems can provide guidance here.)

In this chapter, I have outlined the genre ecology framework and used an illustrative study to demonstrate its utility for studying compound mediation. I've emphasized how this framework addresses interpretation in ways that can be useful for those who study and design textual artifacts. Yet the framework can become much more useful as it is refined, filling what I believe to be an important need in workplace communication research.

References

Ackerman, M. S., & Halverson, C. (1998). Considering an organization's memory, *CSCW '98 Conference Proceedings* (pp. 39-48). New York: ACM, Inc.

Ackerman, M. S., & Halverson, C. A. (2000). Reexamining organizational memory. *Communications of the ACM, 43*(1), 59-64.

Bakhtin, M. M. (1986). *Speech genres and other late essays*. (1st ed.). Austin: University of Texas Press.

Bazerman, C. (1994). Systems of genre and the enactment of social intentions. In A. Freedman & P. Medway (Eds.), *Genre and the new rhetoric* (pp. 79-99). London; Bristol, PA: Taylor & Francis.

Beyer, H., & Holtzblatt, K. (1998). *Contextual design: Defining customer-centered systems*. United States of America: Morgan Kaufmann Publishers, Inc.

Bødker, S. (1996). Creating conditions for participation: Conflicts and resources in systems development. *Human-Computer Interaction, 11*, 215-236.

Bødker, S. (1997). Computers in mediated human activity. *Mind, Culture, and Activity, 4*(3), 149-158.

Boehm-Davis, D., Fox, J., & Philips, B. (1996). Techniques for exploring program comprehension. In W. Gray & D. Boehm-Davis (Eds.), *Empirical Studies of Programmers, Sixth Workshop* (pp. 3-21). Norwood, NJ: Ablex.

Brooks, R. (1983). Toward a theory of the comprehension of computer programs. *International Journal of Man-Machine Studies, 18*, 543-554.

Coble, J. M., Maffitt, J. S., Orland, M. J., & Kahn, M. G. (1996). Using contextual inquiry to discover physicians' true needs. In D. Wixon & J. Ramey (Eds.), *Field methods casebook for software design* (pp. 229-248). New York: John Wiley & Sons.

Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Belknap Press of Harvard University Press.

Devitt, A. J. (1991). Intertextuality in tax accounting: Generic, referential, and functional. In C. Bazerman & J. G. Paradis (Eds.), *Textual dynamics of the professions: Historical and contemporary studies of writing in professional communities* (pp. 336-357). Madison, WI: University of Wisconsin Press.

Engeström, Y. (1990). *Learning, working, and imagining: Twelve studies in activity theory*. Helsinki: Orienta-Konsultit Oy.

Engeström, Y. (1992). *Interactive expertise: Studies in distributed working intelligence*. Helsinki: University of Helsinki.

Engeström, Y., & Escalante, V. (1996). Mundane tool or object of affection? The rise and fall of the Postal Buddy. In B. A. Nardi (Ed.), *Context and consciousness: activity theory and human-computer interaction* . Cambridge, MA: MIT Press.

Freedman, A., & Smart, G. (1997). Navigating the current of economic policy: Written genres and the distribution of cognitive work at a financial institution. *Mind, Culture, and Activity, 4*(4), 238-255.

Haas, C. (1996). *Writing technology: Studies on the materiality of literacy*. Mahwah, NJ: L. Erlbaum Associates.

Henderson, P. G. (1996). Writing technologies at White Sands. In P. A. Sullivan & J. Daughterman (Eds.), *Electronic literacies in the workplace: Technologies of writing* (pp. 65-88). Urbana, Il: National Council of Teachers of English.

Hutchins, E. (1995a). *Cognition in the wild*. Cambridge, MA: MIT Press.

Hutchins, E. (1995b). How a cockpit remembers its speeds. *Cognitive Science, 19*, 265-288.

Johnson, R. R. (1998). *User-centered technology: A rhetorical theory for computers and other mundane artifacts*. New York: SUNY Press.

Johnson-Eilola, J. (2001). Datacloud: Expanding the roles and locations of information, *SIGDOC 2001 Conference Proceedings* (pp. 47-54). New York: ACM, Inc.

Lange, B., & Moher, T. (1989). *Some strategies of reuse in an object-oriented programming environment.* Paper presented at the Human Factors in Computing Systems: CHI '89 Proceedings.

Lay, M. M. (1996). The computer culture, gender, and non-academic writing: An interdisciplinary critique. In A. H. Duin & C. J. Hansen (Eds.), *Nonacademic writing: Social theory and technology* . Mahwah, NJ: Lawrence Erlbaum Associates.

Leont'ev, A. N. (1978). *Activity, consciousness, and personality*. Englewood Cliffs, NJ: Prentice-Hall.

Leontyev, A. N. (1981). *Problems of the development of mind*. Moscow: Progress.

McLellan, S., Roesler, A., Fei, Z., Chandran, S., & Spinuzzi, C. (1998). Experience using web-based shotgun measures for large-system characterization and improvement. *IEEE Transactions on Software Engineering, 24*(4), 268-277.

McLellan, S., Roesler, A., Tempest, J., & Spinuzzi, C. (1998). Usability testing application programming interfaces as input to reference documentation. *IEEE Software, 15*(3), 78-86.

Miettinen, R. (1999). The riddle of things: Activity theory and actor-network theory as approaches to studying innovations. *Mind, Culture, and Activity, 6*(3), 170-195.

Mirel, B. (1988). The politics of usability: The organizational functions of an in-house manual. In S. Doheny-Farina (Ed.), *Effective documentation: What we have learned from research* (pp. 277-298). Cambridge, MA: MIT Press.

Mirel, B., Feinberg, S., & Allmendinger, L. (1991). Designing manuals for active learning styles. *Technical Communication, 38*(1), 75-87.

Nardi, B. A. (Ed.). (1996a). *Context and consciousness: Activity theory and human-computer interaction*. Cambridge, MA: MIT Press.

Nardi, B. A. (1996b). Studying context: A comparison of activity theory, situated action models, and distributed cognition. In B. A. Nardi (Ed.), *Context and consciousness : activity theory and human-computer interaction* (pp. 69-102). Cambridge, MA: MIT Press.

Nardi, B. A., & O'Day, V. L. (1999). *Information ecologies: Using technology with heart*. Cambridge, MA: MIT Press.

Orlikowski, W. J., & Yates, J. (1994). Genre repertoire: The structuring of communicative practices in organizations. *Administrative Science Quarterly, 39*, 541-574.

Page, S. R. (1996). User-centered design in a commercial software company. In D. Wixon & J. Ramey (Eds.), *Field methods casebook for software design* (pp. 197-213). New York: John Wiley & Sons.

Paradis, J. (1991). Text and action: The operator's manual in context and in court. In C. Bazerman & J. G. Paradis (Eds.), *Textual dynamics of the professions: Historical and contemporary studies of writing in professional communities* (pp. 256-278). Madison, WI: University of Wisconsin Press.

Pennington, N., Lee, A. Y., & Rehder, B. (1995). Cognitive activities and levels of abstraction in procedural and object-oriented design. *Human-Computer Interaction, 10*, 171-226.

Raven, M. E., & Flanders, A. (1996). Using contextual inquiry to learn about your audiences. *Journal of Computer Documentation, 20*(1), 1-13.

Rist, R. (1989). Schema creation in programming. *Cognitive Science, 13*, 389-414.

Rist, R. S. (1991). Knowledge creation and retrieval in program design: A comparison of novice and intermediate student programmers. *Human Computer Interaction, 6*, 1-46.

Rogers, Y., & Ellis, J. (1994). Distributed cognition: An alternative framework for analysing and explaining collaborative working. *Journal of Information Technology, 9*, 119-128.

Rosson, M. B., & Carroll, J. M. (1996). The reuse of uses in Smalltalk programming. *ACM Transactions on Computer-Human Interaction, 3*(3), 219-253.

Russell, D. R. (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication, 14*(4), 504-554.

Schryer, C. F. (1993). Records as genre. *Written Communication, 10*(2), 200-234.

Schuler, D., & Namioka, A. (Eds.). (1993). *Participatory design: Principles and practices*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Soloway, E., & Ehrlich, K. (1984). Empirical studies of programming knowledge. *IEEE Transactions on Software Engineering, SE-10*(5), 595-609.

Spinuzzi, C. (1999). Grappling with distributed usability: A cultural-historical examination of documentation genres over four decades. In J. Johnson-Eilola & S. Selber (Eds.), *ACM SIGDOC '99* (pp. 16-21). New York: ACM, Inc.

Spinuzzi, C. (2001a). "Light green doesn't mean hydrology!": Towards a visual-rhetorical framework for interface design. *Computers & Composition, 18*, 39-53.

Spinuzzi, C. (2001b). Software development as mediated activity: Applying three analytical frameworks for studying compound mediation, *SIGDOC 2001 Conference Proceedings* (pp. 58-67). New York: ACM, Inc.

Spinuzzi, C. (2002a, March 20-23). *Post-Process Theory and Programming: Toward a Hermeneutic Understanding of Programming Languages.* Paper presented at the Conference on College Composition and Communication, Chicago.

Spinuzzi, C. (2002b). Toward integrating our research scope: A sociocultural field methodology. *Journal of Business and Technical Communication, 16*(1), 3-32.

Spinuzzi, C., & Zachry, M. (2000). Genre ecologies: An open-system approach to understanding and constructing documentation. *Journal of Computer Documentation, 24*(3), 169-181.

Takang, A., Grubb, P., & Macredie, R. (1996). The effects of comments and identifier names on program comprehensibility: An experimental investigation. *Journal of Programming Languages, 4*, 143-167.

Tenny, T. (1988). Program readability: Procedures vs. comments. *IEEE Transactions on Software Engineering, SE-10*(5), 595-609.

Wiedenbeck, S. (1986). Process in computer program comprehension. In E. Soloway & S. Iyengar (Eds.), *Empirical Studies of Programmers: First Workshop* (pp. 48-57). Norwood, NJ: Ablex.

Wiedenbeck, S. (1991). The initial stage of program comprehension. *International Journal of Man-Machine Studies, 35*, 517-540.

Winsor, D. (2001). Learning to do knowledge work in systems of distributed cognition. *Journal of Business and Technical Communication, 15*(1), 5-28.

Wixon, D., & Ramey, J. (Eds.). (1996). *Field methods casebook for software design*. New York: John Wiley & Sons.

Zachry, M. (1999). Constructing usable documentation: A study of communicative practices and the early uses of mainframe computing in industry, *ACM SIGDOC '99* (pp. 22-25). New York: ACM, Inc.

Zachry, M. (2000). The ecology of an online education site in professional communication. In T. J. Malkinson (Ed.), *SIGDOC 2000 Conference Proceedings* (pp. 433-442). New York: ACM, Inc.

Appendix: Interview Questions

The following questions were asked by the researcher in the pre-observation interview.

Background

- What development environment are you using? (Unix, Windows, etc.)

- What are you working on, and how long have you been working on it?

- How long have you been working with C/C++?

- How long have you been working with Schlumberger's C/C++ libraries?

- Which libraries are you using the most today? In this project? In general?

Documentation needs

- How do you usually get information about Schlumberger's libraries? (e.g. asking other developers, examining the libraries, reading the documentation.)

- Under what circumstances might you use each avenue of gathering information?

- What are the advantages of getting information each way? The disadvantages?

- What types of documentation or reference materials have you used while programming in this language? About how long have you used these? What are their advantages and disadvantages?

Appendix A

Table 1: Number and Percent Words Spoken by Participant Group

Trans #	Clerk	Doctor	# Words Total	# Words Spoken			% Words Spoken		
				Clerk	Doctor	Others	Clerk	Doctor	Others
1	C6	D6	6,434	4,073	2,361	0	63	37	0
2	C6	D3	5,250	2,007	3,179	64	38	61	1
3	C2	D1	5,308	1,677	3,287	344	32	62	6
4	C2	D1	2,072	1,102	929	41	53	45	2
5	C3	D4	2,571	1,333	769	469	52	30	18
6	C5	D5	3,061	1,641	1,339	81	54	44	3
7	C5	D7	3,415	1,806	1,332	277	53	39	8
8	C7	D8	4,889	2,114	2,077	698	43	42	14
9	C8	D7	2,855	1,277	1,393	185	45	49	6
10	C8	D7	2,144	1,026	566	552	48	26	26
11	C5	D7	2,921	2,495	256	170	85	9	6
12	C10	D8	5,634	1,422	3,890	322	25	69	6
13	C10	D8	5,089	1,974	2,651	464	39	52	9
14	C12	D7	1,301	927	272	102	71	21	8
15	C11	D9	4,116	1,757	1,970	389	43	48	9
16	C13	D10	5,491	2,726	2,765	0	50	50	0
Mean			3,909	1,835	1,815	260	50	43	8

Appendix B

Table 2: Percent Words Spoken by Groups across Quartiles

Trans #	Clerk	Doctor	# Words Total	% Words (Clerks)				% Words (Doctors)				% Words (Others)			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	C6	D6	6,434	89	79	40	45	11	21	60	55	0	0	0	0
2	C6	D3	5,250	75	41	16	21	25	59	83	76	0	0	2	3
3	C2	D1	5,308	62	34	30	0	36	64	57	91	2	3	13	9
4	C2	D1	2,072	69	33	60	41	31	58	37	54	0	9	4	5
5	C3	D4	2,571	97	54	29	27	3	27	46	43	0	19	25	29
6	C5	D5	3,061	77	63	33	42	20	34	65	56	3	4	2	2
7	C5	D7	3,415	94	76	33	8	5	23	46	82	0	1	21	10
8	C7	D8	4,889	97	43	10	23	2	52	64	53	0	6	26	25
9	C8	D7	2,855	84	47	41	6	14	48	53	80	2	5	7	13
10	C8	D7	2,144	96	68	8	20	4	32	31	38	0	0	61	42
11	C5	D7	2,921	91	97	92	62	1	2	9	24	8	1	0	14
12	C10	D8	5,634	65	15	12	9	32	76	79	88	3	8	10	4
13	C10	D8	5,089	68	41	33	13	26	58	65	61	6	1	3	27
14	C12	D7	1,301	86	77	55	68	4	13	39	28	11	11	6	4
15	C11	D9	4,116	100	48	15	8	0	48	68	76	0	5	16	17
16	C13	D10	5,491	46	50	55	41	54	50	45	59	0	0	0	0
Mean			3,909	**81**	**54**	**35**	**27**	**17**	**41**	**53**	**60**	**2**	**4**	**12**	**13**

NOTE: **Q =   Quartile (1st, 2nd, 3rd, 4th)**

Notes

[1]By *informal* I mean studies that are less time consuming and relatively less rigorous than traditional academic research. Such studies are useful for descriptive and exploratory research and for guiding rapid development (Beyer & Holtzblatt, 1998; Schuler & Namioka, 1993; Wixon & Ramey, 1996).

[2] For another, shorter account of this study, see McLellan, Roesler, Tempest, and Spinuzzi, 1998.

[3] Reijo Miettinen argues: "Industrial corporations are aggregates of activity systems" (1999, p.187). He elaborates on this view in a more detailed way than this article permits.

[4]This solution is an example of *externalization* (cf. Leont'ev, 1978, p.58): once programmers have internalized the workings of grep, they can externalize it through this script, delegating the cognitive load.

[5] A *path* is a list of specific subdirectories.

[6] Cf. Bakhtin's theory of genre, especially Bakhtin, 1986.

[7]Leontyev (1981, p.406) calls this *operationalizing* actions.

[8] For a brief discussion of some of these articles in terms of code examples, see McLellan, Roesler, Tempest, and Spinuzzi, 1998.

When Management Becomes Personal:[1] An Activity-Theoretic Analysis of Palm™ Technologies[2]

Cheryl Geisler

Language, Literature, and Communication
Faculty of Information Technology
Rensselaer Polytechnic Institute
Troy, New York 12180
geislc@rpi.edu
http://www.rpi.edu/~geislc

Abstract

Palm Technologies, a group of personal digital assistants or PDAs developed in the early 90s, have rapidly embedded themselves into the daily lives of users. The aim of this chapter is to provide an activity theoretic account of PDAs as technologies of text. Three questions are pursued: Out of what cultural history did Palm Technologies emerge? What motivated users to adopt Palm Technologies? How did Palm Technologies become incorporated into the activity patterns of everyday life? The evidence presented suggests that Palm Technologies work by moving systematic management techniques originally developed for organizations into the personal sphere. When systematic management becomes personal, task management separates from the task itself, leading to a fragmentation of motive that may challenge some of the basic assumptions of activity theory. This fragmentation is mediated through the space-time affordances of textualization and concurrent linearization of time. Like the systematic management of organizations before it, such textual affordances may become subject to surveillance and manipulation - by ourselves if not by others. All of this suggests that some interesting issues will arise as PDA technologies attempt to move outside of their managerial base and into the domestic sphere, in effect *databasing* our lives.

Market figures suggest that a new technology, Palm Technologies, has emerged and rapidly embedded itself into the everyday lives of millions of users. The term "Palm Technologies" refers to a group of personal digital assistants or PDAs developed by Palm, Inc. in the early 90's. The acknowledged granddaddy of these devices was the PalmPilot, which hit the market in April, 1996, and captured half the market by the end of its first year (Brandel, 1999; Bayus, 1997; Graves, 1998). By the end of four years, 7 million devices had been sold (Pachetti, 2000). Since then, Palm has continued to dominate with about 75 percent of a PDA market which topped 6 million units in 2000 (Quittner, 2000a). And, unlike other technology companies who found 2000 to be a bad year, makers of PDAs were seeing strong growth (Rosen, 2001). Indeed, in 2001, sales of PDAs were expected to grow 57 percent to 9.6 million units (Gilroy, 2001), and industry analysts were predicting an even greater increase in profitability (Schaeffler, 2001).

Who are the users of these Palm Technologies? According to a recent profile by Consumer Electronics Association (Gilroy, 2001; Thibodeaux, 2001), current PDA owners belong to what we might call the managerial class: wealthy, well-educated adults under 55, a slight majority of

whom are men. They are frequent users: Most use their PDAs everyday. Almost all carry them wherever they go. As projected market growth suggests, however, PDAs are moving beyond this managerial class. At the end of 2000, advertisements for PDAs started appearing in print and on TV for the first time (McCarthy, 2001), and this media campaign was expected to grow (Schaeffler 2001). Technology reviews have begun to represent PDAs in the hands of many outside of the traditional market: Teachers and students in public schools, mothers, Gen Y women, and tech-savvy kids have all been urged to take advantage of PDA mobility (McCampbell, 2001; Quittner, 2000b; Lowe, 2001; Gardyn, 2001; Montoya, 2001). And finally, PDAs have recently appeared on the cover of *Consumer Reports* (May 2001), a certain harbinger of arrival in the mass market.

When a new technology embeds itself into the daily lives of users with the rapidity and thoroughness displayed by Palm Technologies, the time is ripe for analysis. One of the most useful frameworks for this purpose is activity theory. In studies of writing and in studies of human-computer interaction — the two fields for which Palm Technologies are of interest — activity theory is receiving increasing attention (Bodker, 1997; Cole & Engeström, 1993; Gifford & Enyedy, 1999; Kaptelinin, 1997a & 1997b; Kaptelinin, Nardi, & Macaulay, 1999; Nardi, 1998; Russell, 1997; Turner, Turner, & Horton, 1999; Witte & Bracewell, 1988). From the perspective of human-computer interaction, the reason for interest in Palm Technologies is clear. Handheld organizers from Palm have been the agent of a paradigm shift in humans interacting with computers. By packing personal data into a handheld device that fits in the "palm" of the hand, Palm altered the conviction that more was better in a computational devices (Bergmann & Haitani, 2000). The case for Palm Technologies' interest to researchers of writing is not hard to make either. As shown in Figure 1, basic Palm tools involve, without exception, the creation and use of texts:

- In Notes (shown in A in Figure 1), users create texts that record information to be remembered. Users can give these texts titles, and they are automatically stamped with the date and time of creation.

- In Contacts (shown in B in Figure 1), users create texts that associate personal information — phone numbers, e-mail addresses, mailing addresses, and other information like web sites and birthdays — with individuals.

- In the Calendar (shown in C in Figure 1), users create texts that record appointments, each assigned to a specific date and time.

- In the Task List (shown in D in Figure 1), users create texts that detail work to be done. Each task may be assigned a priority (from highest to lowest) and a specific date.

These Palm texts are texts because they use the symbol system of language as represented in material form through an alphabetic script. And yet, they are unlike the prototypical texts traditionally examined in writing research. In Palm Technologies, each text has become, in effect, a data structure with assigned attributes whose spatial display is critical to interpretation. Most Palm texts — notes, appointments, and tasks — can be assigned to user-defined categories.
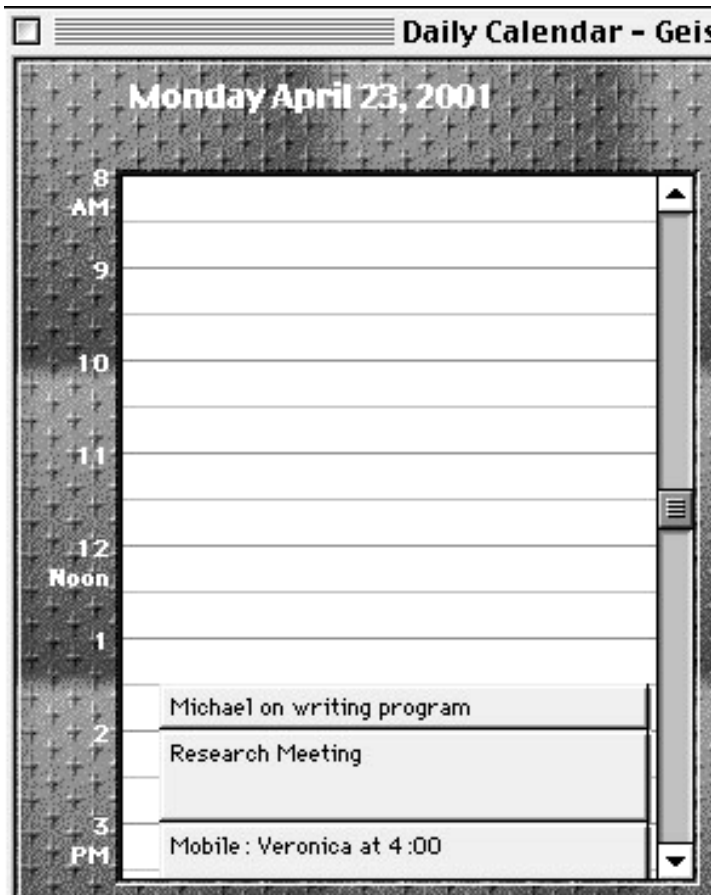
Some Palm texts — notes and addresses — can also be linked to points on the calendar. All Palm texts can be displayed for browsing, searched, sorted, and filtered in multiple ways by content and by attribute.
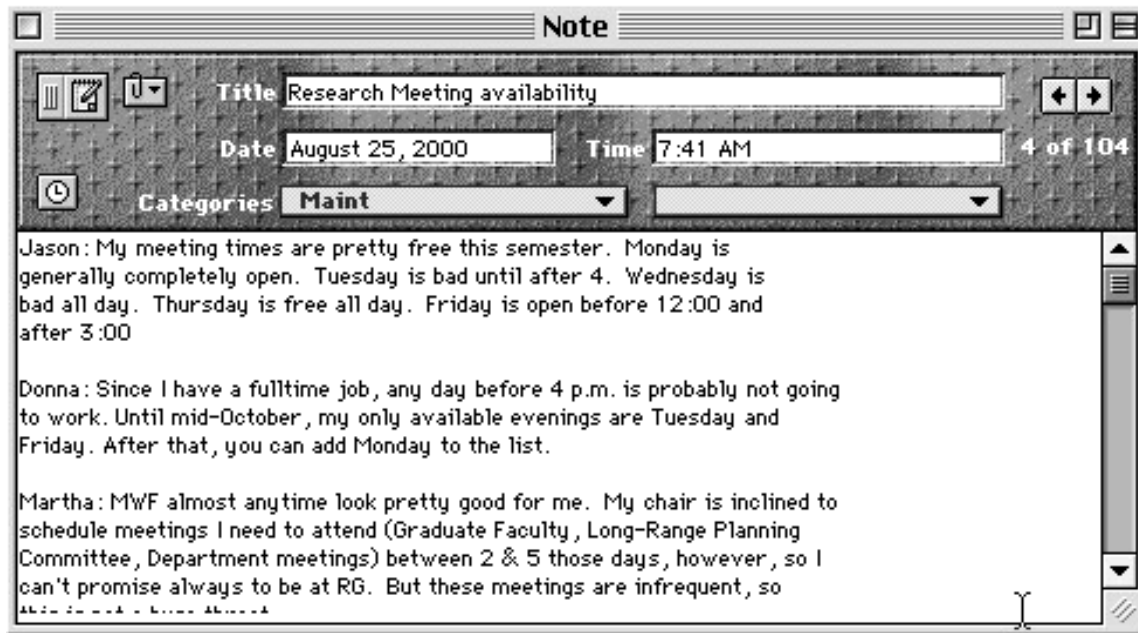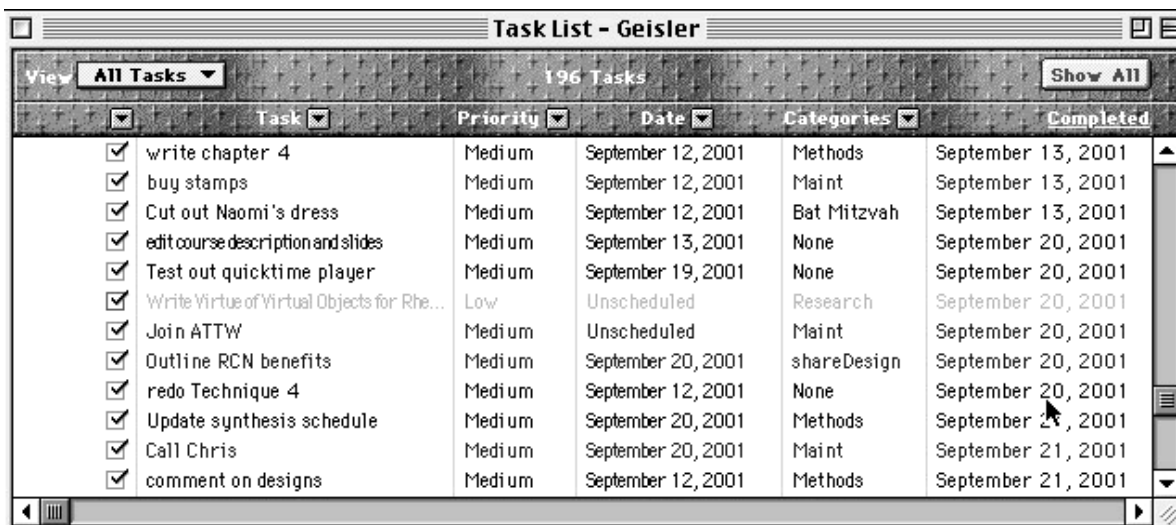

A: Note from the Palm Desktop
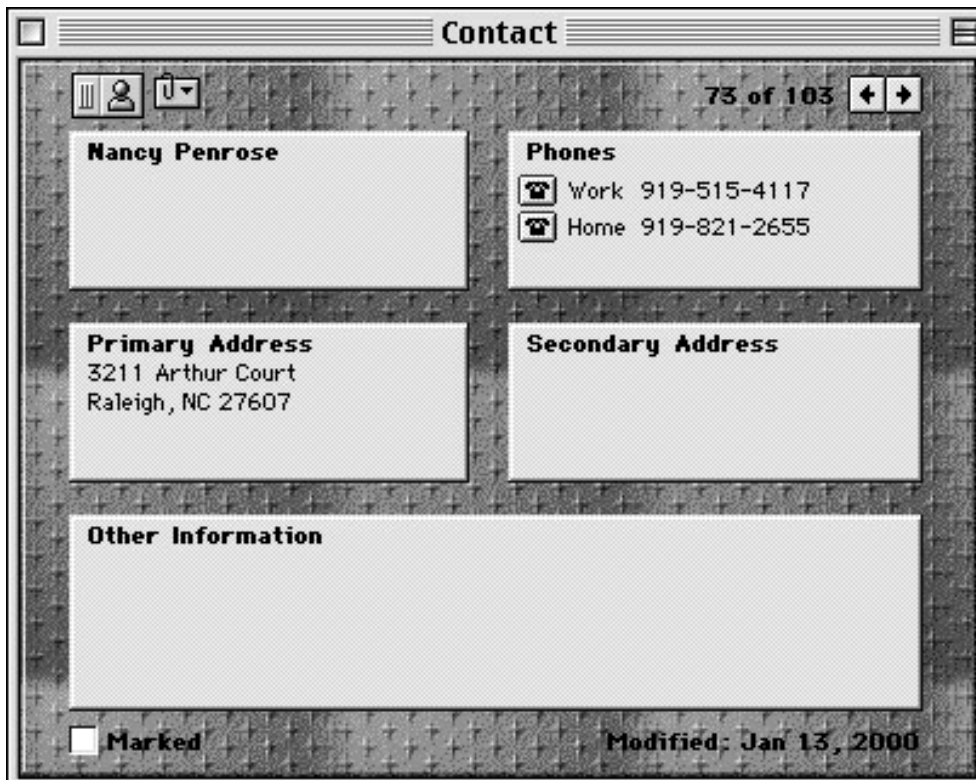
B: Address from the Palm Desktop

C: Appointments from the Palm Desktop

D: Tasks from the Palm Desktop

Figure 1. Texts in the basic Palm applications for notes (A), addresses (B), appointments (C), and tasks (D).

In many minds, by contrast, prototypical texts are quite different. As information technologies re-mediate paper-based technologies, however, our prototypical view works less well even for those texts that look like a "text". Texts in word processors, for instance, have many attributes beyond what a paper-based medium affords. Words have attributes of time, date and even authorship, which can be used to display editing changes. Words can be assigned attributes for annotations, hypertextual links, and stylistic characteristics, all of which can be used to control the readers' experience. For this reason, analysis of Palm texts can help to call attention to aspects of texts that become increasingly critical to understanding the role texts play in the information age.

Activity theory provides a useful analytic framework for this purpose. One of the major contributions of activity theory has been the integration of a psychological account of individual development with a sociohistorical account of the development of culture. At any given time and place, the collocation of actors, motives, and mediational means that constitute an activity are taken to be the result of a convergence of two lines of development:

- the *cultural history* of the mediational means that, as a kind of legacy, provides a set of physical, mental, and social resources by which current motives can be pursued; and

- the *developmental history* of individual agents, which produces a set of desires and dissatisfactions embedded in a set of personal techniques and tools.

Both of these lines of development together converge to enable the combination of actions and motives that we call an *activity*.

The aim of this chapter is to provide an activity theoretic account of the interrelationship among the cultural history of Palm Technologies as tools, the individual development of a Palm user's motives, and patterns of Palm-embedded activity. Three questions were pursued:

- Out of what cultural history did Palm Technologies emerge?

- What motivated users to adopt Palm Technologies?

- How did Palm Technologies become incorporated into the activity patterns of everyday life?

The evidence to be presented suggests that Palm Technologies work by moving systematic management techniques originally developed for organizations into the personal sphere. As we shall see, when systematic management becomes personal, task management separates from the task itself, leading to a fragmentation of motive that may challenge some of the basic assumptions of activity theory. This fragmentation of task and motive is mediated, I will suggest, through the space-time affordances of textualization and concurrent linearization of time. Like the systematic management of organizations before it, such affordances may become subject to surveillance and manipulation — by ourselves if not by others. All of this suggests that some interesting issues will arise as Palm and other PDA technologies attempt to move outside of their managerial base and into the domestic sphere, in effect *databasing* our lives. The analysis that follows is a first step in understanding this new role for texts in the information age.

Analysis of Cultural History

As shown in Figure 2, the Palm family of handhelds pioneered the arrangement of the set of basic tools described earlier — Calendar, Contact List, Task List, and Notepad — on a handheld device. With a push of the button, each tool is available nearly instantly, viewable on the screen occupying the top two-thirds of the device. Above the buttons is an area on which the user can "write" with a stylus using a simplified character set. By means of a docking cradle, the Palm handheld can synchronize with a desktop application, the Palm Desktop that displays the same information on the user's desktop. Users thus have a complex personal database available both at their usual places of work and on the run.

The cultural history of these Palm tools is complex, but we can begin with paper-based antecedents like the personal organizers, Filofax and Day-Timer, and rotary files like the Rolodex. Early technology reviews of the Palm called attention to these paper-based antecedents: "[N]o more difficult than opening a Filofax" said *Time*'s reviewer (Jackson, 1998). "[S]uperportable electronic Rolodexes" quipped a reviewer at *Money Magazine* (Turner, 1998). "I view it as an electronic replacement for a daily planner," suggested another at *Electronics Now* (Holtzman, 1998). Such comments were an important mechanism by which users were able to see the link between Palm Technologies and other tools in their cultural history.

These paper-based time management technologies were all developed around the middle of the twentieth century as a way of extending office technologies to the management of personal data. The Filofax, first developed in 1921 as a "file of facts," quickly became standard equipment for the British army (Meyer, 1996), and was later adopted by the yuppies of the 1980's (Canfil, 1996). In 1947, the Day-Timer daily planner was born as the Lawyer's Day, a similar combination of an appointment calendar, to-do list, time record, and work planner aimed at helping professionals keep track of their billable hours (Daytimer, 2001). And in 1950, the Rolodex, a desktop rotary file of removable cards, revolutionized our approach to keeping address books up to date (Hampson, 1996).

Paper-based systems like the Day-Timer and Rolodex all eventually made their way into electronic form as PIMs – Personal Information Managers — such as Microsoft's Outlook or Micro Logic's Info Select. Originally cast as competitors to the Palm handhelds (Coates, 1996; Jasper, 1999), PIMs soon became their desktop adjuncts when Palm developed conduit software that would move information from the handheld device into a variety of desktop applications.

Electronic antecedents for Palm handhelds were more diverse than just this direct line of time management technologies. Most notably, the consumer market was prepared for handheld devices starting with the craze in the 70's for the handheld calculators we now take for granted (Turner, 1998; Holtzman, 1997). The laptop, as a downsized and portable desktop computer, is also widely recognized as an electronic antecedent, though it may have been more of a distraction than a precursor. In the early days at Palm, venture capitalists and manufacturers repeatedly told Palm president, Donna Dubinsky, that Palm was going in the wrong direction by offering less rather than more in a handheld computing device. Distracted by the laptop as
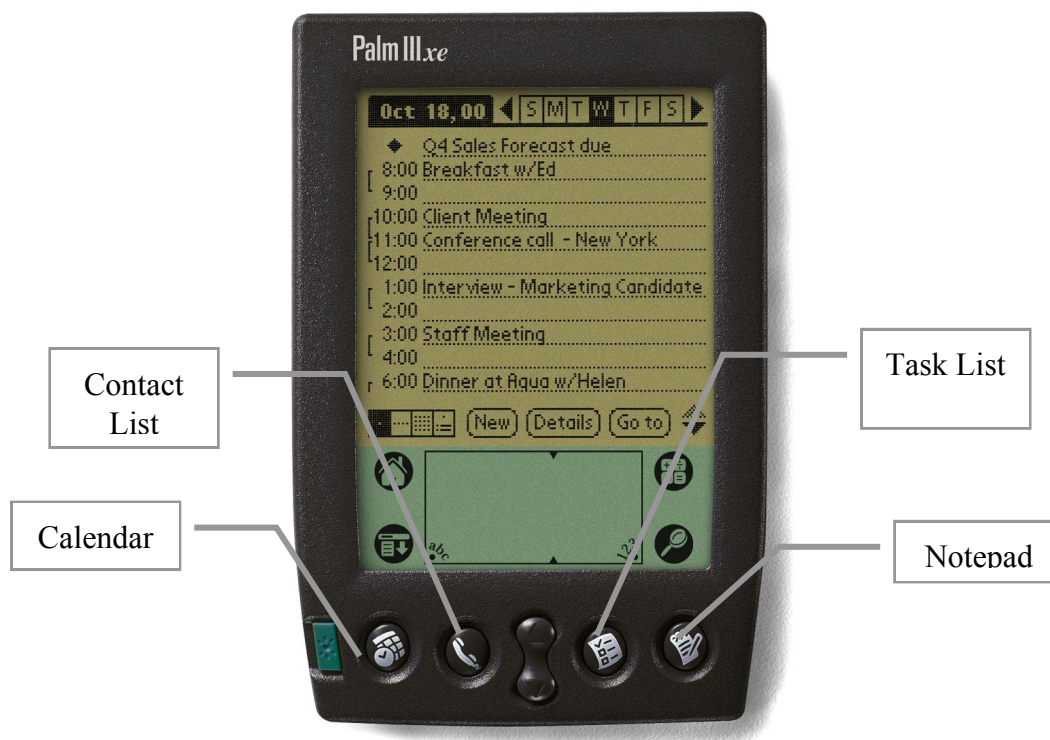
Figure 2. The Palm™IIIxe handheld showing arrangement of buttons for basic applications.

cultural antecedent, these potential partners could not see the connection between the proposed technology and the cultural history of their tools. "Time after time, I'd go into meetings, and they'd say, 'You can't do a device like this without a PC card slot or a spreadsheet or whatever,'" Dubinsky has been quoted as saying (Jackson, 1998).

In addition to physical tools, the cultural history of a device like the Palm handheld includes the social arrangements that support it. In this area, two interrelated social movements are relevant. The first, time management, provided the underlying rationale for using Palm tools. Time management gurus like Charles Hobbs (1987) preached the combination of efficiency and goal-setting that first became embodied in personal organizers like the Day-Timer (Daytimer, 2001), and later appeared in the Palm handheld interface. Based on systematic management, which has received many challenges in recent decades, its tenants of segmenting time into ever finer intervals and separating task management from the task itself (Yates, 1993; Waring, 1991; Kanigel, 1997) remain fundamental to Palm Technologies.

The second social movement making up the cultural history of Palm Technologies is professionalization (Bledstein, 1976; Friedson, 1986; Collins, 1979; Larson, 1977; Geisler, 1994). The creation of associations of what we now call white-collar workers with the prerogative to control their working conditions developed hand-in-glove with systematic management in late nineteenth century. This professional or managerial class developed time

management as one of its tools, so it is no accident that Palm Technologies have made their greatest inroads among so-called mobile professionals — "white collar workers who spend more than 20 percent of their time away from their desks" (Hulak, 1995).

The final set of cultural antecedents relevant to an analysis of Palm Technologies are what we might call technologies of the body. The rapid emergence of Palm Technologies may, in fact, be best explained through careful attention to issues of the body. The size of the PalmPilot (4.7 x 3.2 inches) was a notable break with the form factors that prevailed in earlier PDAs like the Apple Newton which was twice its size (8 x 4.25). The shape was no accident: Jeff Hawkins, Palm's founder, early on challenged his developers to come up with a device that could fit in any shirt pocket (Bergmann & Haitani, 2000; Brown, 1998), an image in keeping with Palm Technologies' professional roots.

Behind the shirt pocket, however, was an even more compelling tool: the hand — or, more specifically, the palm. The ability to hold the Palm comfortably in the palm of the hand while writing on it with the other hand was important for users. Unlike Windows CE machines which aimed to extend the tradition of the laptop into the so-called "palmtop" devices, Palm handhelds had a stylus rather than a keyboard; reviewers pointed out that this seemed more physically manageable on the go (Holtzman, 1997). As one early reviewer harangued, "There's no easy way to use a keyboard while standing up…. Okay, there is one way to use a keyboard when you're standing up: Hold the machine by the sides and type with your thumbs" (Manes, 1997, p. 312).

Analysis of Individual Development

While links to antecedent tools can begin to account for the rapid emergence of a technology like the Palm, decisions to adopt are made by individuals in response to the desires and dissatisfactions that make up what activity theorists label as *motive*. In this section, then, we turn from the general patterns of cultural history to look at more specific patterns of individual development. In particular, we take a look at the ten-year history leading to my own adoption of a PalmPilot in the relatively early year of 1997.
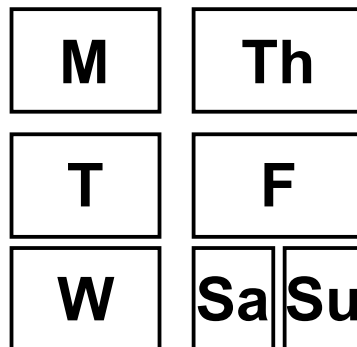

Figure 3. Schematic representation of the Week-at-a-Glance academic year calendar.

Before 1988, I used the still-common academic year calendar, Week-at-a-Glance, available from most university bookstores. A little bigger than the PalmPilot (4 x 6.5), it offered seven days in a 2-page spread as diagrammed in Figure 3. Monday through Friday provided 7 full blank lines; the weekend (on which I would presumably be loafing) provided 7 half-lines per day. A sample week, that of Dec. 7, 1987, showed that I recorded four kinds of information in the Week-at-a-Glance. First, I listed daily appointments by writing a time followed by the name of the appointment: "9:30 Graduate Review Committee." Second, I noted deadlines such as "Final project due." Third, I created numbered task lists like the following:

- Annenberg

- Book revision plans

And finally, I recorded untimed events that, nevertheless, were scheduled to occur on specific days: "David Phillips visits, New Zealand." As might be expected with all of these kinds of entries, the seven lines provided for each day often made space tight in my Week-at-a-Glance.

The following year, at the beginning of my second year as an untenured assistant professor, the impending birth of my first daughter increased my sense of the inadequacy of the simple academic calendar. I particularly remember being concerned with finding a way of keeping myself on track with multiple academic projects with the appealing distraction of a baby at hand. My solution was a large-format Day-Timer daily planner diagrammed in Figure 4. At 10 x 12 inches, it barely met the criteria of mobility, but it gave me a full-page per day with 28 lines in the top for "Appointments & Scheduled Events," marked by the hour starting at 8a.m and running, in half hour intervals, until 10 p.m at night. In the bottom were 14 lines in a section titled, "To Be Done Today," followed by the admonition (which I ignored) to "number each item."

By the end of the first year, I had developed a system for using this Day-Timer. Friday, September 22, 1989, for example, showed 4 back-to-back afternoon appointments (12:00, 1:00, 2:30, and 3:30) in the top left-hand column and 17 To Do's spread over both columns at the bottom of the page, all but two of which were checked off. In addition, at the top of the otherwise empty top left-hand column, I recorded time-keeping notes — the hours which I worked on research ("9:30-12:30"), a note that my baby was sick, and, at the bottom on the column, the sum of hours worked ("3.0.").
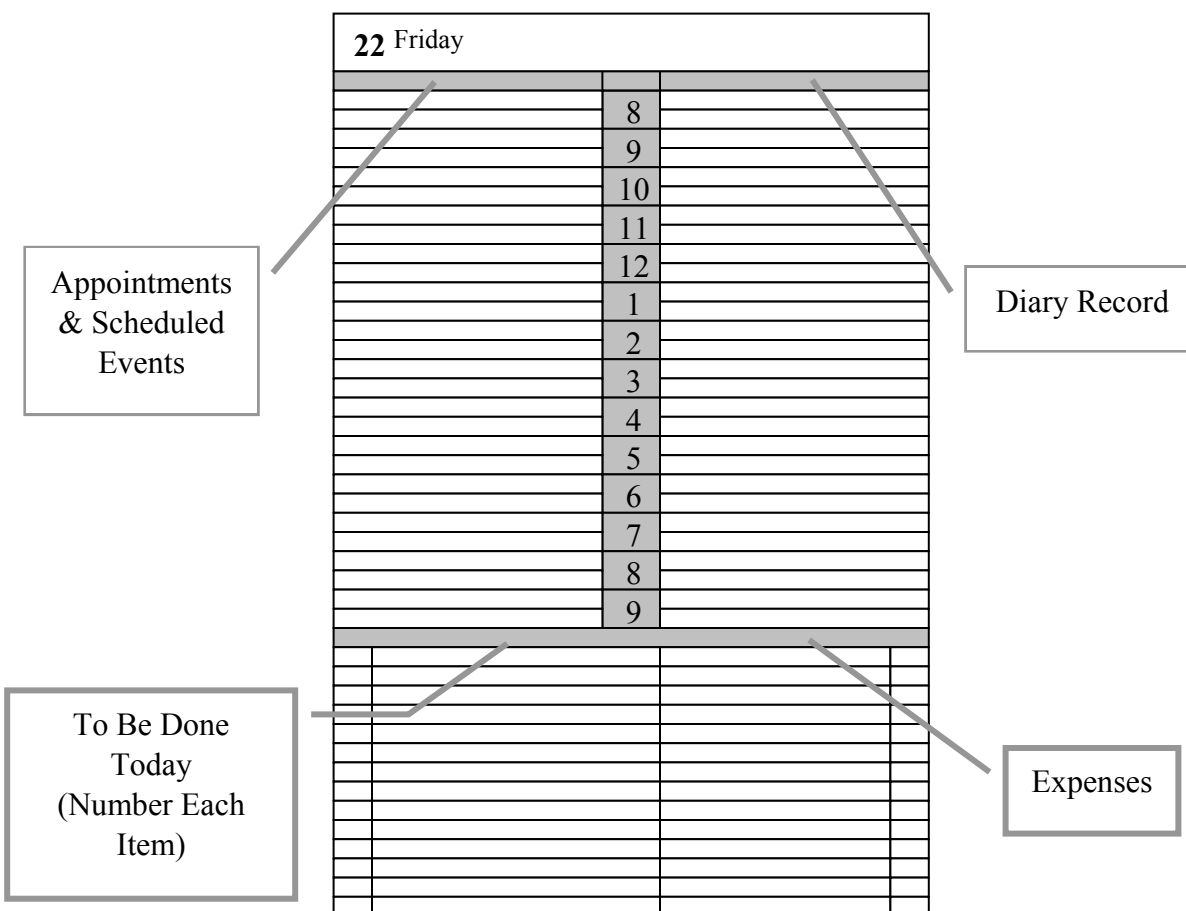
Figure 4. Schematic Representation of a page from my Day-Timer.

My Day-Timer also provided me with other supplemental pages which I incorporated into my daily routine. I used a tabbed divider which arrayed the days of each month to re-record time keeping notes ("9:30-12:30"; "Naomi sick," and "3.0"). Each Saturday was then annotated with the total number of hours worked for the week ("19.25"). I also used a full-page 2-column spread labeled "Notes and Memos" at the end of each week to record tasks that I needed to do long-range.

Activity theory requires us to understand how a tool builds upon the user's prior tools, responds to her desires and dissatisfactions, and, through its affordances, extends the capacity of the user in unexpected directions. We can see all of these factors at work with my use of the Day-Timer. The same kinds of information that we noted in the Week-at-a-Glance — daily appointments, deadlines, task lists, and untimed events found their place in the new Day-Timer technology. In addition, my desire for better control over project tasks and a mechanism through which to assure that I did not neglect my scholarship lead me to develop new mediating means built on tool affordances: not only task lists created in a space whose label ("To Be Done Today") invited

such use, but also time-keeping notes ("9:30-12:30") in spaces (Diary Record) designed for other purposes (billable hours).
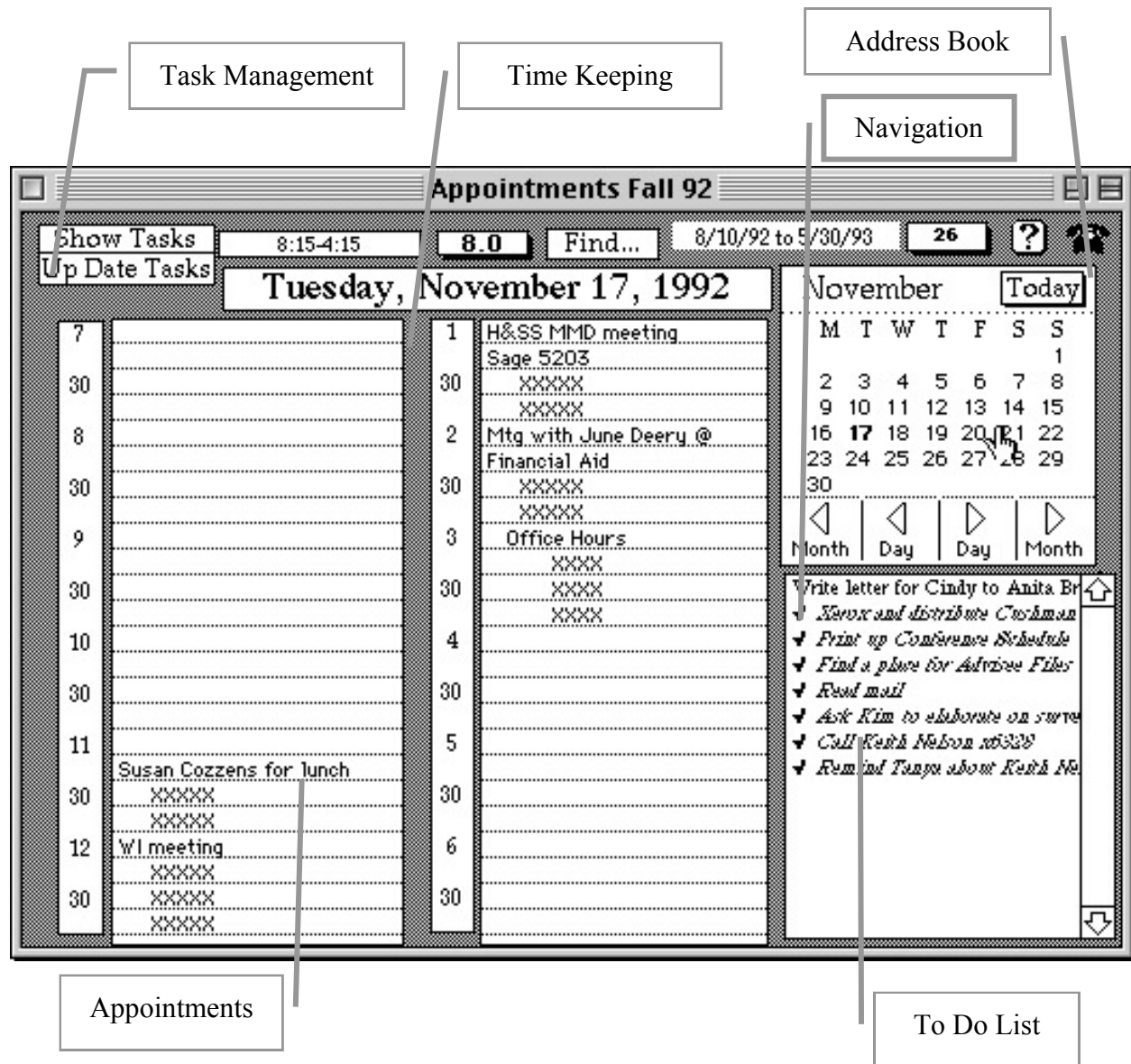
Figure 5. Electronic organizer created in Hypercard, showing the appointments view.

With time, my task management became increasingly complex in response to these new affordances. "Notes and Memos" was used to record long-range goals that couldn't be more immediately assigned to a specific day of the week. Each week called for a review of this long-range list so that I could assign its tasks to a specific day for the coming week. By the end of two years, the long-range task list had started to segment itself by project, so that I could manage multiple responsibilities.

At the same time, I was growing more dissatisfied with aspects of the Day-Timer technology itself. The pages, which at that time had to be special ordered from the company, were expensive; the 10 x 12 format was bulky. And the proliferation of project To Do Lists required me forever to be copying undone tasks from one day to another as things piled up.

During a sabbatical leave in 1990, a new Macintosh with Hypercard 2.0 arrived on my desk. Armed with Danny Goodman's *The Complete HyperCard 2.0 Handbook*, I added to simple appointments and address "stacks" which came installed to recreate my full Day-Timer system in electronic form. Over the course of nearly a year, I added features tailored to my own interests limited only by my programming abilities and the limitations of the application itself.

As shown in Figure 5, the resulting appointments stack preserved many of the features that I had found or created in my paper-based system. An appointments calendar, better adjusted to my work schedule, ran from 7am to 7pm, preserving the half-hour increments of the DayTimer. The day's To Do list was found in the bottom right-hand corner. Time-keeping hours were located above the day's date. Replicating my more cumbersome paper-based system, the sum to the near right ("8.0") showed the total hours worked that day; the sum further to the right ("26") showed the hours accumulated so far for the week. I could see, then, at a glance, how well I was doing for the week.

The biggest innovations with this stage of technology came in task management. On the daily To Do List, a simple Option-Click sufficed to check off a task as shown in the bottom right-hand corner. The "Update Tasks" button in the upper left-hand corner automatically copied any uncompleted tasks from one day to the next, alleviating the need for tedious recopying. Thus, as shown in Figure 5, the task "Write letter for Cindy" which is not checked off, would be brought forward to the next day, while all of the checked-off tasks would be left behind.

The segmentation of task lists into ever finer projects reached its apogee in a second view of the Hypercard stack, shown in Figure 6, for which I was entirely responsible. Reached by clicking on the "Show Tasks" button in the upper left-hand corner in Figure 5, eight different projects were arrayed, each with multiple tasks. Command-click opened up a specific task list for more complete viewing; option-click moved a task onto today's to-do list; option-command-click moved a task onto any specific date clicked on the monthly calendar. By reviewing this complex set of tasks on any given day, I could now better organize the long-range tasks like those I had earlier recorded on the "Notes and Memos" page of my Day-Timer and more easily move them to the To Do List of specific days.

The Hypercard appointments stack lost me the mobility I had considered essential in my two earlier paper-based systems, but it wasn't until five years later that this and other issues became serious sources of dissatisfaction. In that year, I assumed the position of department chair and, for the first time, faced the need to have my schedule "managed." My assistant, furthermore, worked not only on a different computer but also on a different operating system. Pressed for time, I implemented the spreadsheet-based calendar shown in Figure 7. It replicated my hour-by-hour daily appointments in a format that worked on both the Macintosh and Windows platform.

But I gave up much in return —my To Do lists, my mobility, and my ability to schedule my own appointments — complaints all familiar to the managerial class of which I was now a member.

At this point, the trajectory of cultural history reviewed in the previous section and the personal history reviewed in this section collided. The PalmPilot was released within nine months of my becoming department chair. Members of my campus community with whom I routinely interacted were some of the first users. They frequently showed their Palms around in meetings I attended. Not surprisingly, the beginning of 1997 found me with a Palm in hand.
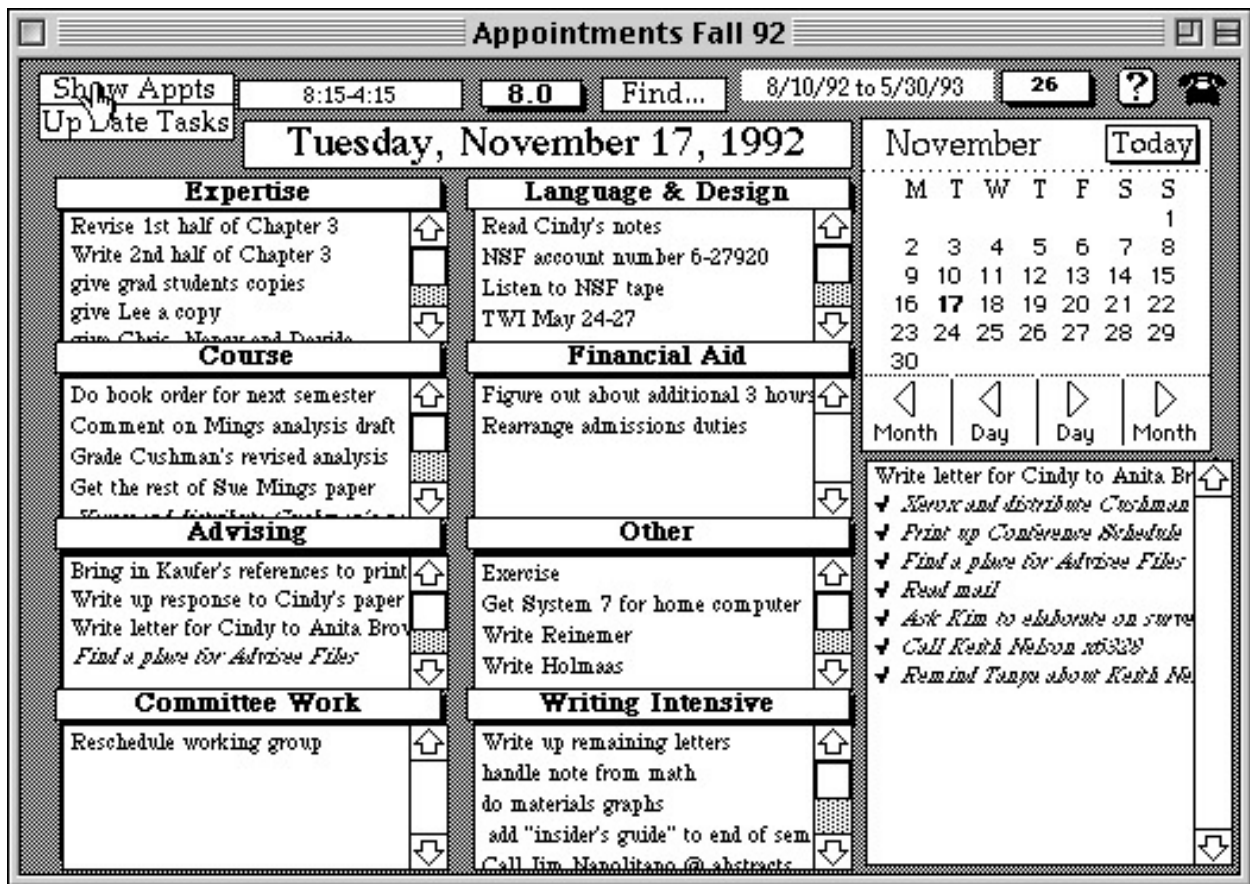

Figure 6. Electronic organizer created in Hypercard, showing the task view.

Week 21	Mon 1/13	Tues 1/14	Wed 1/15	Thurs 1/16	Fri 1/17
8:00	Classes Begin				Hold SCAiT Meeting DCR
8:30					Hold SCAiT Meeting DCR
9:00					Hold SCAiT Meeting DCR
9:30					Hold SCAiT Meeting DCR
10:00					
10:30					
11:00	Research 0n ComposingClass			Chris Boese Orals	
11:30	Research 0n ComposingClass			Chris Boese Orals	
12:00	Research 0n ComposingClass			Chris Boese Orals	
12:30	Research 0n ComposingClass			Chris Boese Orals	
1:00	Research 0n ComposingClass			Chris Boese Orals	
1:30	Research 0n ComposingClass			Chris Boese Orals	
2:00		H&SSExec. Meeting		Chris Boese Orals	
2:30		H&SSExec. Meeting			
3:00		Exec. Meeting	Hold for Faye,Rolnick ,Buton,	Bill Shumway/Rolnick CII 8231	
3:30		Exec. Meeting	Hold for Faye,Rolnick ,Buton,	Bill Shumway/Rolnick CII 8232	
4:00					
4:30					
				Naomi rehersal	

Figure 7. Esched, a spreadsheet-based appointments calendar.

Analysis of Patterns of Activity

Two difficulties face the researcher interested in studying patterns of activity associated with Palm Technologies. The first has to do with privacy: Palm use has the potential to cut across all domains of life and can, therefore, be extremely private. The second has to do with ubiquity: Creating challenges for data capture, the Palm can be used anytime anywhere. Methods for producing detailed records of the human-computer interactions associated with these mobile devices have still to be developed; techniques for gathering the contextual information associated with these ubiquitous human-computer interactions remain untried.

Nevertheless a start can has been made to analyze the patterns of activity in which Palm Technologies are embedded through screen-capture data gathered from a desktop session, one of my own. The session to be described here occurred on Monday, February 5, 2001, one winter Monday of a sabbatical leave that kept my children home from school and forced the cancellation of several afternoon meetings. The sessions, which lasted 97 minutes, constituted the first work of the day. Screen capture was set to record at 1 frame per second.
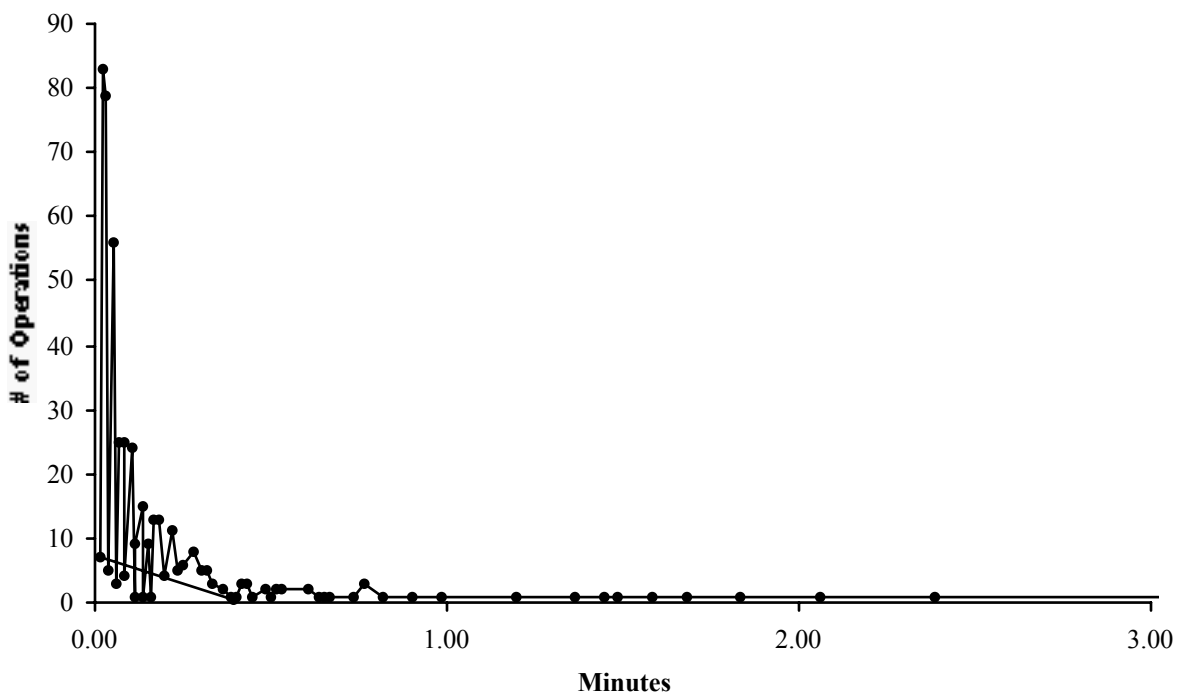
Figure 8. The frequency of operations. Two operations, both periods of off-line activity, one 26 minutes and the other 6.85 minutes, are not shown on this graph. The median duration was .06 minutes

Such data has its limitations: Although, at the time of this session, the desktop was my major location for using Palm Technologies, such data only hints at the kind of embedding in everyday

life that may occur with mobile handhelds. Such data is also limited in scope and the analysis shaped by the constraints of self-consciousness that frame any data about oneself. The data do, however, have the benefit of directly relating Palm-based activity to the history of user motives reviewed in the previous section, providing the kind of depth and breadth called for by activity theory.

Preliminary analysis reported earlier (Geisler, 2001) showed that the Palm Desktop application was one of five applications I used that morning along with e-mail, web browser, word processor, and spreadsheet, as well as two breaks "off-line." That analysis also suggested that the texts in the Palm were used far more frequently and for shorter periods of time than texts in the other applications.

The analysis reported here looks in more detail at the activity patterns underlying this use of texts and its relationship to the mediational tools of the other applications. Analysis was conducted as follows:

- The screen capture was segmented into *operations*, the smallest unit of observable behavior from an activity theoretic perspective. As the graph in Figure 8 indicates, operations tended to be very short. The median duration for operations was .06 seconds, with a distribution skewed toward the mode of .03.

- Each operation was associated with one of the five application *tools* or with work *offline*.

- Each operation was also associated with a *text*, defined as an arrangement of discursive symbols which was read, written, or transformed by the operation.

- Operations were aggregated into *action sequences*, the next larger unit of observable behavior from an activity theoretic perspective. Action sequences were either application-specific (i.e., word processing, e-mail, etc.) or were made up of a mixture of applications. Codes for the action sequences were developed iteratively to best account for regularities in the clustering of actions.

- Finally, these action sequences were plotted on *activity graphs* (Geisler & Munger, 2002) like those shown in Figures 10-13. On these graphs, the duration of each action sequence is represented as a line with a specific time of initiation and completion read from the x-axis. Different line styles indicate different application sets according to the key shown in Figure 9. The elevation of the line is related to the type of action sequence involved. All action sequences of the same type are at the same level on the y-axis. For simplicity, however, these types are noted in the data labels rather than on the y-axis itself. The texts involved in each action sequence are noted in square brackets.

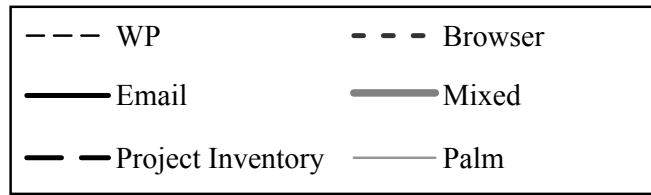|			
– – –	WP	- - -	Browser
———	Email	———	Mixed
– —	Project Inventory	———	Palm

Figure 9. Legend for activity graphs shown in Figures 10-13.

In keeping with the historical roots of Palm in systematic management, the session largely concerned itself with task management, the kind of self organization and maintenance activity that I routinely complete before doing what I would think of as my "work" of the day. For about the first 40 minutes, this task management was embedded in e-mail. After a 30-minute break to dress, check on my children, and take a phone call, it was mediated by a complex of task technologies to which we'll return in a moment. Palm Technologies did not stand apart from these activities, but played a role in each.

Palm in "Doing E-mail"

The largest of these activities could be characterized as "doing e-mail," though the work accomplished through this activity was broader than might be expected. In its simplest form, as shown in the activity graph in Figure 10, doing e-mail involved reading messages and taking one of a number of simple actions in response to messages received:

- archiving many (action sequences 17, 19, 29, 22, 23, 25, 27, 30),

- replying to one (action sequence 21),

- trashing a couple (action sequences 18 & 26),

- holding one for later reply (action sequence 37), and

- responding to one by modifying an earlier reply (action sequence 24).

For most of these actions sequences, texts were processed serially in the order in which they were encountered. Only two new texts were created: Text 31 which served as a reply to Text 30; and Text 35 which became an addition to that same reply later on in action sequence 24.

18 Read & Trash [27]

21 Read, Reply & Archive [30 & 31]

7.5   8.5   9.5   10.5

17. Read & Archive [26]

19. Read & Archive [28]

20. Read & Archive [29]

24. Read & Modify Previous Email [34, 2, 31, 35]

26. Read & Trash

28 Read & Hold [37]

11.5   12.5   13.5

22. Read & Archive [32]

23. Read & Archive [33]

25. Read & Archive [34]

27. Read & Archive [36]

29 Open In Box [2 & 3]

30. Read & Archive [38]
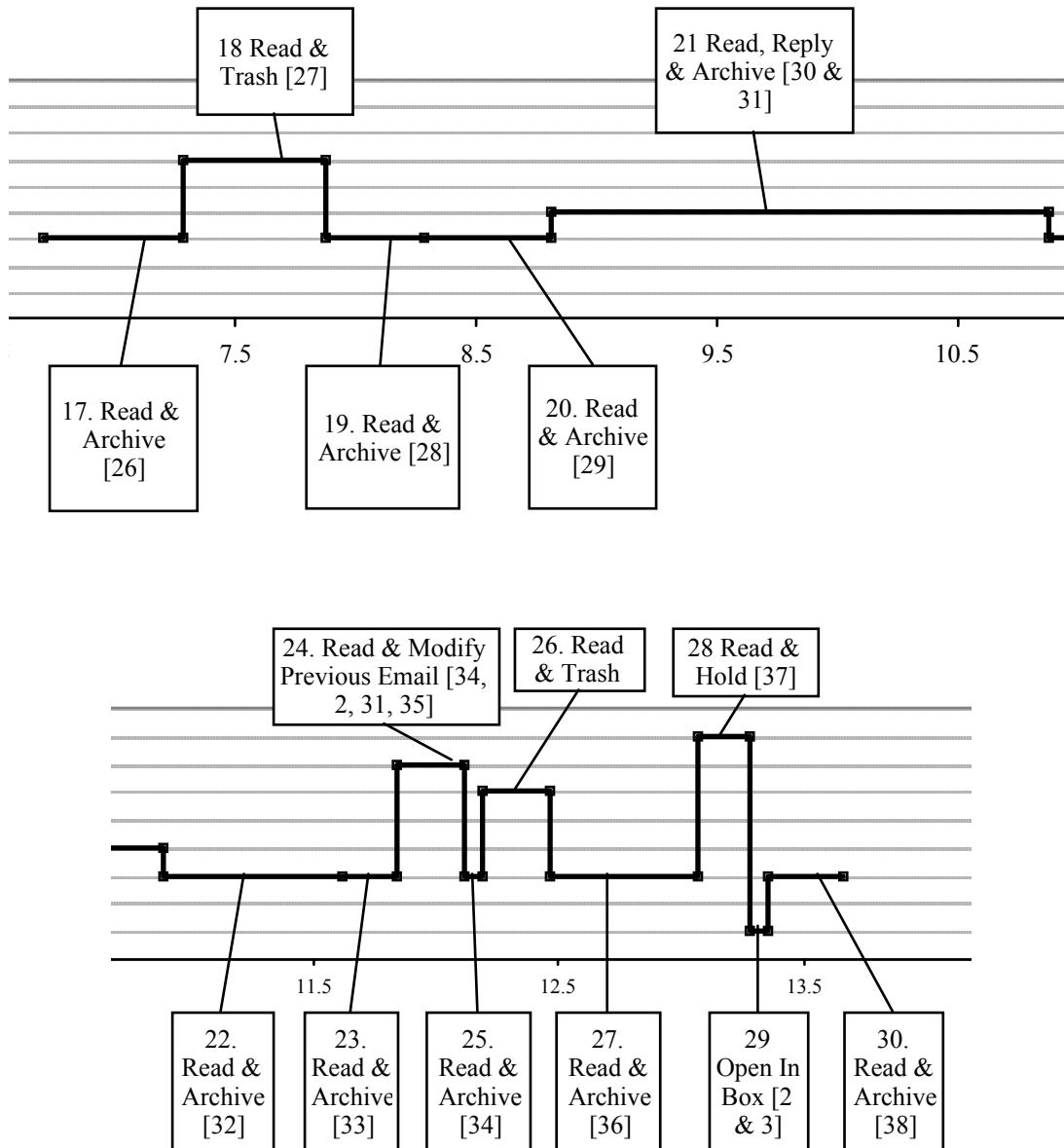
Figure 10. Activity graph of action sequences 17-30 lasting nearly 7 minutes.

While "doing e-mail," I invoked Palm Technologies when messages were linked to task management issues. As shown in Figure 11, for example, I responded to one e-mail message (Text 12) in three different ways, all involving the Palm:

- First, I created the event (Text 19) mentioned in the message by going to my daily calendar for today (Text 1), moving forward 3 weeks (Texts 13, 14, and 15) and 3 days (Texts 16, 17, and 18) to the date of the event.

- Second, in the course of replying (Text 20) to the message, I sought to confirm the time for an upcoming meeting — going back to my Palm (Text 17), returning to the daily calendar for today (Text 1), changing to the weekly view (Text 21), and then checking the start time I had listed for the appointment (Text 22), which I then included in my reply (Text 23).

- Third, while viewing my weekly schedule, I also decided to cancel another meeting (Text 24) earlier in the week, deleted it from the Palm, and then added a note about this (Text 25) to my e-mail reply (Text 40).
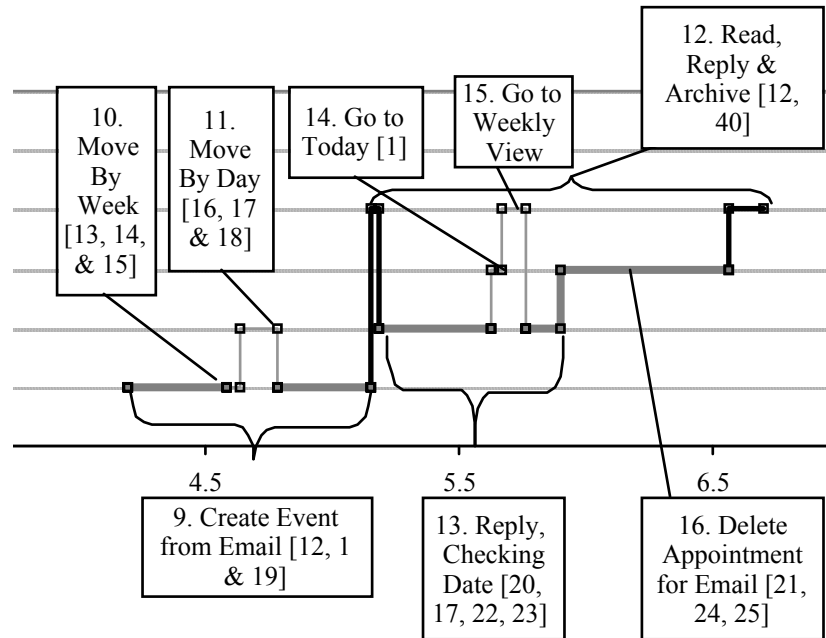

Figure 11. Activity graph of action sequences 9-16 lasting 2.5 minutes.

The activity diagrammed in Figure 11 exhibits distinctive traits associated with Palm Technologies. Although still embedded in routine e-mail, mixed action sequences — to create an event (action sequence 9), to check a date (action sequence 13), and to delete an appointment (action sequence 16) — repeatedly crossed application borders and moved information through a complex series of texts. In an effort to coordinate the original e-mail (Text 12), my eventual reply (Text 40), and the array of events and appointments that made up my weekly schedule (Text 21), these texts became highly layered: Not only was an event (Text 19) layered onto one daily calendar (Text 18) and an appointment (Text 24), as well as wiped from another (Text 21), but the reply meant to communicate all of this (Text 40) was itself built in several layers — one acknowledged the information about the event (Text 20); another confirmed the time of a meeting (Text 23); and a third suggested that there was no need to meet earlier (Text 25).

150. Edit Appointment [1, 83, 149, 13]

153. Send Email about Rescheduled Meeting [2, 88, 92, 93, 13, 94, 95]

69.0   70.0   71.0   72.0   73.0

151. Make New Task [1, 84]

152. Move By Day through Week [85, 86, 87, 1]

155. Go to Today [1]

156. Move by Week [13]

154. Send Email about Rescheduled Meeting [89, 90, 91]

158. Duplicate Email [96, 97, 88, 99]

74.0   75.0   76.0

157. Go to Today [13, 1]

159. Adjust Window [96]
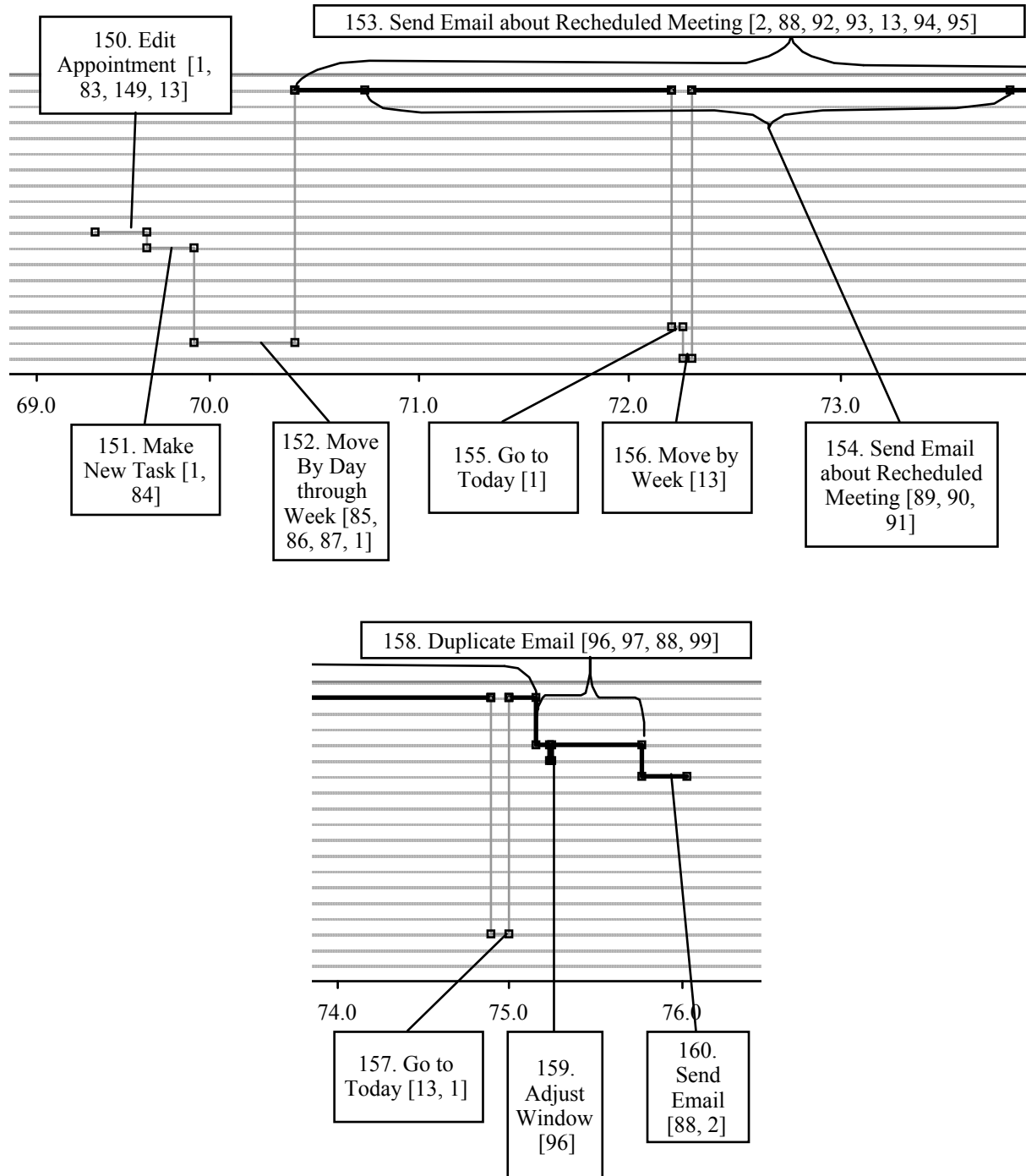
160. Send Email [88, 2]

Figure 12. Activity graph of action sequences 150-157 lasting 6.7 minutes.

This kind of layering, the careful construction and reconstruction of textual objects (Geisler, 2001), supported the coordination of project work within a multi-tasking framework. Each project, with its associated meetings, tasks, and interlocutors, needed to be interlocked with the

	A	B	C	D	E	F	G
11	Deadlines						
12	Work						
13	Events						
14		M	T	W	Th	F	S
15		15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan
16	Deadlines						
17	Work		NSF IT Proposal	NSF IT Proposal	NSF IT Proposal	NSF IT Proposal	
18	Events	No school					
19		M	T	W	Th	F	S
20		22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan
21	Deadlines			NSF ITR			
22	Work						
23	Events						
24		M	T	W	Th	F	S
25		29-Jan	30-Jan	31-Jan	1-Feb	2-Feb	3-Feb
26	Deadlines				JBTC		
27	Work	JBTC	JBTC	JBTC	Palm Tech	Palm Tech	
28	Events						
29		M	T	W	Th	F	S
30		5-Feb	6-Feb	7-Feb	8-Feb	9-Feb	10-Feb
31	Deadlines					HBC	
32	Work	Palm Tech	Palm Tech	Palm Tech	Palm Tech	Palm Tech	
33	Events						
34		M	T	W	Th	F	S
35		12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb
36	Deadlines						
37	Work	Palm Tech	Palm Tech	Palm Tech	Palm Tech	Palm Tech	
38	Events						
39		M	T	W	Th	F	S
40		19-Feb	20-Feb	21-Feb	22-Feb	23-Feb	24-Feb
41	Deadlines						
42	Work						
43	Events		Tucson	Tucson	Tucson	Tucson	Tucson
44		M	T	W	Th	F	S
45		26-Feb	27-Feb	28-Feb	1-Mar	2-Mar	3-Mar

Figure 13. Project Inventory used to plan private work time.

meetings, tasks, and interlocutors of other projects which together made up the near-term horizon of my life. Only constant vigilance and the kind of complex yet routine manipulation of texts shown in Figure 11 allowed me to maintain alignment. Just 7 minutes later, in fact, another e-mail message (Text 39) from the same correspondent caused me to return to the Palm again, change the start time for the appointment I had inquired about earlier (Text 22) and modify my previously composed reply (Text 40).

Efforts after alignment were not always successful. Figure 12, for example, shows the activity that resulted from the day's snowstorm. Following a phone call received from one member of a [second] work group, I went to my Palm and moved the afternoon's meeting forward a week (action sequence 150). I then sent e-mail about the change in schedule to the rest of the work group (action sequence 154). I also sent e-mail to the two students with whom I had planned to

meet before the now-rescheduled meeting (action sequence 153 and 155). Rather than compose a single message to both students or compose separate messages for each, I copied the text of the e-mail to the first student (Text 88) into an e-mail to the second student (Text 96) with a new header (Text 97), changing its recipient (Text 99).

It was only a week later when both students showed up at the same time that I knew that something was wrong. It turned out that the multiplicity of the fourteen texts involved in rescheduling the meetings had become unmanageable. By forgetting to edit the meeting time in the duplicated e-mail, I had scheduled both students for the same time. In this case, then, alignment was not maintained. What I said in my e-mail and what I recorded in my Palm were not consistent with one another.

Palm in "Planning Work"

A second Palm-embedded activity, shown in Figure 14 and comprising 6.55 minutes following a long break, moved away from the short-term workgroup planning embedded in e-mail to longer-term planning of individual work. The distinction between these two kinds of tasks— one structured through interactions with others and the other by the demands of my own private work — had been with me since the Day-Timer days. In planning work, I determined what tasks to take on during the work day aside from the routine of "doing e-mail" and attending the meetings in which such e-mail resulted.

"Planning work" involved the use of a special purpose task management tool, the Project Inventory, created in a spreadsheet and shown in Figure 13. Calendar-like in structure, each week provided room to array three kinds of texts: deadlines such as that for the "NSF ITR" shown for Tuesday, January 16; events such as "Tucson" shown for the week of February 20; and work such as "Palm Tech" shown for Monday, February 5. To the right of the week's array and off screen in Figure 13, texts represented a variety of projects, unscheduled but waiting my attention. Weeks that represented time past were usually grayed out, though this was not true at the start of this session.

In the activity shown in Figure 14, I was working in a multi-application environment that involved this Project Inventory as well as the Palm Task List and Palm calendar:

- With the Palm Task List, shown in Figure 15, I numbered tasks associated with a specific research project to reflect the order in which I thought they should be done (action sequences 165-168). I then sorted the tasks into the correct order (action sequence 170).

- In the Project Inventory, shown in Figure 13, I grayed out weeks now past (action sequences 176-178) and recorded a new event established by recent e-mail (action sequence 180). I also spent nearly a half-minute just looking at the work of the weeks to come, trying to figure out when I could do the tasks just numbered on the Task List.

164. Plan Week's Work [81, 114]

169. Edit Task Category [84]

170. Sort Tasks [81]

171. Adjust Window [81]

173. Adjust Window [21]

174. Adjust Window [21]

80.00   81.00   82.00   83.00

165. Number Tasks [106, 107]

166. Number Tasks [108, 109]

168. Number Tasks [112, 113]

172. Go to Weekly View [1, 21]

176. Color Events as Past [115]

177. Color Events as Past [116]

179. Color Events as Past [118]

180. Create Event [114, 119]

167. Number Tasks [110, 111]

175. Open Project Inventory [114]

178. Color Events as Past [117]

186. Edit appointment date [21, 124]

187. Adjust Window [21]

188. Take a break [21]

84.00   85.00   86.00

181. Block time for work [21, 120]

182. Block time for work [21, 121]

183. Block time for work [21, 122]

184. Block time for work [21, 123]

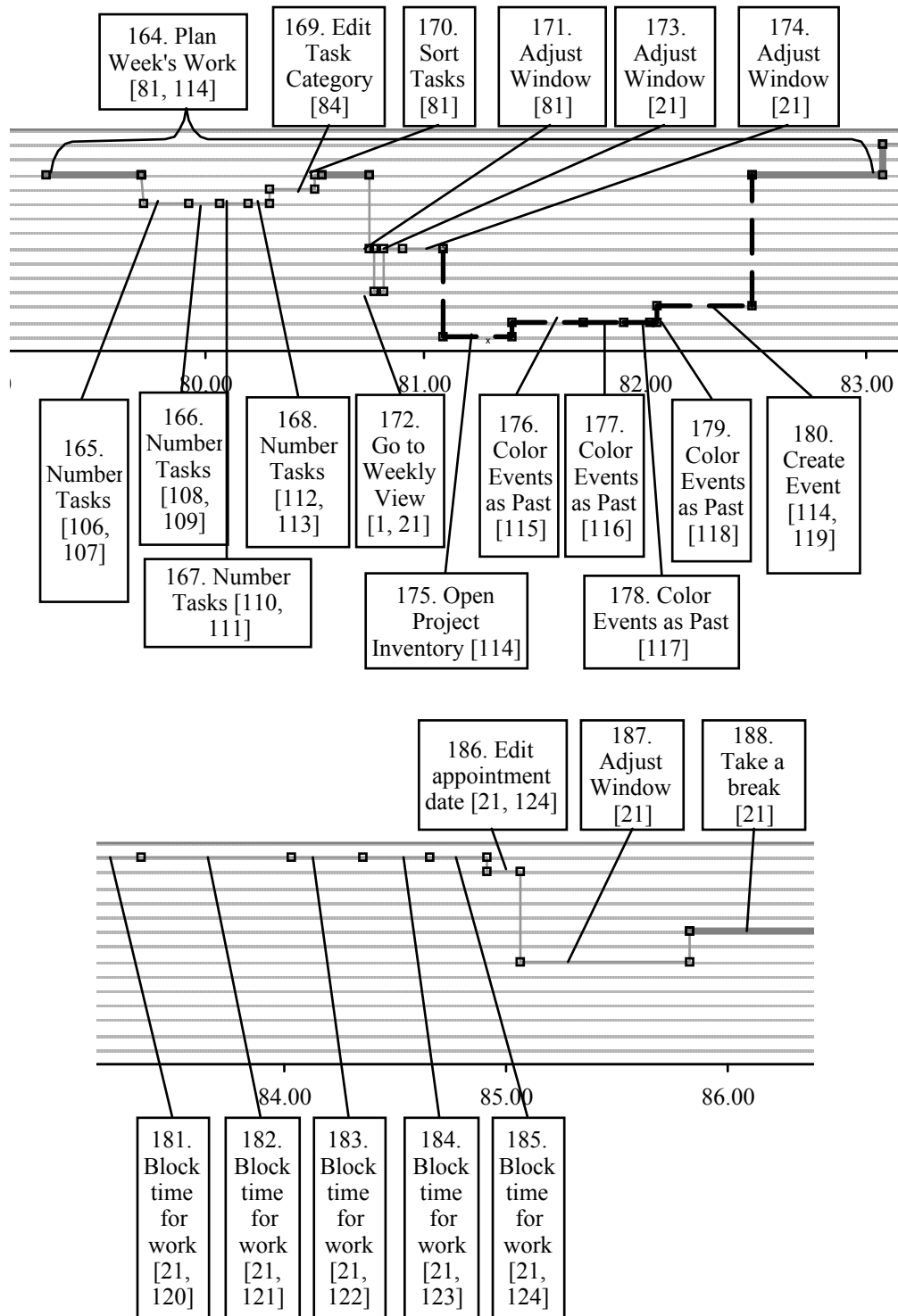185. Block time for work [21, 124]

Figure 14. Activity graph of action sequences 164-188, lasting 6.55 minutes not including the break at action sequence 188.
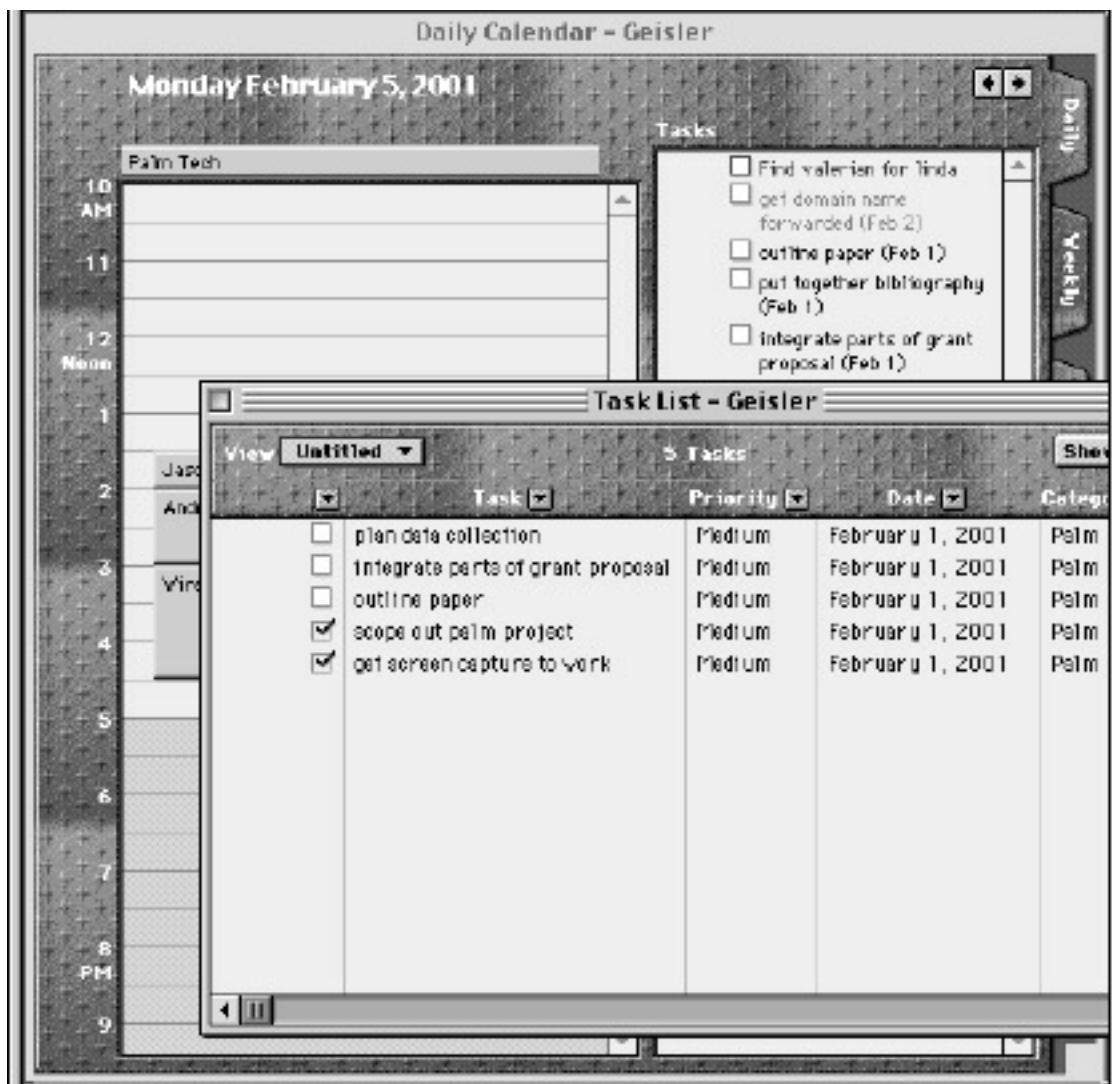
Figure 15: Project task list. Eventually, a fourth task was added, and all were numbered and sorted according to number.

- In the Palm calendar, shown in Figure 16, I blocked out work time for a simplified version of the tasks numbered on the Palm Task List, distributing them over the days of the week and around other commitments (action sequences 181-185).

Overall, the Project Inventory served as a mediational means for the long-range planning that began in the Palm Task List and ended with my setting aside blocks of research time on the Palm calendar. Taking this third step of blocking out such work time is a rarity for me, representing an assessment of a real time crunch in meeting a deadline. Normally, I stop at step 2, simply assigning each work day in the Project Inventory to a specific research project as its routine work. I then use the Palm calendar to record only those events that break into this routine. When time is short, however, even routine work can become textualized as a series of events as it has done in this case.

Palm in "Taking a Break"

The final kind of activity which occurred in this session was one that showed relatively little action on activity graphs like those in Figures 10-14: "taking a break." I took two breaks the morning of February 5, one more than 26 minutes shortly after completing my e-mail and the other lasting nearly 6 minutes taken after blocking out my work for the week. During both, my attention was given to my children and to various aspects of home and personal management — what we might call the domestic sphere.
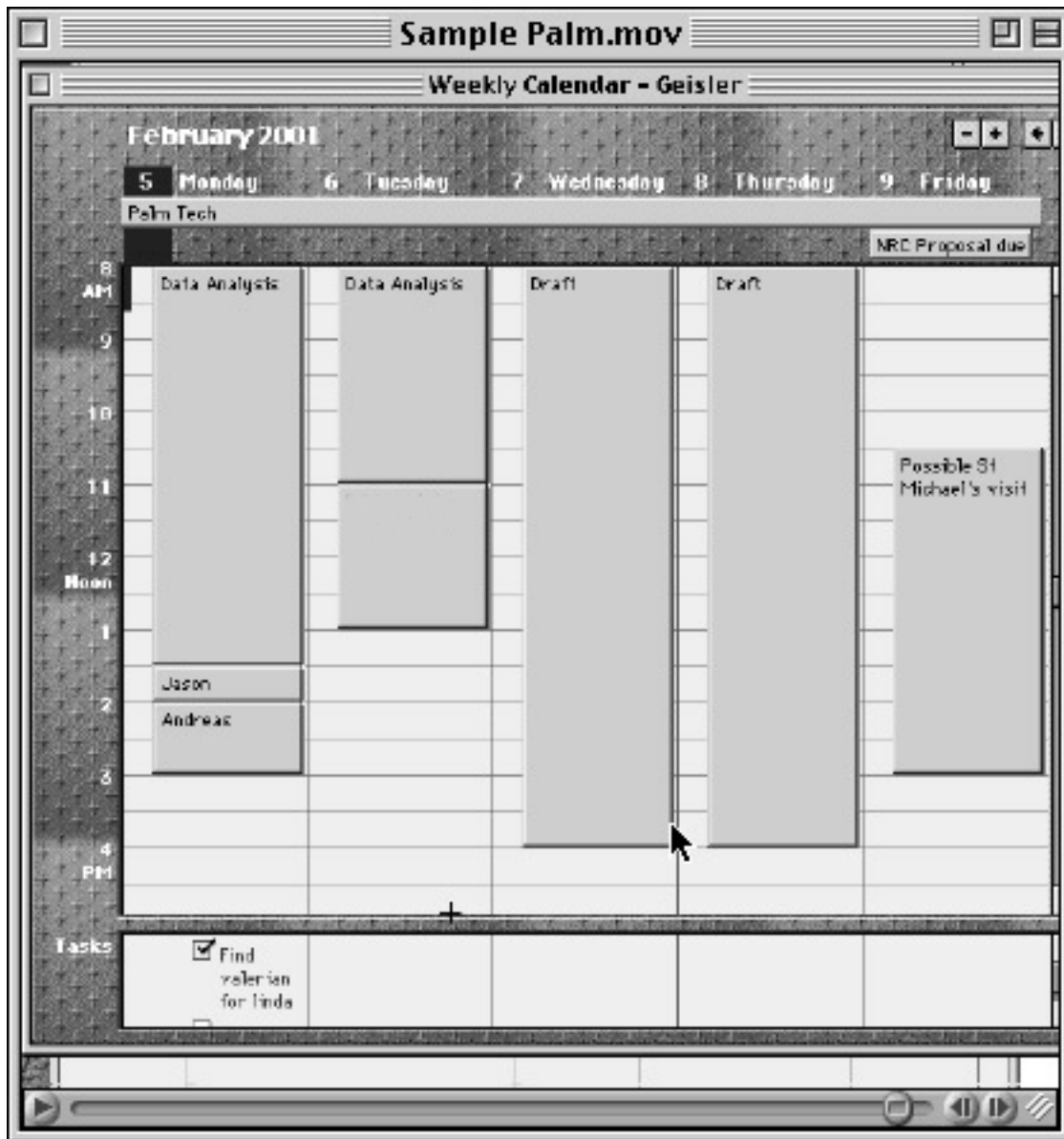

Figure 16. Palm-based calendar with tasks arrayed across a week of work. The label for a doctor's appointment on Tuesday afternoon has been removed for reasons of privacy.

Palm was noticeably quiet about this sphere. My breaks were not blocked out on my calendar; my domestic tasks were not recorded in my Task Lists; the only domestic events and appointments that appeared were those that intruded upon the 8-5 workday like the unlabelled appointment on Tuesday afternoon shown in Figure 16.

Nevertheless, taking a break can be viewed as a third multi-tasking environment in which the Palm was embedded rather than as a activity entirely separated from the spheres of work. Palm framed both breaks: I both left and returned to work via the Palm calendar for Today, once the daily view (Text 1) and once the weekly view (Text 21). Thus the Palm calendar served as a kind of bookmark by which I could mark my place in work and hold it until I returned.

Palm-Embedded Activity

In general, this analysis of patterns of one user's activity involving Palm suggests that, as a tool, the Palm was not used in isolation but was part of multi-application environment associated with distinct spheres of activity with distinct characteristics.

The embedding of Palm into "doing e-mail" created a multi-application task management system that supported the coordination of project work within a multi-tasking framework. The sequences of e-mail texts waiting in my in-box creating a kind of *de facto* cueing system for projects. This cueing system channeled requests for decisions, consideration, and attention through the activity system I called "doing e-mail," affording more than a simple mechanism to communicate. It also provided a mechanism for moving individual projects forward as well as a coordination mechanism with which to weave multiple projects into the near-term planning horizon to which the Palm was key. "Doing e-mail" was intensely social; it involved other interlocutors: both those who sent and received e-mail messages, and those involved in the meetings and events recorded on my Palm calendar.

This second multi-application environment, "planning work," was designed to provide a representation space that counteracted the kind of event-driven multi-tasking supported by "doing e-mail." Although I planned work on a spatial array of days, weeks, and months in the Project Inventory, and occasionally (though not usually) blocked out time for them on my calendar, my work plans were not associated with specific times and places. Instead, they were meant to serve as the backdrop against which such events and appointments would occur. Indeed, they were meant to remind me that I should be doing something other than responding to external requests; that I had my own research agenda. Unlike the interwoven texture of events and appointments created by e-mail to support multi-tasking, my work plans were more or less serial: I usually scheduled work for a week or more and, if a project was not completed according to schedule, I stayed with it rather than switching to what had been scheduled. "Planning work" was also intensely private; ostensibly, the only one involved was myself, although such plans did, occasionally, impinge upon my family when project deadlines required more than the usual allocation of time.

The third multi-application environment, "taking a break," provided a mechanism by which the domestic sphere was linked to the spheres of work. The routine work of the domestic sphere — time spent dressing, looking at the turkeys on the front porch, talking with my daughter — was not scheduled in the sense that the events and appointments of "doing e-mail" were scheduled; was not planned in the sense that the projects of "planning work" were planned. Indeed, such routine domestic activities were not written down, were not textualized at all. Aside from a doctor's appointment, activities in the domestic sphere, activities with family or self, were not regulated or managed through the objectification of Palm texts, but instead were silently inserted into the sphere of work via Palm's textual representations for the day.

Discussion and Conclusion

From an activity theoretic perspective, these analysis suggest the way the rapid emergence of Palm Technologies was built on a host of both antecedent cultural tools and personal activity systems. Not only is this new tool built on the material base of prior technological advances such as handheld calculators and portable computers, but it is also built upon the cultural base of large scale social movements like professionalization and systematic management. Both professionalization and systematic management seem important backdrops for my movement to Palm Technologies which, not coincidentally, coincided with movement into a managerial role.

Activity theory also calls attention to the trajectory of personal motives that lead to technological adoption. The balancing of the competing demands of work and family shaped, almost from the beginning, my choices in time management technologies from the Day-Timer through Hypercard to the Palm. On this balancing act of work and home, the cultural history of Palm is silent however. On the public pages of Palm's history, written in tech reviews, advertisements, and other cultural representations, Palm was not represented as a tool for work-life balance. Only by examining the relationship between cultural history and personal motive — as called for by activity theory — can we uncover hidden cultural patterns associated with issues such as work-life balance which, for most of the twentieth-century, were not part of public discourse and certainly were not seen as relevant to the technological development of Palm.

With respect to activity theory, these analyses also suggest that a simple model of the relationship between motive and activity may need to be revised to account for the patterns of Palm-embedded activity. According to activity theory, each activity is directly linked to the motive which shapes it, as shown in Diagram A in Figure 17: One motive, one activity. Systematic management in organizations made the first change to this simple model: The management of a task was separated from the doing of the task. As a result, an organization's motive for task management were split apart from workers' motives for the task itself as shown in the Diagram B in Figure 17. Such a split can result in the kinds of organizational conflicts within and across activity systems noted by Engeström (Engeström, 1993).
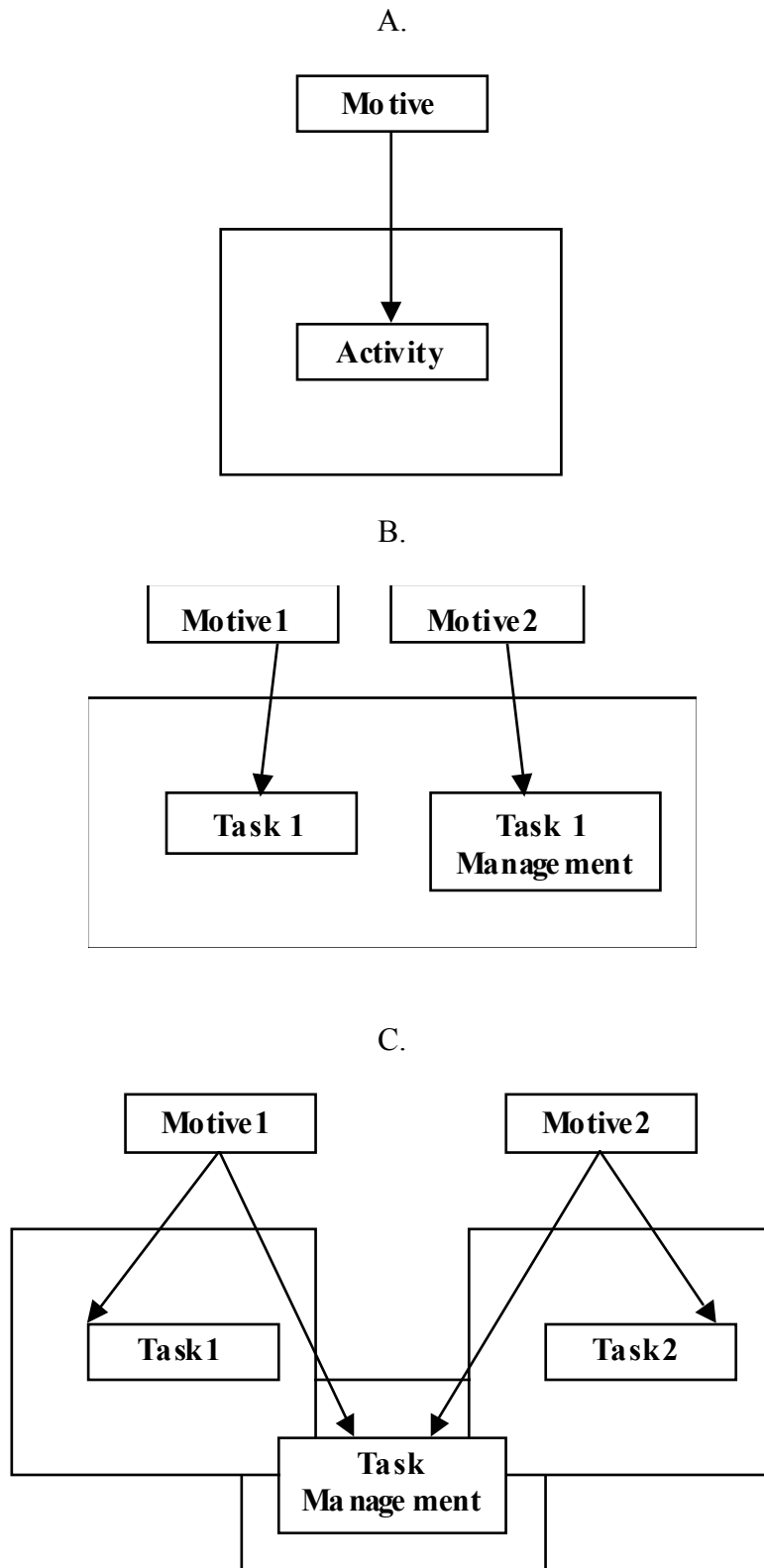
A.

B.

C.

Figure 17. The unity of motive and activity in pre-industrial work (A), its fragmentation after systematic management (B), and in personal management (C).

When systematic management becomes personal, as it now appears to have done with Palm Technologies, the simple model may require even further revision. The separation of task management from the task itself does not split motive across organizational roles as in Diagram B of Figure 16, but fragments it psychologically as in Diagram C. As a result, a task management activity like "doing e-mail" can be understood both as a coherent activity in itself and as components of separate project-based activities associated with different motives. In this chapter, we have looked at "doing e-mail" as a single activity system with its own routine action sequences such as "Read Reply Archive" and "Check Date" as well as routine mediational means. This analysis has ignored, however, the way that selected action sequences within "doing e-mail" should also been seen as embedded in specific projects like those associated with the two workgroups we saw interacting with me. Each of these project might well be understood as associated with their own activities, their own sets of goals, and characteristic mediational means. Thus, as indicated in Figure 17, Diagram C, when task management and the task itself are separated, any action sequence associated with task management needs to be understood *both* as part of the motive-driven activity we might call "the project" and as part of the motive-driven activity we might call "getting organized." The marketplace success of Palm Technologies testifies to the compelling reality of "getting organized" as a activity in itself independent of any specific projects.

Recognizing the fragmentation of motive between task and task management will also compel a more complex analysis of the role of writing in the age of information technology. Many studies of writing, including those conducted from an activity theoretic perspective, have been limited to project-based analyses. It is as if we have focused on the contents of a single project file without noticing the larger filing system to which Yates (1993) has called to our attention. Instead, we need to pay special attention to the kind of multi-tasking textual phenomenon we have seen associated with Palm. Indeed, the use of texts for the multi-tasking of task management may be one of the most significant uses of writing in the information age.

Turning from activity theory to the phenomenon of Palm itself, we see an overall picture of Palm Technologies as a technology of self, a technology for "getting organized" rooted in the philosophy of systematic management. Its events and appointments appear to be well suited for the coordination of work that has been critical to the modern organization. Palm, embedded in e-mail, provides a mediational means for getting the right people to the right places at the right time.

Palm appears to do less well as a mediational means for more routine work, whether it is the routine work of individual scholarship that was the subject of "planning work" or the routine domestic work to which I turned in "taking a break." Routine work is the background for which events and appointments serve as punctuation; it is the default activity for the day. In the sphere of work, the routine work of individual scholarship only became represented as events when the press of impending deadlines and constraints of other obligations pushed me, as in Figure 14, to make an appointment with myself. That is to say, it was pressures toward multi-tasking that encouraged me to transform work from the form of default routine work, planned in the Project Inventory, to the form of articulated and scheduled events, arrayed in the Palm calendar.

In the sphere of work, both routine and punctuated work was mediated by texts. In the domestic sphere, however, I not only resisted pressures toward domestic multi-tasking that have been noted elsewhere (Hochschild, 1997; Darah, et. al, 2000); I even resisted textualization. Unlike the routine work of scholarship, I did not use any text-based system to array domestic plans across the weeks and months. My informal discussions with colleagues and strangers suggests that many of us are strongly aware, albeit in an unarticulated way, of the issues at stake in bringing or refusing to bring, the socio-technical systems of time management across the border into the home through Palm Technologies. Once textualized, domestic time and space may become subject to surveillance and manipulation — by ourselves if not by others. At this point in my personal history anyway, the domestic border was the place where this kind of textualization — and its attendant technologies — halted.[3]

The potential movement of Palm Technologies into mass culture over the next few years presents a number of possibilities that bear watching. Is an individual's adoption of Palm Technologies associated with increasing patterns of textualization with increased multi-tasking? Will users embed Palm into multiple activity systems shaped by distinctions between routine and punctuated work, between the domestic sphere and the sphere of work? Can we develop a new set of design considerations for the next generation of information technologies, considerations better suited to representing the routines of everyday life, better able to balance rather than merge work-life relationships?

The analyses presented in this chapter can only begin to suggest some of the questions that researchers taking activity theory as a base, whether for the study of writing or for the study of human-computer interaction, may find worth asking. The need for more work on the impact of new writing technologies like Palm is clear. Such research can become an important source of reflection for a society undergoing technological transformation. Linking the critical tradition of humanism with the empirical attention of the social sciences, activity theory can serve as a mirror on ourselves, providing us with images through which we can shape ourselves and our future.

References

Bayus, B. (1997). Speed-to-market and new product performance tradeoffs." *Journal of product innovation management*, *14*, 485-497.

Bergmann, E. & Haitani, R. (2000). Designing the PalmPilot: A conversation with Rob Haitani. In E. Bergman (ed.), *Information appliances and beyond: Interaction design for consumer products* (81-102). San Francisco, Morgan Kaufmann.

Bledstein, B. (1976). *The culture of professionalism: The middle class and the development of higher education in America.* New York, Norton.

Bodker, S. (1997). Computers in mediated human activity. *Mind, Culture and Activity*, *4*, 149-158.

Brandel, M. (1999). Early PDAs: pretty darn annoying. A look back to the year 1993. *Computerworldˆ*, *33(45),* 68.

Canfil, D. (1996). Social Filofax. *Armadillo-Watch List.* Retrieved from the World Wide Web: http://www.rice.edu/armadillo/Mlist/archivejul96/msg00155.html.

Coates, J. (1996, June 23). Pen-based pocket-size Pilot flies smoothly. *Chicago Tribune*. Chicago: 55.

Cole, M., & Engeström, Y. (1993). A cultural-historical approach to distributed cognition. In G. Solomon (Ed.), *Distributed Cognition: Psychological and educational considerations* (1-46). New York, Cambridge University Press.

Collins, R. (1979). *The credential society: An historical sociology of education and stratification*. New York, Academic.

Darrah, C. N., English-Lueck, J. A., & Freeman, J. M. (2000). Living in the eye of the storm: Controlling the maelstrom in Silicon Valley. Retrieved from the World Wide Web: http://www.sjsu.edu/depts/anthropology/svcp/SVCPmael.html.

Daytimer (2001). Company History. Daytimer.com. Retrieved from the World Wide Web: http://www.daytimer.com/content/help/btm_nav_daytimer_history.asp?shopperid=A27C7E5E4D5E11D5A87D0008C7E62C73&aid=False&snid=&wu=0&style=&keycode=&line=&PP=&cid=10&MPC=WEB&Origin=

Engeström, Y. (1993). Developmental studies of work as a testbed of activity theory: The case of primary care medical practice. In S. Chaiklin and J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 64-103). Cambridge: Cambridge University Press.

Freidson, E. (1986). *Professional powers: A study of the institutionalization of formal knowledge*. Chicago, Chicago University Press.

Gardyn, R. (2001). "Granddaughters of feminism." *American Demographics,* 23(4).

Geisler, C. (1994). *Academic literacy and the nature of expertise*. Hillsdale, Erlbaum.

Geisler, C. (2001) Textual Objects: Accounting for the role of texts in the everyday life of complex organizations. *Written Communication*, *18*, 296-325.

Geisler, C., & Munger, R. (2002). Temporal analysis: A primer exemplified by a case from prehospital care. In E. Barton and G. Stygall, *Discourse Studies in Composition*. Hampton Press, 283-304.

Gifford, B. R., & Enyedy, N. D. (1999). Activity centered design: Towards a theoretical framework for CSCL. *Conference on Computer Supported Collaborative Learning*.

Gilroy, A. (2001). CEA study shows PDA sales to grow upward of 50 percent in 2001. *Twice*. *16(7),* 32.

Graves, L. (1998). Edward Colligan: VP of marketing, 3Com's Palm Computing. *MC Technology Marketing Intelligence*, *18(2),* 29.

Hampson, R. (1996, April 20). Rolodex inventor dead at 85; created wheel of fortune. *The Detroit News*. Detroit.

Hobbs, C. (1987). *Time power*. Salt Lake City: Charles Hobbs Corporation.

Hochschild, A. R. (1997). *The time bind: When work becomes home and home becomes work*. New York: Metropolitan Books.

Holtzman, J. (1998). Going mobile. *Electronics Now*, *69*, 10-11+.

Holtzman, J. (1997). Hacking the Pilot. *Electronics Now*, *68*, 21-23.

Hulak, J. (1995). In defense of the personal digital assistant. *Business Communications Review*, *25*, 45-8.

Jackson, D. (1998). Palm-to-palm combat. *Time*, *151*, 42-4.

Jasper, J. (1999). *Take back your time: How to regain control of work, information, and technology*. New York, St. Martin's Griffin.

Kanigel, R. (1997). *The one best way: Frederick Winslow Taylor and the enigma of efficiency*. New York, Penguin.

Kaptelinin, V. (1997a). Computer-mediated activity: Functional organs in social and developmental contexts. In B. A. Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction* (45-68). Cambridge, MA, MIT Press.

Kaptelinin, V. (1997b). Activity theory: Implications for human-computer interaction. In B. A. Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction* (103-116). Cambridge, MA, MIT Press..

Kaptelinin, V., B. A. Nardi, and C. Macaulay (1999). The activity checklist: A tool for representing the "space" of context. *Interactions*, *6*, 27-39.

Larson, M. S. (1977). *The rise of professionalism: A sociological analysis*. Berkeley, The University of California Press.

Lowe, J. (2001, April 26). Online shopper; gifts as good as mom; Is she a 'queen mother'? A 'tub soaker'? A 'trendsetter'? E-tailers offer suggestions for categories from traditional to humorous. *The Los Angeles Times*, Los Angeles, T.4.

Manes, S. (1997). "Is that a computer in your pocket?." *PC World*, *15*, 312.

McCampbell, B. (2001). Taking a look at pocket digital assistants. *Principal Leadership*, *1(7),* 72-74.

McCarthy, E. (2001). Tips for tech tools. *Journal of Financial Planning*, *14*, 56-57.

Meyer, T. (1996). Filofax: A brief history of personal time management. *Schrodinger*, *3*. Retrieved from the World Wide Web: http://www.univie.ac.at/Schroedinger/3_96/time24.htm.

Montoya, M. (2001, February 15). Handhelds as kid stuff: Lower prices should attract younger users. *USA Today*. Arlington, Va.: D. 10.

Nardi, B. A. (1998). Concepts of cognition and consciousness: Four voices. *The Journal of Computer Documentation*, *22(1),* 31-48.

Pachetti, N. (2000). Palm nation. *Money*, *29(9),* 92-4.

Quittner, J. (2000a). A toy for mama. *Time*, *156(8),* 81.

Quittner, J. (2000b). PCs? Forget 'em!. *Time*, *155(19),* 105.

Rosen, H. (2001). Popular new devices mean IT pros must make forward-thinking decisions. *Communications News*, *38*, 60-62.

Schaeffler, J. (2001). Looking ahead to 2001: What to expect at retail. *Twice*, *15(29),* 78-79.

Thibodeaux, T. (2001). In the palm of their hands. *Dealerscope*, *43(2),* 10.

Turner, P., Turner, S., & Horton, J. (1999). From description to requirements: An activity theoretic perspective. *Conference on Supporting Group Work*, Phoenix, ACM.

Turner, R. (1998). Making it personal. *Money*, *27(5),* 155-7.

Waring, S. P. (1991). *Taylorism transformed: Scientific management theory since 1945*. Chapel Hill, University of North Carolina Press.

Witte, S. P., & Bracewell, R. J. (2000). The advanced workplace ensemble (AWE): An introduction to a unit of analysis for studying literacy in professional and technical workplaces. American Educational Research Association, New Orleans.

Yates, J. (1993). *Control through communication: The rise of system in American management*. Baltimore, Johns Hopkins University Press.

Notes

[1] The analyses presented in this paper are part of the Mobile Technologies Project, a multidisciplinary project that examines the impact of mobile technologies like PDAs and cell phones on the relationship between work and life. The author would like to acknowledge the support of her colleagues in this project, Nancy Campbell, June Deery, and Annis Golden at Rensselaer Polytechnic Institute. More information about the Mobile Technologies Project can be found at www.rpi.edu/~geislc/Mobile.

[2] Palm and Palm Desktop are trademarks of Palm, Inc. or its subsidiaries.

[3] Since this analysis, however, the need to coordinate the preparations for my daughter's Bat Mitzvah caused me to create a second spreadsheet similar to the Project Inventory. I have not (as yet) moved to block time for those tasks on the Palm calendar!

Writing and the Management of Power: Producing Public Policy in New Zealand

Derek Wallace

School of Linguistics and Applied Language Studies
Victoria University of Wellington
Wellington, New Zealand
derek.wallace@vuw.ac.nz
http://www.vuw.ac.nz/lals/staff/Derek_Wallace.html

Abstract

In contrast to the traditional view of policymaking, which assumes a rational process of problem identification and solution evaluation, much actual policy turns out to be solution-led. In other words, predetermined policy measures are imposed as "solutions" to retrospectively presented "problems". This has been particularly true, ironically, of the supposedly rational neo-liberal or "New Right" resurgence of the last quarter-century, whose influence is perhaps diminishing in some quarters but continues to be felt. In these conditions, the processes and mechanisms of policy development, particularly the various genres of the formal written stages, can be viewed as a *system of production*, where the favored policy is "managed" through the traditional democratic framework of agenda setting, consultation, and enactment. This chapter charts the passage of a particular instance of policy development in New Zealand – the privatization of electricity supply – through this textual regime. The chapter shows both how traditional textual genres can survive unchanged into new circumstances, thereby misleading their readers, and how genres can change or rupture under pressure of new conditions and expectations. It will be demonstrated that the staged production of policy creates a differentiation of audiences that limits participation; and that viewing the texts in interaction allows analysts to refine their perceptions of the rhetorical purposes of each.

Until recently, approaches to textual, rhetorical, and discourse analysis, for all their variety, have tended to focus on single genres, or on features common to a range of genres within a discursive formation or even within a cultural system. Deserving of more analysis is how different but related genres within a particular domain work together to generate rhetorical effects out of their differences in language, textual organization, designated audience, purpose, etc. Specifically for my purposes here, I am referring to the set of textual hoops through which instances of public policy setting must pass in order to be formalized and enacted.

This notion of related genres or textual hoops is consistent with that of "genre system" introduced by Bazerman (1994) to describe the patenting process, and "system" is the exact word for what I have in mind in characterizing the policy formation process as a "production." (The process could also be usefully described, using Foucault's term, as an "order of discourse." See, for example, Fairclough [2000] for comparable work in that tradition.) I am referring to those stages of policy development that are realized in a linear but interrelated series of written texts, each the (variable) realization of a different genre. The genre system used may differ according to the broad policy approach chosen, or the particular democratic tradition in question, but the

effect in every case can be characterized as a machine or apparatus for the production of policy, and for the governmental managing of power.

By "managing power" I do not mean to necessarily denigrate the process. There is a tension in a democracy between, on the one hand, the legitimate role of government to lead a process of social adaptation to ever-continuing change, and on the other an obligation on the part of that government to consult the affected social body about measures to be taken. This tension is inevitable, and the key task of policy makers is to manage or balance it in ways that maximize the acceptability of government conduct – a hugely complex task since the conditions of acceptability may vary from place to place, time to time, and issue to issue.

Such managing, therefore, may be more or less enabling or disabling of citizens, depending on the wider context of political circumstances that bears upon the application of the apparatus in each case. What I need to do in order to demonstrate the relationships and effects at work in this notion of genre system is to focus on a specific case and to:

- Sketch the political and policy background to the particular case.
- Outline the particular genre system of policy production employed for that case.
- Analyze how each genre contributes uniquely to the passage of policy through the system.

In what follows, I will take each of these steps in turn. The case I will be concentrating on is the restructuring of the New Zealand electricity sector between 1986 and 1990. The fact that the tension was managed closer to the autocratic rather than democratic end of the spectrum in this case is not so important as attending to the actual detail of how the genre system operated to manage the process.

The Political Background

At the 1984 election, the New Zealand Labour Party (traditionally left wing) replaced the New Zealand National Party (traditionally right wing) as the party of government. In New Zealand, these ideological labels had meant little, and were to mean even less. The National party had dominated government for the past 30 years, and as the "natural party of government," had adopted a broad-appeal policy platform which included maintenance of an extensive welfare state and considerable economic regulation. Some civil servants, particularly within the Department of Treasury, believed that the economy was collapsing under the weight of governmental taxation and regulation (Scott et al., 1997). The new Labour government almost immediately began instituting a Treasury program of deregulation and privatization of the state, citing the TINA (there is no alternative) principle.

Opinions remain divided over the "necessity" of this program of action. An alternative to viewing the program as a response to the immediate demands of crisis management is, following Castells (1997, ch. 5), to view the "reforms" (as they came to be known) in the context of international forces of neo-liberalism. These forces, which had already gained significant purchase in other "Western" countries, were dedicated above all to accelerating the globalization

of capital. In national terms, the reforms were about preparing "New Zealand" (or more accurately, those of the population not in a position to profit from the new possibilities) for full participation in the New Right agenda of free trade, de-unionization, and welfare reduction. Such conditions were viewed by proponents of the agenda as necessary for a small, export-dependent country to survive in the new order.

It is important for understanding the processes of policy formation in this case (and in many another contemporary instance) that what transpired was contrary to the textbook model, which posits a logical sequence of problem identification and solution evaluation. The policy makers (in reality a few key politicians and bureaucrats) had determined to bring a ready-made, broad-based solution to bear on every aspect of the state's operations, irrespective of whether, in any particular case, a definite problem existed. Analysis of documents pertaining to reform of the electricity sector shows that little evidence was supplied regarding inefficiency in the sector, and little justification was given for the new measures introduced. Rather than the classical policy by reasoned argument, this was policy by dogma; the fanatical belief that the state is, by definition, a poor administrator, and that regulation is bad and privatization is good. (Wallace [1998, p. 58-60] provides an elaboration of this point.)

None of this is to say that the reforms were completely unjustifiable, or that dogma is entirely avoidable in public affairs. But it sets the scene for the application of the genre machine in this case. It demonstrates that the governmental powers were intent on massaging a "solution" through the policy process rather than searching for and establishing an agreed course of action to meet an accepted problem. We need to know this in advance of textual analysis in order to describe how the particular procedures and operations of the genre system were used to this end, and not, as it could equally appear to an observer lacking the full context, to the end of open, consultative democracy. In the terms given earlier, we can show how the rhetorical resources of the policy process could be used to disable citizenship rather than to enable it as it was purportedly designed to do.

A Brief History of the Electricity Reforms

Prior to reform of the sector, electricity generation in New Zealand was managed by a state entity called the New Zealand Electricity Department (NZED). Distribution of the electricity to businesses and households was handled separately by two kinds of public bodies. The first kind was called the electric power board, typically but not exclusively established on a district basis (a mix of rural and urban), and run by specific locally elected representatives independent of other mechanisms of local government. The other kind was the municipal electricity department, a form particular to the majority of the larger cities, where the elected governing body was the city council. Historically, there was antagonism between those involved in these two forms (partly because city councils could use revenue from the sale of electricity for other purposes); an antagonism that continued right through, and was influential in, the reform process.

The first stage of reform was to corporatize the NZED, turning it into a peculiarly New Zealand institution called the state-owned enterprise (i.e. a public company), in this case with the name

Electricity Corporation of New Zealand (ECNZ). Corporatization basically conferred on a publicly owned body the requirement to demonstrate profitability, and in many cases it was seen as an interim measure to be followed by sale to the private sector (privatization). It is extremely significant for subsequent policy development, however, that no competition or regulations were at the same time introduced to offset the consequential dangers of a pricing monopoly. This fact of market dominance was retrospectively used to argue the "necessity" of further reform. As a result, full public discussion in advance about the future shape of the electricity industry was pre-empted.

Further reform was organized around the establishment of a task force charged with conducting a review of the electricity industry as a whole, the ostensible need for which, as just indicated, "arose initially because of concern over the dominant market position of ECNZ." (Electricity Task Force, 1989b, p. 3) In fact, work had already begun on reorganization of the wider industry. The government had already decided, over a year earlier, that electricity distribution bodies would be turned over to private ownership, and had directed officials to work on the details; this work was initially suspended and then merged with that of the task force (Farley, 1994, p.14).

As I will illustrate in detail later, this government-appointed task force was disposed towards privatization, more so initially, when it largely comprised government officials and representatives of the already corporatized ECNZ. (Later, it was expanded to include representatives of the supply authorities, who moderated its stance.) But there was considerable opposition to privatization from power boards and, particularly, municipalities (the latter standing to lose significant discretionary revenue), as well as from the wider public and from substantial sections of the governing party itself. The urban origins of the Labour Party, and the strong relationship it had traditionally enjoyed with urban local body politicians, would appear to have proved decisive. In August 1990, the Labour Government introduced legislation that limited reform of the supply authorities to corporatization and gave municipal authorities responsibility for managing the process, as well as permitting them to preserve their own ownership rights. Three months later, Labour were defeated in the general election, and the incoming National Government overturned the earlier legislation, briefly restoring immediate privatization to the agenda before being forced by the range of opposing interest groups to back down somewhat.

The eventual solution, whether foreseen in its entirety or not, was ingenious from the point of view of privatization interests.

The Energy Companies Act 1992, while providing for a range of possible ownership options for the new companies (including City Council jurisdiction over former municipal electricity departments, and indeed community ownership of the former electric power boards) also provides for their privatization under a process requiring only that the public be consulted (in effect, informed).

A creeping privatization has been occurring ever since. One prominent city council, Wellington, has divested itself entirely of its power company shareholding against the wishes of the majority

of its citizens. And minority share-holding community trusts within power companies are constantly pressured by their directors to distribute their shares to individual trust beneficiaries, and they are one by one succumbing.

The Genre System

The policy genre system employed in this case was one often used in the New Zealand context for highly intractable as well as technical policy problems, such as the provision of social security (superannuation) to the elderly. It involves the appointment of a task force to inquire and report on the question at issue. The government typically selects people who can represent what government sees as the key stakeholder groups with interests in the issue, along with others perceived to be independent specialists with relevant technical expertise. Such a group is charged with preparing a report (generally following a degree of wider consultation), on the basis of which the government may make some decisions.

More specifically in the case of the electricity restructuring, the policy process went through two main stages. First, the task force invited comment from interested parties and commissioned additional research before responding to government in writing, whereupon government made public its policy intentions and requested some further work to be done. Thereafter, the policy process was in the hands of the government's own officials. A special officials' committee (some key members of which were on the original task force) was established which carried out its own "consultation" with relevant government departments and industry players. This culminated in the August 1990 legislation referred to above.

For reasons of space I will limit myself here to the first stage of the process – the task force. From the point of view of an approach to discourse that is broadly aligned with contemporary activity theory and genre as social action models, the process can be rhetorically classified, employing terms consistent with agents' self-understandings, as follows:

- Tasking
- Consulting
- Reporting
- Declaring

Each of these rhetorical functions (or policy modes) is realized in at least one text. In the case under discussion, tasking took the typical form of *terms of reference*, a document setting out the parameters of the inquiry to be conducted. Consulting took the understandably dialogic form of a *discussion paper* produced by the task force and a number of *submissions* produced in response by interested parties. Reporting took place through an official written *report* from the task force to government, and the government declared its intentions in a *media release*. Clearly, these textual realizations or genres are not rigidly fixed. For example, the government could have held a press conference to announce its intentions, rather than preparing a formal release. It will also be clear that broader dialogic relations pertain between the texts. Most significantly, the report is

an answer to the terms of reference, this relationship overarching that between the discussion paper and the submissions. Subsequently, the media release is a response to the report, but also, implicitly, to the terms of reference, thereby framing the whole cycle with the words of government: Ultimately, government determines both the questions and the answers. (These interrelations are similar to Freadman's [1994, p. 48] notion of generic pairs or groups, though I see no particular advantage for my approach, so long as the interrelations are constantly foregrounded, in making the relationship rather than the text the point of generic designation.)

I will now provide an analysis of each of the genres through which the rhetorical functions are instantiated. I will focus on the ways each genre, in interaction with the others, organizes the passage of policy through the process in the effort to manage, to the advantage of government in this case, the tension between the autocratic intention to impose and the democratic requirement to consult.

The Terms of Reference

The most obvious characteristic (function) of terms of reference is that they define the parameters within which the investigation called for will take place. In this case, the terms of reference begin as follows: "Advise Government on the optimal industry structure and regulatory environment for electricity generation and transmission, and implications for electricity distribution in the light of the Government's overall economic efficiency objective." Subsequently, the terms instruct the task force instituted by this document to prepare a report which, inter alia, "provides an outline of the major options available . . ." and "provides an assessment of their costs and benefits…." (Electricity Task Force, 1989c)

On the one hand, the formulation used here achieves a certain narrowing of focus to financial considerations. This narrowing is signaled by the references to economic efficiency as the horizon for inquiry, and to costs and benefits. This allows the task force in subsequent documents to define efficiency so as to exclude what in some other contexts would be considered pertinent – consideration of social equity factors in relation to electricity pricing.

On the other hand, the formulation projects a rhetorical situation of general review and inquiry: Pertinent here are the references to optimal structure and major options (though the further qualification "available" in respect of the latter provides a hint of the actual stakes). General review and inquiry is a conventional feature of terms of reference, but in this case it belies the clear evidence of previous decisions concerning structure and ownership. This case provides an example of a genre that might once have accurately reflected reality (a practice of periodic policy evaluation) surviving unchanged into a dispensation (policy imposition) that is very much at odds with it. The resulting effect may very well be to mislead citizens unaware of changes in the policy machinery.

More specifically, terms of reference document in such a policy context conceals its origins and in doing so establishes itself (for readers not in the know) as the origin of the inquiry. It creates this false impression of inauguration by (a) providing minimal background as to its necessity or

antecedents, and (b) expressing its conditions at a level of generality that removes it from the specific circumstances giving rise to it.

This generality has two significant and related possible effects:

- To bracket prior dialogue so as to dictate the terms of the ensuing dialogue; and

- To place uninformed or face-value readers of public documents in a position where they do not know the precise parameters weighing on policy makers at any one time.

They are thus prevented from reconstructing and thereby fully appreciating the precise course of the conditioning such policy-formers are subjected to by the terms of reference.

It is significant in respect of the latter point that membership of the task force was largely made up of government officials, possibly the same officials – or certainly those in a position to be in contact with these officials – who had been directed previously to work on supply authority reformation.

Furthermore, the generality of terms of reference lends itself to the possibility of subsequent requests for responses (e.g. from the task force to the public at large) being couched in a similar generality. This will have the potential consequence that interested and even knowledgeable citizens (but citizens uninformed about developments elsewhere in the governmental machinery) will respond at an equivalent level of generality. This in turn will render their views and knowledge of limited value, and even irrelevant, to those charged with determining the policy. (Ironically, their responses will often occasion frustrated complaints from officials about lack of specifics.)

This logic of generality is what indeed transpired when the task force came to write its discussion paper and call for submissions, as described in the next section.

The Discussion Paper

More than any other text within the distinct chain characteristic of policy formation, the discussion paper (or "consultative document" as such texts, including the one to be analyzed here, are now more commonly, and revealingly, designated) must refer explicitly to prior as well as to ensuing texts. The authors of a discussion paper intervening and mediating between the official terms of reference and a report must engage both:

- The text to which they are bound to ultimately respond, and by which they are warranted (the terms of reference), and

- The audience(s) which they are bound to address in order to elicit a further set of texts (submissions).

A discussion paper is thus a vital hinge in the process of linking the authorities with the consulted so the policy process as a whole will be regarded as legitimate. Traditionally, the genre proceeds by setting out a range of optional solutions to a defined problem, very much in line with the focus required by the terms of reference, and invites comment from interested parties.

Set against this traditional model, the discussion paper produced by the Electricity Task Force is heavily marked by plurality, contradiction, and interruption. For example, the text insists repeatedly to begin with that it "is not intended to convey conclusions," (Electricity Task Force, 1989b, p. 3). Yet it later admits that Phase 1 of the task force's study (already completed) "was largely based on the presumption that all or most of the industry will be privatized" (1989b, p. 13). In other words, the text inscribes in advance one conclusion (solution) from the many that it was purportedly the purpose of the requested submissions to help provide. The discussion paper is thus enabled to continue with such forward-looking statements as: "A central issue is whether the industry during the privatization process can be structured in such a way as to increase competition without introducing significant operating or technical inefficiencies" (1989b, p. 13).

So strong, in fact, is the commitment to privatization that the authors may have been unaware of the extent to which their predisposition was structuring an avowedly and conventionally neutral text. This can be demonstrated by juxtaposing an early statement delivered from the relatively lofty height of the obligatory "Approach to the Study" section of the text with the rather waspish retort emanating from the more embroiled situation of discussing the "Framework for Analysis."

> This paper should be treated, as its title suggests, as an indication of the issues and options being addressed by the Task Force. It does not provide solutions (1989b, p. 5).

> There is no justification for the current structure as the starting point since it did not evolve to this point under the pressures of commercial or market forces (1989b, p. 13).

The latter is a fine example of pre-scribing the solution to a problem by defining the solution's absence as the cause of the problem. Such circular or internal logic is a form of enthymeme, employing an unsupported premise to function grammatically as a justification.

This privileging of privatization is not fully sustained in the discussion paper. However, its temporary dominance has conceivably already done its work of coloring and channeling reception. Here we have an instance of the opposite of what we saw with the terms of reference genre where the traditional form survived a change of context. The departure from generic convention in the case of the discussion paper, brought about, it seems certain, by the pressure of the overall policy objective, suggests the possibility of genre manipulation as discussed by Berkenkotter and Huckin (1993, p. 476). However, my own sense is that, while manipulation of readers may certainly have taken place (indeed, a number of ensuing submissions referred to the text as a report), this generic distortion is more likely to have resulted from post hoc and localized attempts to manage the tension I have referred to, rather than from a consciously strategic transgression of genre. Nonetheless, what we are arguably seeing here is an early prototype of the new genre "consultation document" – a genre geared more to providing information than to seeking participation. (It is reflective of the transitional status of this genre that while the title of the text in question identified it as a "consultation document," the conventional disclaimer concerning authorial unanimity referred to it as a "discussion

document." I have used the traditional term "discussion paper" to highlight the stakes involved in the evolution or transformation of the genre.)

It is worth briefly mentioning in this context the "public consultation document" regarding the institution of a code of social and family responsibility that was sent to all households in New Zealand in 1998, and ostensibly directed at all citizens. Microanalysis of the representations and sentence forms employed, which were almost certainly below the level of conscious awareness and control, suggest, however, the constitution of an audience thought to be in need of help/remedial action (Wallace, 2000). The effective purpose of the text is therefore not so much consultative as educative – informing the target group of "standard" norms of behavior and preparing them for the possibility of intervention. And this finding is in line with what examination of background papers reveal to have been the initial policy push. This was subsequently amended but without, I suggest, altering what the policy makers were disposed to achieve.

The tension stemming from the interrelations within the genre system of policy production is most foundationally enacted in the practical impossibility of the task force bringing down a conclusion that things stay as they are. The terms of reference by tacit definition – when in practice has a review or inquiry "found" that everything is fine? – oblige the task force to recommend, even at this early step in the sequence, an industry structure other than the status quo. In other words, the terms impose a policy vacuum that the currently ascendant ideology (privatization) – already prefigured, as we have seen, in prior decisions – rushes to fill.

This is what produces the extraordinary formulation to be repeated several times throughout the task force's writings: "The present system works . . . no intervention [may be] warranted . . . nevertheless some option must be chosen."

The pressures bearing on the task force, therefore, are not just those brought about by its various interlocutors, but also those imposed by the specific rhetorical situation confronting it. This is the requirement to maintain a stance of privatization in the face of numerous practical obstacles (having to do with the unfeasibility of the market mechanism in an industry characterized by "natural monopoly"), without undermining the authority of the text by making claims that are grossly impracticable or contradictory. An important question that arises, addressed in the next section, is whether the contradictions and incoherences produced by this pressure detrimentally affect the legitimacy accorded to the discussion paper by its primary readership (i.e. those invited to make submissions in response).

It is also noteworthy that a comparison of a draft of the discussion paper (Electricity Task Force, 1989a) with its final version reveals that a considerable amount of background and explanatory material was deleted from the final version. Perhaps more than any other component of the draft text, these sections produced a sense of the text being employed as a forum or site for thinking out and arguing through possibilities, in particular with a non-specialist audience in mind. In other words, these deleted sections were what gave this version the character of a discussion paper.

I can think of only two possible reasons for the deletion of the background material. One is that it was decided that the intended audience should not become too wide; the other, more charitably, is that the information was perceived as being more general or elementary than required for the audience the task force had in mind. In any event, the effect is to restrict the audience to those with technical know-how or with the resources to employ such know-how; i.e. agencies involved in the production and circulation of electricity, large industrial consumers, and academics with expertise in the field. As Frank Fischer (1993, p. 36) has observed, such restriction results in the "technical framing of political arguments." The constitution of, in effect, qualified producers of policy by definition constitutes/excludes other citizens as policy consumers. This restriction is directly reflected in the sources of the submissions.

To sum up, the drafting history and final organization of this particular text, put together with the fact of a prior policy determination, are strongly suggestive that the actual rhetorical problem facing the authors was the following: On the one hand, the discussion paper had to anticipate a diversity of perspectives on the issue in order to convey at least the appearance of its own neutrality and openness to a range of possible solutions to the problem it poses. On the other hand, it would have to steer respondents towards a solution which was "feasible" (i.e. acceptable to Cabinet), rather than present a scattering of possible solutions so attenuated that there was no weight of response to anchor the "findings" to be presented in the final report.

Submissions

As could be expected, the submission stage of the policy process allows interested parties to have their say. In fact, for most it is the only formal opportunity to comment that they receive. And it is indicative of the ritualistic nature of the process that certain relevant agents, such as government departments with interests in the issue, typically refrain from comment at this stage of the process. Instead, they wait for an invitation to comment through inclusion in, or request for response to, the officials' committee established to follow up on and/or implement the task force's work. What this means is that certain information or perspectives are not necessarily brought into play at a time when they could most usefully inform the discussions in and around the public report stage of the process.

In the case under consideration, two main strategies of response can be discerned, resulting in very different texts within the submission genre. One, which I call the "autonomous model" of response, does not explicitly address the discussion paper at all. Rather, it offers a full-blown proposal for the structure of the electricity industry, a proposal that is presented as that party's own, although it may bear resemblance to options described in the discussion paper or elsewhere. The other main strategy, which I call the "critical model," responds specifically and in detail to the discussion paper, for the most part critically and from the standpoint of desiring little or no change to the existing system. (A further, intermediate, model proposes incremental changes to the current system.)

These strategies correspond to the comparative influence that their authoring institutions can be assumed to hold within the electricity sector. In the case of the autonomous model, two obvious

examples are submissions (proposals) from a major industrial user of electricity and the central supplier of New Zealand's largest city.

The submissions most exemplary of the critical model are those from a union organization and a local government (resource management) organization, both representing key "resources" within the industry (labor and water), albeit with constrained powers in an industry so closely associated with the "national interest" and "essential services." Stylistically, these are the most expertly written, practiced (i.e. conventional) of all the submissions made.

However, such is the treatment accorded these and the other submissions in this case (as detailed in the next section) that it is hard to escape the conclusion that all submissions are merely the products of a system designed to extrude and then re-ingest them to satisfy an institutionalized requirement to consult and be consulted. There is little sense of any of the respondents engaging in discussion or dialogue with the task force. This perhaps is not surprising, given the monological tendencies of the discussion paper as described in the previous section.

It would appear, then, to answer the question I posed in the previous section, that the credibility of the discussion paper as a coherent document was scarcely an issue for a large proportion of respondents. That is to say, those who fall into either the "autonomous" category (more or less ignoring the discussion paper) or into an intermediate category of texts referring only sporadically and selectively to the discussion paper. These latter would appear to have been the product, as far as their relationship with the discussion paper is concerned, of highly selective or particularistic reading practices, which have the effect of blinding readers to larger incoherences in the text they are reading.

The Report

If the policy production process is to be anything more than a ritualistic formalization of the predetermined, then reporting is arguably the most crucial stage. For it to be an acceptable product of institutionally required processes of consideration and consultation, the report must "draw the fire" of opposing viewpoints, gather opinions and evidence from experts, and out of all these materials, fashion a coherent response to the task set by the terms of reference. Given that the overall position arrived at in the report discussed here is largely consistent with that of government as implied in the terms of reference and foreshadowed in previous policy decisions, the most urgent question is: What does the report do with the opposing and heterogeneous viewpoints provided by the submissions? Does it explicitly acknowledge these diverse viewpoints, weaving them into a discussion of various options; does it refer to them indirectly; or does it completely ignore them?

In fact, the report neither ignores the submissions nor does it engage with them. It does not even bolster its own position by referring to those submissions, or parts of submissions, which adopt a similar stance. The report consigns all submissions to a common site, grouped together as the third and final part of the report. Here they appear in summarized form, ordered alphabetically within a classification scheme that distributes them in accordance with the particular segment of

the electricity industry in which each authoring institution or individual agent is located. Everything suggests the use of the policy genre system in this instance to project a ritualistic show of consultation and public discussion. It cannot be denied that the views of the submitters have been publicly disseminated or fairly represented. And yet it would appear, on close inspection of the rest of the text, that the views expressed in the submissions have had no bearing whatsoever on the deliberations of the task force.

In effect, the report – through what amounts to an act of appendixing despite its renaming as Part III – simply partitions the submissions off from the legitimate (i.e. expected) work of analysis, offering no comment or commentary other than an indication of their existence and location. The report submits the submissions without overtly subordinating them, while "giving" them a significant amount of space. The effect is similar to that identified by Jean Baudrillard (1994, p. 112) when writing of the mass media:

> To understand properly the term "response," one must appreciate it in a meaning at once strong, symbolic, and primitive: Power belongs to him who gives and to whom no return can be made. To give, and to do it in such a way that no return can be made, is to break exchange to one's own profit and to institute a monopoly: The social process is out of balance.

The consultation process strictly limits the involvement of citizens outside those specifically authorized to have a view by constituting such others as respondents, ensuring that they can only react to a prior formulation, rather than initiate or share in that formulation. Additionally, the process in large measure dictates the precise terms of response. It does this first of all by framing its composition within the narrow parameters of the terms of reference and discussion paper, and secondly by controlling its reception through judicious textual placement. The result is a distancing of response by which the requirement of consultation can be met without it necessitating any real interaction and concomitant deflection from the predetermined policy path. As Baudrillard would say, the submissions are a simulation of a response, since they have no particular dialogic efficacy, no appreciable impact on the discourse that supposedly is subsequent to them. And this of course is what makes the term "submission" such an appropriate one in this case.

* * *

The staged production of policy through a genre sequence that differentiates audiences facilitates the activation of a defined and consistent "reading posture," to use Bryan Green's (1983) term, for any specific text. In the case of the report, the primary and institutionalized audience is government, or more specifically, its executive branch or Cabinet. Without wishing to overstate its homogeneity, it is nonetheless the case that this audience is accustomed to reading texts of a certain consistent format and development (including reports). In addition, this is a highly circumscribed group in terms of its exposure to the circulation of certain ideas and to the processes to which these ideas are subjected. All this can be expected to induce settlement into a single posture of reception for texts such as reports.

Moreover, the task of reporting is carried out within a relationship of delegation. In other words, there is a certain investment of trust on the part of those who have the power to decide – but who do not have the information on which to base (justify) that decision – in the report writers whom they have certified as competent to act on their behalf. This trust, in combination with a common reading posture associated with a specific stage in a genre sequence, and a related belief in interpretive transparency that characterizes a literal view of language, has a very precise effect. Namely, an apparent absence of expectation on the part of the addressees of a report that its basic informing assumptions should be spelled out and backed up.

For example, the presupposition in the report under discussion here that competition equals efficiency, closely linked to the conceptual framework of economic rationalism, receives virtually no documentation and certainly not the slightest attempt at a systematic genealogical mapping. It is apparent that a key element of the work of textuality in public policy production is the rendering of specific discursive features as natural and transparent. Green, in his regrettably little known study, provides a theorization of this process through his notion of "contextual transitivity":

> A social stock of knowledge can be thought of as an array of cultural coding devices – what ethnomethodologists call sense-making practices – through which otherwise disparate events and behaviors are exhibited as determinate social realities. Assuming that such coding devices form a common ground between writing and reading we can say, as a first approximation, that contextual transitivity is a recognitionary match between cultural coding devices in a text and devices present as prior plausibility structures in the person who reads (1983, p. 171).

I am suggesting that the formulation "competition equals efficiency" forms part of the stock of knowledge shared by members of the task force and their governmental addressees, and it is therefore employed unproblematically in their text. In these circumstances, any attempt to ground the coding device in logical demonstrations or external sources would have had the opposite effect to what such grounding was intended to achieve. It would merely have suggested to receptive readers that there was a question mark over the validity of the notion. As Green goes on immediately to say, "the presence of contextual transitivity means that the reading of a text can be carried on completely as a contexted work practice, i.e. as another enactment of cultural membership, and is undisturbed by the reading act itself."

A similar effect is achieved by the paucity of historical contextualization provided. For example, while the report notes the government's general policy of reviewing its business activities, it excludes any reference to possible sale (privatization) of electricity assets. In other words, it provides no situating of the overall policy environment operating at the time beyond the general objective of economic efficiency expressed in the report's reproduction of its terms of reference. It is significant that such exclusion does not necessarily confer incomprehensibility (and therefore perhaps disturbance and resistance) on the report for some sections of its audience. Rather, exclusion as a rhetorical move is able to accommodate both a governmental audience

that would not need reminding that privatization was under consideration, and a public audience that would (preferably) not need to know.

It is worth noting an additional, or perhaps even coexisting, tendency that may be revealed by the progressive decontextualization of the documents in the policy cycle. The earliest text produced by the task force that I have come across (1988) contains by far the most generous account of the conditions pertaining to the policy and industry environments. It may be no accident that it was also the first, and that the texts that succeeded it progressively reduced and standardized their accounts. Notable here are the excising from the final discussion paper of a considerable quantity of this type of material and the extensive recycling in the final report of material used in previous texts. This pattern is strongly suggestive of the use of a chain of texts on the same topic by the same authoring agent as self-informing devices. The result is a progressive condensation of what is perceived to be pertinent knowledge concerning the topic, and a corresponding diminution of the need, as perceived by the agent, for detailed contextualization. More specifically, the authoring agent (individual or group) may come to have a progressively altered sense of the significance of background details and what a reader coming into contact with the topic, perhaps for the first time, needs to know in advance in order to fully comprehend the material.

This possibility is reinforced by the absence of any suggestion that the primary audience of the final report (executive government) was in any way disadvantaged by the limited contextualization. Indeed, it indicates that one aspect of a self-informing process is the achievement of a refined sense of what the sponsoring institution, as the primary reference point for the authoring agent, needs to know, and therefore, by implication, what it knows already and doesn't need to be told again. In other words, what was winnowed out led to the enhancement, for the primary audience, of what I have been referring to, following Green, as contextual transitivity, at the same time as it marginalized a more general public audience.

* * *

In the case under consideration, the report is, if anything, more cautious in its advocacy of change than the discussion paper. A number of factors, which are very difficult to sort out, potentially contribute to this caution. One is the somewhat unconventional nature of the discussion paper as already referenced. Another, and related, factor is the differences between the primary audiences of the respective documents (and also, no doubt, the sense of finality associated with the report, compared with the provisional status of the discussion paper). The discussion paper, from a perspective of viewing the texts in interaction, can now be seen as primarily determined by the requirement of transmitting to the electricity industry the government's expectation that change would occur. The report, on the other hand, is oriented towards the need to produce a workable solution or resolution of that expectation; to a comparatively greater degree, its authors' heads are on the block and the discourse protects itself accordingly.

The contrast is at its sharpest when the report is compared with the initial task force text referred to above (Electricity Task Force, 1988). Rather than the evolutionary approach to reform advocated in the report, the task force had stated:

> It is clear, however, at this stage in the review of the establishment process, that a clear-cut shift, preferably made faster rather than slowly, in the external regulatory framework of the electricity industry *as a whole, alongside any other major structural and regulatory changes affecting* (in this case) *the wholesale industry on its own* will be more effective in increasing efficiency than a progressive change which is driven not by the logic of the industrial and commercial processes of that overall industry but by what the political traffic can bear. In other words, timing and the comprehensiveness of the reform are probably more efficacious (in terms of efficient outcomes) than an attempt to modify the potential transition costs by a staggered or evolutionary approach to large-scale industrial manufacturing aimed at improving overall national economic performance (1988, p. 28, original emphasis).

At this point, it is useful to refer to the aims of "technical rationality" described by Green and characterized by contempt for both, (1) the application of peremptory schemas, and (2) ad hoc adjustment to circumstances. I believe it is possible to perceive in the former mode of action the "clear-cut shift" espoused in the early task force text, together with the associated tendency, among Treasury officials in particular, to pursue the imposition of theoretical frameworks. (It is significant in this respect that this early document was produced prior to the expansion of the task force to include representatives of the electricity supply authorities.) And one can perceive in the latter mode the conviction of many of the electricity supply authorities (apparent in their submissions to the task force) that reform can be achieved incrementally within existing political frameworks. The reporting work conducted by the task force, manifested most clearly in the comparison of official and unofficial texts produced during its existence, can in this light be seen as achieving two functions. First, a managing of the tension between these dispositional tendencies. And second, a mediating increasingly arrived at by the time of the final report that is consistent with technical rationality – i.e. with the production and application of "developmental systems of action" (Green 1983, p. 45) rather than a more revolutionary kind of restructuring.

The shift in the value accorded to "evolutionary" as a quality of industry reform, from a derogatory meaning in the earliest text (Electricity Task Force, 1988) to a term of approbation ("transitional strategy") in the last, is indicative, it seems to me, of the stakes and outcomes of this dispositional struggle. Indeed, I would go further and say that we can see in these texts the working out of a significant conflict over bureaucratic practice that emerged at this time – on the one hand, between a traditional, public service-oriented bureaucratic ethos, and on the other a new, highly ideological, advocacy-based conception of the bureaucratic role that has been a feature of the neoliberal or New Right revolution in public policy throughout the world over the last 25 years.

There is a salutary lesson here for those who might overstate the efficacy of textual operations in policy production at the expense of a full appreciation of institutional and interpersonal

dynamics. Nevertheless, in their interaction with each other – a relationship which, significantly, is not one of the more obvious dialogical pairings in the textual chain – the discussion paper (in its various drafts and versions) and the report appear to provide a mechanism for the working out, or through, of the interpersonal dynamics needed to carry the work of policy production forward.

The Media Announcement

A significant role of the media announcement within the generic cycle of policy texts is to provide a vehicle for the assertion of governmental authority and power, or more precisely, for reaffirming government control of the policy process. This is exemplified from the beginning of the announcement (Office of the Ministers of Finance, 1989, for this and subsequent citations in this section):

> The decisions the Government had made were based on the work undertaken by the Task Force.

> "The Government has, however, directed officials to do more work in a number of specific areas," the Ministers said.

As anyone who had read the task force report would know, this will in most cases be precisely the same work that the task force had requested that it be directed to do. Although it is not unheard of for government representatives to distance themselves from the findings of officials or appointed investigators, the relationship of delegation that exists between them, on an overt and formal level, at least, tends to ensure that the government will take ownership of policy proposals. The expected or official government role, as embodied in the principal–agent relationship, i.e. of initiating, directing, and signing off on bureaucratic work, requires an exaggeration of its actual role. The media announcement provides occasion for such a signing off in the same way that the terms of reference "initiated" work that was already in process.

The media announcement is notable for an almost total absence of elaboration of ramifications and implications arising from the decisions announced. A significant example concerns the future of the electricity supply network.

> The Government has confirmed the decision to remove exclusive franchises for supply and removal of the obligation to supply all consumers in a supply area.

As the task force had made clear in its report, the unavoidable outcome of this decision would be a huge increase in electricity prices for rural dwellers, to the extent of making compensatory measures necessary. However, the characteristic brevity of the media announcement increases the opportunity for such implications to remain concealed while subsequent policy development can occur. (In this brevity, it corresponds to the terms of reference as the other point in the first iteration of the production cycle when the "voice" of government is heard directly – these two instances in fact framing the cycle.)

The answer to the key question of the future ownership structure for the distribution sector is especially vague. The text begins its coverage of this topic by saying: "The Government has not yet taken decisions on the future ownership of the distribution industry." Conceivably, this coyness reflects the particular political sensitivity of the issue, and a desire, therefore, not to let it contaminate the other parts of the announcement. (As I have mentioned several times, this question had in fact received considerable attention from a previous working party of officials, which subsequently merged its work with that of the task force. And it is equally significant that work subsequently undertaken by officials would, initially at least, demonstrate an unflagging commitment to privatization.) Possibly, the narrow majority by which task force members ultimately arrived at their recommendation of privatization as opposed to consumer cooperatives would also have given the government pause. Typically, though, the broad brush-strokes of the media announcement do not admit such subtleties, moving directly from a statement of the task force's position to a statement of the decision taken by the government, as follows:

> The Task Force has recommended that the distribution companies be privatized with direct ownership, rather than ownership through a local body or similar arrangement.

> The issue of ownership of distribution companies has been sent back to officials for more work to be undertaken.

In terms of the textual dynamics of policy production (the managing of the tension between preconceived intent and required democratic process), the media announcement enacts a *division* between the decisions that the current political traffic will bear (the phrase "proceed as planned" is a characteristic formulation) and decisions that are judged as yet too contentious ("more work"). Or putting it another way, the media announcement functions as a site of mediation between one generic cycle of policy formation and subsequent iterations (in which similar textual patterns can be observed).

Conclusion

Given the solution-led character of the policy instance discussed here, the question arises as to why the particular genre system of policy production employed was one typically associated with difficult and technical problems. I hope to have demonstrated that, in addition to signaling electricity as essentially a technical issue, this choice of mechanism, by framing the policy process as a conventional problem-focused one, works to conceal the fact that the government has already made up its mind. The technical orientation of this mechanism further frames the issue as one which ordinary citizens need not (or can not) give their attention to.

To sum up, then, my investigations of the formal policy institutionalization process have focused on the precise mechanisms (textual and otherwise) by which a predetermined result could be "produced" or managed. Elsewhere, I have generalized these mechanisms under three implicit principles of policy production: exclusion, limitation, and dialogue (Wallace, 1998). The various mechanisms perform the functions named in the first two principles, exclusion and limitation, to

diminish the power of the principle of dialogue, or, in Bakhtin's well-known terms, to maximize monologism. I have concentrated here on demonstrating just one of these mechanisms, albeit a major one: that the policy process is subject to a partitioning by genre and by genre cycle which, potentially, limits democratic participation. That is, there is inherent in the genre system of policy production a tendency towards fragmentation through which the discourse can be regulated.

It is true that, to some extent, each type of text is a response to the one(s) preceding it and an anticipation of the one(s) to follow, and therefore partakes in exemplary fashion of the dialogic framework as theorized by Bakhtin. Each text is in some sense an utterance in a dialogue, which conceivably allows for the dialogue's beneficial development. On the other hand, each genre lends itself to being oriented towards a particular audience, which does not entirely coincide with the audiences of the other genres. This differentiated audience is a large part of what defines the texts as separate genres, but in terms of participation in an ongoing dialogue, genre division can be used, as my analysis has demonstrated in this case, to effect a degree of interruption, distortion, and exclusion. Perhaps the clearest example concerns the way the report, directed primarily to government, could turn away from those whose involvement was solicited by the discussion paper.

At its broadest, the operation of the rhetorical system is embedded in a particular discursive logic: a logic that, at base, is narrative, although it need not be (and typically is not) represented that way. The rhetorical cycle I have identified clearly constitutes a kind of narrative in its own right, by virtue of the fact that a chronological sequence of human relations and actions are involved. The point is vividly illustrated by the ease with which we could rename the rhetorical categories of tasking, consulting, reporting, and declaring as, say, "mission," "search," "discovery," and "valuation" respectively. This overarching processional narrative is one that policy agents cannot avoid or completely suppress, though they can (and invariably do, in the current dispensation at least) ensure they never draw attention to it in anything resembling narrative terms. Rather, the process is depicted as a rational one of review and recommendation.

It is significant that a more obviously narrative mode of discourse would tend to open up contextual matters that the agents would prefer to suppress (narrative typically placing considerable emphasis on the nature of the "complication" to an existing state of affairs prior to focusing on the resolution). One could usefully employ here the distinction between "mythos" (leading to interpreting the process by means of overt narrative elements) and "logos" (interpreting the process as logical and rational). The fact that such a marked distinction can be made in respect of the "same" process is a powerful demonstration of the ability of institutions to exercise power through establishing the customary frame or posture that is to direct any unreflective instance of document consumption (or for that matter, production).

Note

The full explication of my study of the role of writing in the formation of public policy (Wallace, 1997) relies heavily on terms provided by Pierre Bourdieu. The purpose of doing

so was to theorize, on the one hand, the relationships among the institutions involved in any instance of policy development ("field") and, on the other hand, the acculturation of those employed by the institutions ("habitus"). Because the present account is limited as much as possible to specifically examining the interrelationships among the texts as a genre system, I have decided not to complicate the matter or take up space by foregrounding this theoretical apparatus here. However, it can be seen to erupt at times; for example, in making use of Green's framework of "posture," "prior plausibility structure," "technical rationality," etc. And most notably in resorting at times to the term "disposition" (comparable to "habitus") to acknowledge what the policy makers "brought" to the writing of their texts in addition to what they "found," or "renegotiated," in the process of writing them.

References

Baudrillard, J. (1994). The masses: The implosion of the social in the media. *The polity reader in cultural theory* (pp. 11-118). Cambridge: Polity Press.

Bazerman, C. (1994). Systems of genres and the enactment of social intentions. In A. Freedman and P. Medway (Eds.), *Genre and the new rhetoric* (pp. 79-99). London: Taylor and Francis.

Berkenkotter, C. and T. N. Huckin (1993, October). Rethinking genre from a sociocognitive perspective. *Written Communication, 10*, 475-509.

Castells, M. (1997). The power of identity. *The information age: Economy, society and culture. Vol. 2.* Cambridge, Mass.: Blackwell.

Electricity Task Force (1988). Issues and options: Optimal structure and regulatory environment for the electricity industry of New Zealand. Unofficial draft document.

Electricity Task Force (1989a). Electricity industry restructuring: Issues and options. Unofficial draft document.

Electricity Task Force (1989b). *Government policy towards the electricity industry: Issues and options.* Consultative document prepared by the Electricity Task Force.

Electricity Task Force (1989c). *Structure, regulation and ownership of the electricity industry: Report of the Electricity Task Force.* Wellington: Government Printing Office.

Fairclough, N. (2000). Dialogue in the public sphere. In S. Sarangi and M. Coulthard (Eds.), *Discourse and social life* (pp. 170-184). Harlow: Pearson Education.

Farley, P. (1994). *The process of corporatisation of electricity distribution authorities in New Zealand.* Wellington: n.p.

Fischer, F. (1993). Policy discourse and think tanks. In F. Fischer and J. Forester (Eds.), *The argumentative turn in policy analysis and planning* (pp. 21-42). Durham and London: Duke University Press.

Freadman, A. (1994). Anyone for tennis? In A. Freedman and P. Medway (Eds.), *Genre and the new rhetoric* (pp. 43-66). London: Taylor and Francis.

Green, B. S. (1983). *Knowing the poor: A case-study in textual reality construction*. London, Boston, Melbourne and Henley: Routledge and Kegan Paul.

Ministers of Finance, State Owned Enterprises, and Commerce (1989, September 13). "Reorganisation of the electricity industry." Press release.

Scott, G., Ball, I. & Dale, T. (1997). New Zealand's public sector management reform: Implications for the United States. *Journal of Policy Analysis and Management, 16*, 357-381.

Wallace, D. (1997). *Managing power: The role of writing in the formation of public policy*. Unpublished Ph.D. dissertation, Victoria University of Wellington.

Wallace, D. (1998, June). Writing policy: From monologue to dialogue. *Social Policy Journal of New Zealand*, 58-60.

Wallace, D. (2000). The code through a rhetorical lens. In J. Davey (Ed.), *Another New Zealand experiment: A code of social and family responsibility* (pp. 152-167). Wellington: New Zealand Institute of Policy Studies.

Part 2: Producing Selves in Community

Chronotopic Lamination: Tracing the Contours of Literate Activity

Paul Prior and Jody Shipka

Center for Writing Studies
University of Illinois at Urbana-Champaign
Urbana, Illinois 61801
pprior@uiuc.edu
shipka@uiuc.edu

Abstract

This chapter explores the chronotopic lamination (Bakhtin, 1981; Prior, 1998) of writers' literate activity—the dispersed, fluid chains of places, times, people, and artifacts that come to be tied together in trajectories of literate action along with the ways multiple activity footings are held and managed. Twenty-one academic writers (undergraduates, graduates, and professors) participated in interviews where they were asked to draw and then discuss two representations of their processes in writing a particular piece. To further explore writers' multiple streams of activity and the ways texts mediate that activity, we also asked participants to share drafts, final texts, notes, annotated readings or other material they used in their writing. We focus here on four case studies that illustrate our findings. The interviews showed that the writers' work crossed institutional settings, especially mixing home, community, and discipline, and thus was deeply laminated (multimotivational and multi-mediated). In particular, we found that writers actively engage in what we call ESSP's (environment selecting and structuring practices), which not only lead to their texts but also contribute to the distributed, delicate, and partly intentional management of affect, sense, identity, and consciousness.

A psychology professor reports to us that when she is revising an article for publication she works at home and does the family laundry. She sets the buzzer on the dryer so that approximately every 45 minutes to an hour she is pulled away from the text to tend the laundry downstairs. As she empties the dryer, sorts and folds, reloads, her mind wanders a bit and she begins to recall things she wanted to do with the text, begins to think of new questions or ideas, things that she had not been recalling or thinking of as she focused on the text when she was upstairs minutes before. She perceives this break from the text, this opportunity to reflect, as a very productive part of the process. In some respects, this story is a familiar one in cultural-historical activity theory (CHAT), a tale of how tools (external aids) mediate activity, altering the flow of behavior. The dryer-buzzer is acting here, in one sense, as an externalized memory system (like such classical examples as a notch on a stick, a knot in a rope, the words on a page), reminding the professor, in effect, to take a break.

However, there are other elements of this story that we believe are less familiar and that deserve serious theoretical and methodological attention. Here we see two activity systems—the domestic activity of the home, the disciplinary activity of the workplace—becoming to some degree interwoven, and each is thereby altered. The gendered work (with doing laundry often still associated with "women's work") of family household chores is routinely blended into a scientific/disciplinary activity. The psychology paper is revised as the family laundry is done.

Moreover, this act of writing is dispersed, not only across the loosely bounded acts of sitting and working with the text versus standing with the laundry, but also across a series of writing episodes: this process, the professor says, is not for first drafts; it is a step in a longer and blurrier chain of textual invention and production. There is also a puzzle here. Why does the dryer buzzer not act simply as an externalized memory for checking the laundry? Why does the whole sequence of actions—the disengagement from focal action at the site of the text and the reengagement in the domestic chore—become a space for productive reflection on the text, a place where new ideas emerge and older plans are recalled? Methodologically, how can we understand and study these private phases of the dispersed activity, which in this case reveal the folding of clothes to covertly be part of the chain of textual invention and revision for an academic article? These questions draw us into considering the territory of the writer's consciousness, of interior practices. Finally, we also see here a case where higher-order cognitive processes are marked by a delicate ordering of a specific externalized environment. Whereas the dominant metanarrative of CHAT understands development as interiorization and idealization, as a shift from external mediation and external control of behavior to internal self-regulation, here that developmental trajectory has spiraled to a higher stage, one in which self-regulation activity is now (re)externalized so that self structuring is achieved through environment structuring, and with the environment being structured a socioculturally specific one—equipped, peopled, and affectively colored.

In this chapter, we wish to explore how CHAT (and related sociocultural and practice theories) can help us to understand and conceptualize such literate activity as well as how exploring the specific issues of such literate activity—what is afforded theoretically by this disciplinary object—can in turn inform the evolving theories and agendas of CHAT.[1] To address these questions, we will draw on case studies of the literate activity of four writers in a university setting. Through these case studies, we will explore the three dimensions of literate activity described above. First, we will trace the chronotopic lamination (Bakhtin, 1981; Prior, 1998) of the writers' literate activity, the dispersed and fluid chains of places, times, people, and artifacts that come to be tied together in trajectories of literate action, the ways multiple activity footings are simultaneously held and managed. Second, we will turn to questions of sense and affect in literate activity. Here we consider writers' reported struggles to articulate their ideas as a case of what Bolter and Grusin (1999) call re-media-tion, a perspective that we think helps to illumine Vygotsky's (1987) arguments that internalization and externalization alike are transformative processes. Finally, we will examine the varied environment-selecting and -structuring practices (what we call ESSP's) of our participants, the ways these writers worked to manage consciousness as part of their literate practice.

Overall, we are arguing that literate activity consists not simply of some specialized cultural forms of cognition—however distributed, not simply of some at-hand toolkit—however heterogeneous. Rather, literate activity is about nothing less than ways of being in the world, forms of life. It is about histories (multiple, complexly interanimating trajectories and domains of activity), about the (re)formation of persons and social worlds, about affect and emotion, will and attention. It is about representational practices, complex, multifarious chains of

transformations in and across representational states and media (cf. Hutchins, 1995). It is especially about the ways we not only come to inhabit made-worlds, but constantly make our worlds—the ways we select from, (re)structure, fiddle with, and transform the material and social worlds we inhabit.

A Methodology for Tracing the Contours of Literate Activity

In an on-going study, we are approaching academic writers (undergraduate and graduate students, professors) to learn about the processes and spaces of their literate activity. In specific, we ask the writers to participate in an interview about a specific writing project and to share with us some of the texts that relate to that project. We begin the interview by asking them to draw two pictures of their processes for that specific writing project. The basic task for the first drawing is described in these terms:

> The first picture should represent how you actually engaged in writing this particular piece. That picture might show a place or places where you wrote, a kind of sustained episode of writing, what resources you use, other people who are involved, how you vary your activities as you engage in a specific episode of writing, how you feel during the writing.

In addition, we show and talk through several sample drawings. Here is one sample with one transcript of its description (Image 1). In response to this prompt, participants typically draw pictures of rooms in their homes where they write as well as of some of the objects and people they interact with there.

The basic task for the second drawing is described in these terms:

> The second picture should represent the whole writing process for this project from start to finish (or to the current stage). The picture might show how this writing project got started, interactions with other people and other texts, experiences that have shaped the project over time, the history of drafts and responses to drafts, your evaluations of and emotions about this project at different times and so forth.

Again, we also show and talk through several sample drawings. Here is one sample with a transcript (Image 2) of how it was described in one interview. In relation to this prompt, participants typically draw a chain of events across a variety of sites (one drew the continent of Africa with a small village hut in the middle because that was where her field research occurred). In both drawings, participants often produce visual metaphors to depict thought processes and emotions.
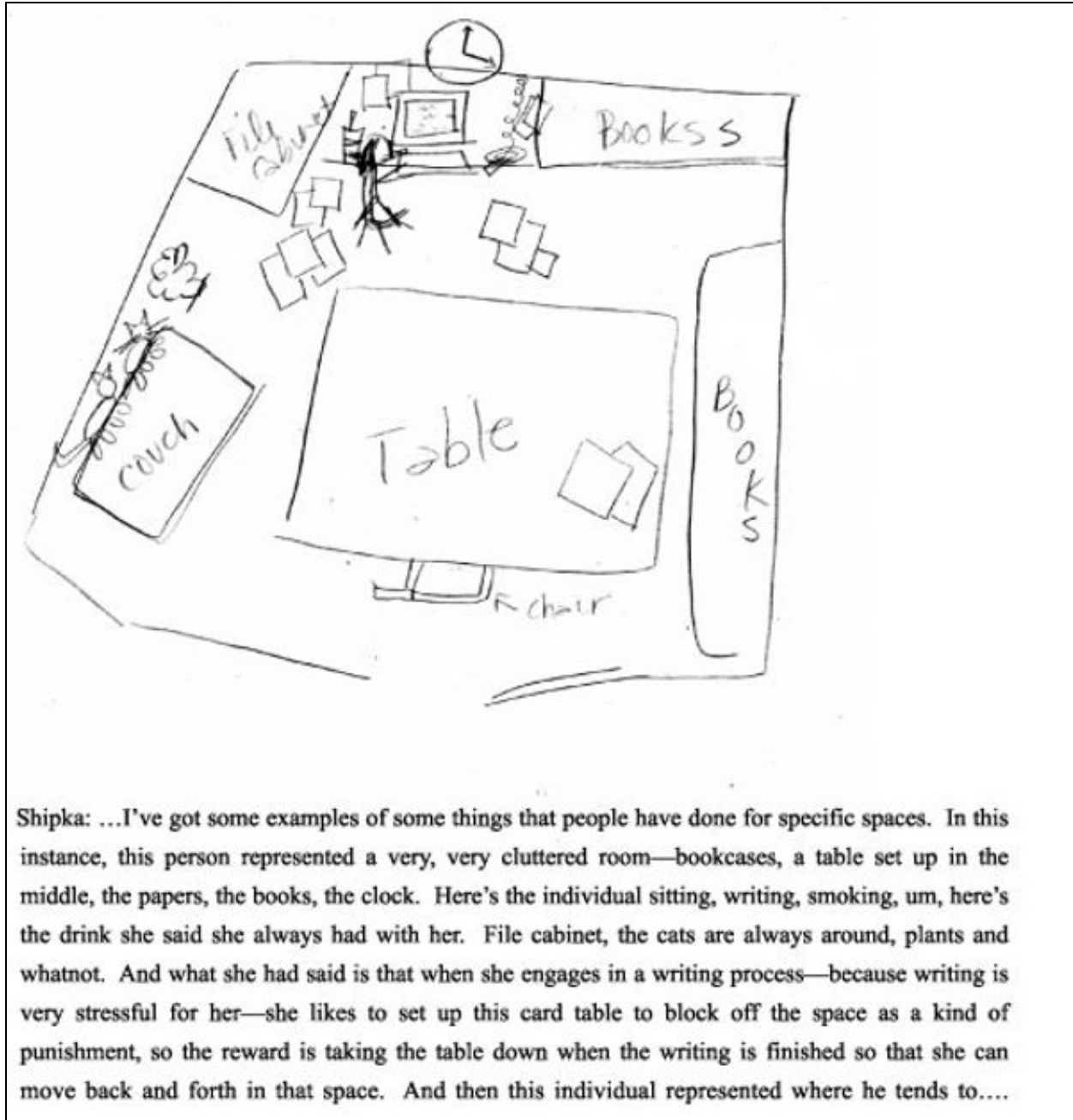
Shipka: …I've got some examples of some things that people have done for specific spaces. In this instance, this person represented a very, very cluttered room—bookcases, a table set up in the middle, the papers, the books, the clock. Here's the individual sitting, writing, smoking, um, here's the drink she said she always had with her. File cabinet, the cats are always around, plants and whatnot. And what she had said is that when she engages in a writing process—because writing is very stressful for her—she likes to set up this card table to block off the space as a kind of punishment, so the reward is taking the table down when the writing is finished so that she can move back and forth in that space. And then this individual represented where he tends to….

Image 1. Sample drawing of a scene of composing and transcript of description

In addition to the drawings, we also routinely ask the following questions at the points in the interview indicated:

After the two drawings are completed.

- In general, what are your feelings about writing?
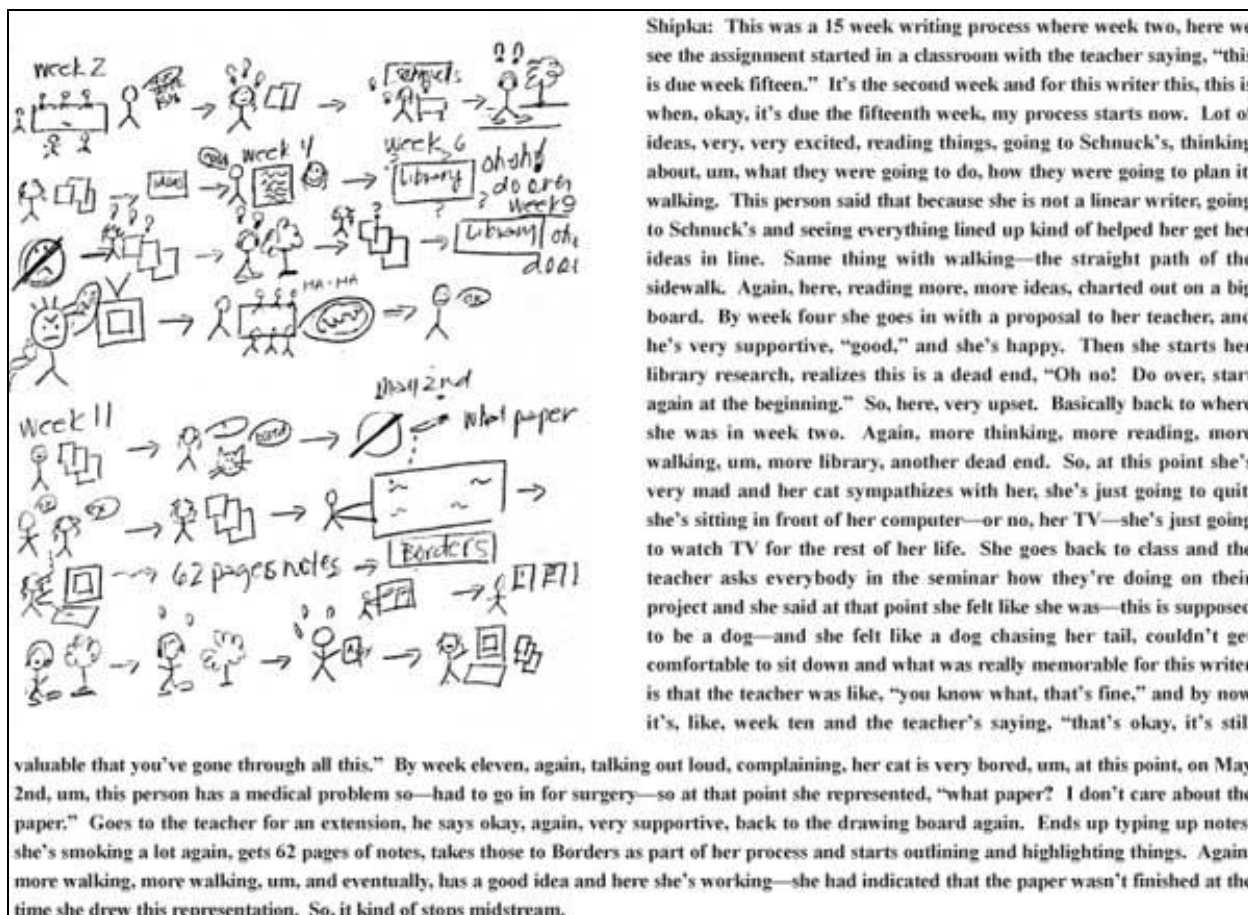- Can you very briefly describe the specific writing project that you have drawn about?

Image 2. Sample drawing of the writing process and transcript of description

- What are/were your feelings about this project in particular? (If there are significant differences here, ask the person to elaborate.)

After going over the first drawing

- Are the places, conditions and supports you have represented here typical in/for other writing tasks?

After going over the second drawing

- Is the process that you have represented one that you typically use for writing tasks?

After the third question above, we simply ask the writers to describe or talk about what they have represented in the first drawing. When the writer's descriptions and our follow-up questions on the first drawing come to a close, we ask the writer to describe or talk about the second drawing and we engage in an active discussion of it. The five questions above have helped us to understand the specific contexts of the tasks the writers describe and also to set those specifics in broader contexts of the typical. Questions 1 and 3 mark our interest in exploring affect in relation

to writing. Finally, in most cases, we are able to examine and ask questions about texts the writers bring to the sessions, texts which have included everything from notebooks, journals, and marked-up readings to full drafts, written responses from readers, final print texts, web sites, and, in one case, a CD burned with images, texts, and movies. We videotape as well as audiotape the interviews so that we have a record of how participants draw and how they point at their drawings and texts.[2]

The task of doing these drawings in response to our prompts and examples has encouraged participants to provide detailed descriptions of the scenes and resources of their writing, of the "procrastinating" (downtime) behaviors they engage in as well as the focused work, and of the emotions they experience (and how they manage those emotions). While participants' drawings offer rich representations for varied types of analyses, we are particularly focused on the way that the drawings and texts are described and elaborated in the interview and on the follow-up questions that those descriptions support. The drawing, in other words, is for us a means to another end—a thick description of literate activity. The combination of texts, talk, and drawings, of participants' accounts and our perceptions, supports a triangulated analysis of these writing processes.

We should address a potential question about the methodology: our use of sample drawings to prompt the writers' drawings. We recognize that these examples may shape the style and content of participants' drawings. Would, for example, pets be included if we did not show examples with pets? Would food be included if we did not show an example with food represented? Would trips to libraries or discussions at bars with friends be included if the samples did not include these kinds of things? Of course, whatever way we elicited the drawings would shape them in some fashion, and participants inevitably must draw on some cultural models to produce representations of their activity. In fact, in designing the study, we were informed by Hanks's (1996) reflections on discourse genres and metalinguistic ideologies. Hanks notes that metalinguistic ideologies (as seen, for example, in the named genres that a person identifies and in conscious articulations of the functions of these genres) are important starting points for research because they represent both reflections of, and tools for creating, the social order. At the same time he argues, research should not stop with participants' everyday accounts, but must recognize that many elements of, in his case, discourse genres go beyond, beneath, and even against metalinguistic ideologies. In the same sense, when we ask the writers to describe their processes, we do not simply want them to articulate their meta-practical ideology of writing, which, as we understand it in general, might construct writing as transcription of text (more so than invention) in bounded episodes and might represent little of the process and even less of the contexts (certainly not pets and food). We use the images and our verbal descriptions, in effect, to cue the notion of literate activity we wish to explore. We should note that, while participants surely take these cues, they have not simply imitated the examples. One participant (Johnson, as we will see below) did his second drawing as a series of storyboards with directions for soundtrack and cuts, a second (Neuman, also seen below) did her first drawing with five different scenes of writing rather than the single scene found in all our examples, and a third (not displayed here) did the second "drawing" by folding a paper repeatedly (and writing words or

phrases in certain folds), producing a complex metaphor of unfolding juxtapositions for his project, thus including <u>none</u> of the concrete scenes and tools or chronologies that all of our examples presented.

We see this methodology as a tool that helps us to sketch the contours of literate activity. These retrospective accounts do not provide the kind of grounded detail available through close observation of *in situ* practices. We cannot, for example, know how well or how fully these accounts of writing would match up with a videotaped record of the process. On the other hand, these retrospective accounts often range across years of experience, multiple settings, and the interior/private experiences of the writer, all things that close observation and videotaping would be very hard pressed to capture. In this sense, we believe that these interviews have functioned not only to point to places where situated research might track and detail some of the literate activity that is only sketched here, but also as a rich "device for thinking" (Lotman, 1990) about the nature of literate activity. In this report, we focus on four writers whose interviews, texts, and drawings illustrate what we are learning about the contours of literate activity in the academy.[3]

Of Chronotopic Chains: Laminating Literate Activity

> However forcefully the real and the represented resist fusion, however immutable the presence of the categorical boundary line between them, they are nevertheless indissolubly tied up with each other and find themselves in continual mutual interaction…. The work and the world represented in it enter the real world and enrich it, and the real world enters the work and its world as part of the process of its creation, as well as part of its subsequent life, in a continual renewing of the work through the creative perception of listeners and readers. Of course this process of exchange is itself chronotopic: it occurs first in and foremost in the historically developing social world…. (Bakhtin 1981, p. 254)

Bakhtin (1981) first drafted out the notion of the chronotope (time-place) as a tool for literary analysis; however, in a later revision, he broadened it to express the fundamental notion of a dialogical social semiotics that Voloshinov (1976, 1973) first articulated. For Bakhtin, the chronotope became emblematic of a fractured ontology—a complex fluid unfinalized and unfinalizable world—in which representational chronotopes (those on paper, in talk, and in the mind) co-evolved with embodied chronotopes, the actual concrete times places, and events of life.[4] Or perhaps it would be best to say that Bakhtin came to view all chronotopes as embodied-representational—with concrete time-place-events deeply furrowed with, and constructed through, representations and with representations always deeply rooted in chains of concrete historical events. Certainly, Bakhtin did not conceptualize chronotopes as some abstract, decontextualized Cartesian time-space coordinates, but as human(ized) worlds filled with historical and social significance, places with expected and unexpected characters, activities, and moods.

In this model then, a literate act, say reading a newspaper, is both localized in the concrete acts, thoughts, and feelings of the reader(s) and sociohistorically dispersed across a far-flung

chronotopic network—including the embodied acts of writing the story, almost certainly spread across multiple chronotopic episodes of individual and collaborative composing; the histories of journalism and the genre of the news story; the actual embodied worlds being represented and their textualized representations; the reader's histories of reading papers and of earlier events relevant to those represented in the story; and so on. Because of the multiplicity of embodied-and-representational chronotopes that are encompassed in any literate act, we find it useful to think of *chronotopic lamination* (Prior, 1998), the simultaneous layering of multiple activity frames and stances (Goffman, 1981) which are relatively foregrounded and backgrounded (Goodwin & Duranti, 1992). Combining understandings of literate activity as social practices that are situated, embodied, mediated and dispersed with the notion of the chronotopic lamination, we see a common challenge for Writing Studies and CHAT: How can we conceptualize and investigate such complex, dispersed, material-semiotic activity? To illustrate this complexity in relation to literate activity, we turn to the writers we interviewed. Each of the writers depicted and described historically laminated activity, chains of invention and inscription over time and across multiple scenes.

Writers' Accounts of Chronotopic Laminations

Megan Neuman is an undergraduate student majoring in engineering. [5] In her interview, she discussed a short writing assignment on her core values that she had done for a class on engineering ethics and communication. The assignment asked her to identify her core values; an associated reading had stated that core values are stable across time. Neuman rejected the central premise and chose an alternative genre of writing, not to meet with the happiest reception from the instructor who graded her assignment. Specifically, she decided to conduct a search for values and to present it as a word jumble (Image 3), so that the instructor would also have to search. In addition, to accompany and contextualize the jumble, she made a list of all the hidden words (Image 4) and why they were there. However, she strategically turned in the jumble first and held back the list until the last minute in the hopes that the instructor would first experience the uncertainty of the word jumble. In every sense, explicitly and implicitly, Neuman's assignment challenged the premise that she should have stable, life-long core values, that she could articulate them (in 250 words), and that she could then treat that articulation as her "mission statement" for life. Neuman noted that she spent about 10 hours working on this assignment and felt proud of it in spite of the fact that her classmates said it would not be accepted and told her they were writing out their core values in 30 minutes. Her instructor gave her a 2 out of 5 on the assignment and offered her the opportunity to redo it, which she did, writing "what they wanted to see" in a half hour without any sense of ownership, and getting 5 out of 5 in return.
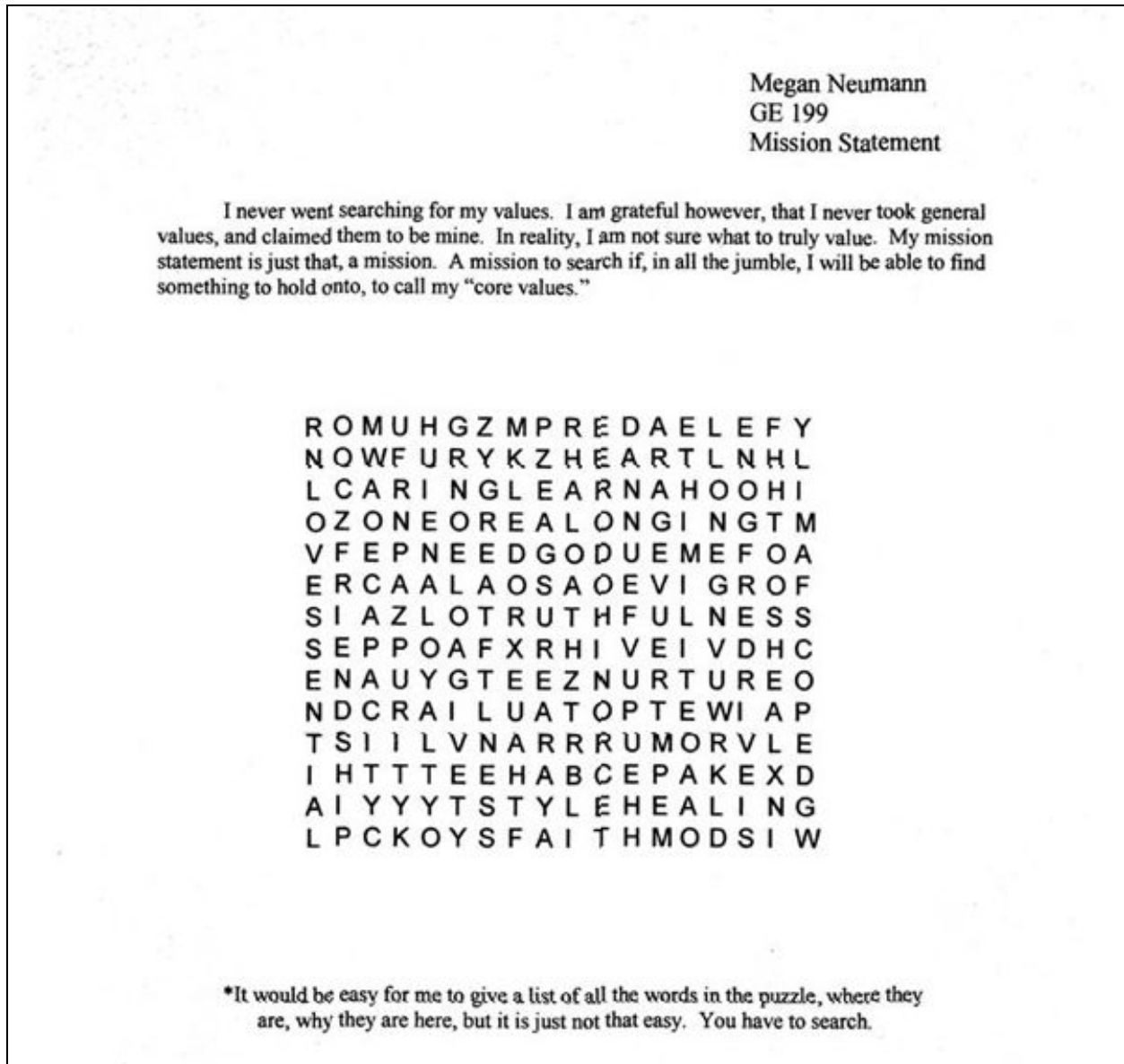
Megan Neumann
GE 199
Mission Statement

I never went searching for my values. I am grateful however, that I never took general values, and claimed them to be mine. In reality, I am not sure what to truly value. My mission statement is just that, a mission. A mission to search if, in all the jumble, I will be able to find something to hold onto, to call my "core values."

```
R O M U H G Z M P R E D A E L E F Y
N O W F U R Y K Z H E A R T L N H L
L C A R I N G L E A R N A H O O H I
O Z O N E O R E A L O N G I N G T M
V F E P N E E D G O D U E M E F O A
E R C A A L A O S A O E V I G R O F
S I A Z L O T R U T H F U L N E S S
S E P P O A F X R H I V E I V D H C
E N A U Y G T E E Z N U R T U R E O
N D C R A I L U A T O P T E W I A P
T S I I L V N A R R R U M O R V L E
I H T T T E E H A B C E P A K E X D
A I Y Y Y T S T Y L E H E A L I N G
L P C K O Y S F A I T H M O D S I W
```

*It would be easy for me to give a list of all the words in the puzzle, where they are, why they are here, but it is just not that easy. You have to search.

Image 3. Neumann's Mission Statement (turned in first)

In her first drawing (Image 5), she actually represents five different scenes where her work occurred. Her apartment was the space she detailed the most. This central image shows her sitting on a couch with a dictionary and drafts on the coffee table, a phone that she used to call a number of people (family and friends, who are shown as a line of linked stick figures), a television unplugged and not in use, her computer table, and a globe that she attended to as she wrote to remind herself of cultural differences in values. However, from top left, she also depicted her classroom, the engineering library (Grainger), a bus, and the food court in the student union (labeled with the names of two food chains). She explained how she immediately thought of doing something different in class when the assignment was given and settled rapidly on the idea of doing a word search:[6]

> Ah, well right when they had, they had said it, like, I, I had an idea right away, like, what I wanted to do. I wanted to do something different because this was, this was based on something they want you to be able to like live by so I knew I wanted something that was 250 words on a piece of paper and, um, right in class, like, they, they told us about it and I started, like, thinking of all the different possible words and, I knew I couldn't get them all to go in 250 words, so I figured the best way to do is probably a word search.

Thus, as the class moved on to other activities, Neuman began working in her head on this assignment. She also indicated in the interview that she had worked on this assignment during that week in several classes (when she got bored). Clearly, her work on this project was diffuse, dispersed across multiple scenes. This dispersion, Neuman indicated, was typical, but more extensive than usual (e.g., noting that she rarely worked on the bus) because she was so engaged in this task.

The following is a list of the words found in the crossword puzzle. They are not exactly what I value, but rather what I believe are valued, it is my mission to look through all of these to determine what I will value.

Humor-always important to laugh
Leader-many people value being a leader, with it comes power
Fury-while it shouldn't be valued, it often is
Heart-I hope one day to really have this one down
Lone-another way to describe is to call single, solo, I though Albert would appreciate this one. He claimed, with it, all else follows
Gone-sometimes I know I value being gone
Soothe-this can really be valued, after hard times, it is so very important
Family-everyone puts it on their list, but is it really valued?
Love-I know I need it
Caring-I wish I could value it more
Learn-I wouldn't be here if it wasn't for this
Rage-It is always valued
God-Some still value God, while others think it's a joke; at least he made the list
Loath-Is to be reluctant or against, we all have to take a stand sometimes
Need-I know I value what I need
Zeal-Passion is an important part of life; it keeps it interesting
Friendship-valued very highly, you choose your friends
Longing-It makes what you want even more special when you get it
Truthfulness-sometimes it is not what you want to hear, but what you have to hear that winds up getting valued
Capacity-the limit
Essential-just like need, we value what is Essential
Purity-it looks so good in the pictures
Loyalty-it's nice to have someone on your side
Give-since it makes you feel so good
Tear-a true sign of emotion
Sure-it feels good to be certain
Lite-easy going
Drive-it keeps you going
Heal-while sometimes it is hard, it is also very important
Brutal-I wish this one wouldn't make the list, but in reality, I think it always will
Scope-it is nice to know when something is a possibility, or in my scope
Nurture-We always protect the little ones
Style-I wish I had some
Star-I am not sure if this one is for me to be a star, to value stars, of just a star in the sky, maybe all of the above
Rumor-if they weren't valued, no one would spread them
Hear-I take it for granted, but sometimes, I really do value it
Healing-It is always important to heal
Faith-what would we do without it?
Wisdom-only the wise truly know what to value

Image 4. Neumann's list of values (turned in separately just before the deadline)

Image 5. Neumann's drawing of scenes of writing

Her second drawing (Image 6) covers the same basic time frame as her first drawing, but now presenting a more fluid and interior view of the process, especially highlighting her thoughts and feelings—through facial expressions of hers and of people she talked to (seen along the right edge of the drawing) in the process. Neuman brought to the interview the word jumble and the list of words with brief explanations as well as an e-mail from her instructor, but she did not bring her re-do, which was a standard paper. The list of words and explanations seems at first glance somewhat telegraphic and condensed (e.g., *Humor—always important to laugh*);
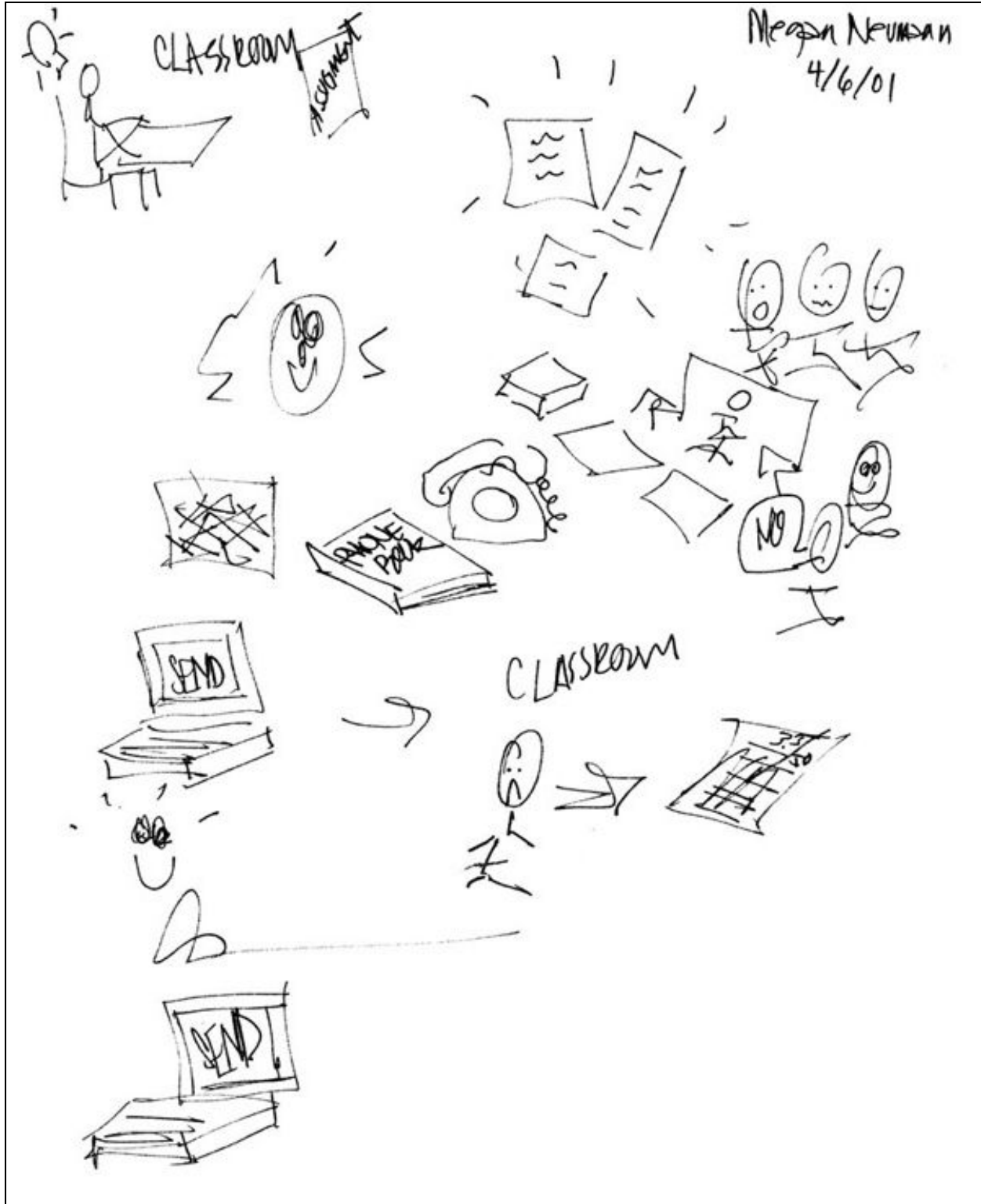
Image 6. Neumann's drawing of the writing process

however, consider other entries, such as: *Lone—another way to describe is to call single, solo, I though Albert would appreciate this one. He claimed, with it, all else follows.* When asked in the interview who Albert was, Neuman replied that he was a very vocal member of the class who

was "always talking about being independent and being by yourself and being able to stand, like, on your own." It is difficult not to hear the dialogic resonances of *Gone—sometimes I know I value being gone*, even if it is not possible to settle on some definitive sense for this entry. The list is marked by variations in evaluation and personalization as well as in degrees of elaboration. Compare, for example, the personalization and endorsement of *need—I know I value what I need* with the distance of *fury—while it shouldn't be valued, it often is*. Like Aladdin with his lamp, Neuman makes three wishes: *Caring—I wish I could value it more; Style—I wish I had some;* and *Brutal—I wish this one wouldn't make the list, but in reality, I think it always will*. In short, this list is filled with chronotopic links, sometimes subtle, sometimes explicit, to other times, places, and people, perhaps especially to the multiple conversations in person and on the phone that she initiated to construct this list of values-in-circulation.

In her interview, Neuman discussed the process, her motives and feelings during it, and the varied responses she got to her ideas along the way. When asked about what audiences she had imagined for the word jumble or had actually shown it to, she explained that she not only showed the jumble to other people, but also had conceptualized it as a kind of psychological test of perception and expectations.

> I, I showed it to a whole bunch of people in the class and just cause I, I was proud of it, basically. And I wanted to see who could like, if, what, what things they'd be able to pick out cause I figured, like, if you were to look at this, you might, I don't know if it's true or not, but I was kind of wondering which words you'd be able to see right away, if those were the words that you're expecting to find in it, then you'd be like, "oh, there's god—that, that's very valid," you know or would you be able to find, like, the words like fury or would you, I mean, cause if you didn't expect to see it in there, would you be able to? And, so, I was kind of curious.

As the same text entered into other scenes with other audiences then, it also began to take on other functions than the official one cued by the class, another mark of its laminated character.

Neuman concluded by talking about how frustrating she found it to watch others write without much thought or care or ownership and get 5 out of 5 on these short assignments, just as she did when she re-did the assignment. In writing this single short assignment, Neuman knit together a number of acts and scenes of text production on a wider landscape of affective and motivational trajectories.

Brent Johnson is an undergraduate student majoring in kinesiology. In the interview, he discussed an assignment in a composition course that one of us (Shipka) had taught. The assignment asked him to write an autobiographic essay about learning. In the first draft, he wrote a paper that reflected on how movies referenced key events, relationships, and lessons of his life. All of the lessons learned were outside of school because, he reported in the interview, school had never been where he learned best. However, in part because the course also encouraged students to consider multimedia and experimental forms of representation, Johnson presented his paper as a box set of movies that he had re-purposed[7], cutting his story, his life experience into the various (popular) movie boxes collected. The collection was called "Reel Learning." Johnson

put a full body shot of himself on the outside of the set. Save for one box in the collection, the re-purposed boxes did not include videotapes of the films he deemed important to his life/education. Instead, he placed a card inside each box that described the importance of each movie—the cards told readers what/how that specific movie taught Johnson something. The project proper, then, consisted of the re-purposed boxes and one viewable videotape, in which Johnson cut together (more re-purposing) pieces of the films and included segments from a video that he had made in high school about his cross-country experiences. For the second draft, he was supposed to change the form; he decided to further re-purpose the text he had written, making it into a film, with himself as commentator. Over spring break, he went back to his old high school, borrowed film equipment, and shot a movie version of the project. This film version showed Johnson sitting in front of the camera narrating the various scenes he arranged for viewers.

In his first drawing (Image 7), Johnson drew his dorm room, where he wrote the first draft of the paper (and watched the movies). The drawing depicts Johnson sitting on his bunk bed with a notebook at his side, facing the TV and VCR with the movie rack next to it. He also draws arrows, pointing to the phone (which he used to call family and friends back home), to his roommate (also a friend from home) sitting in a chair and watching the movies with him, and to his desk (with a computer, printer, and calendar on it and music coming from the computer's speakers). In his second drawing (Image 8 and Image 9), Johnson drew a storyboard version (18 panels in all) of his writing process. Johnson's storyboard representations make a key point about chronotopic chains: He recruits prior experience to the present task. His first five panels all represent experiences he had had before the class assignment was ever made, and those experiences are diverse: growing up at home, going to movie theatres, watching movies with friends at home, running track, and taking a class in video production in high school. These panels make the point that any experience at any time or place might become salient in some writing process. Panels 6 though 12 depict the process of writing the first draft. Panels 13 through 17 depict the process of re-purposing the first draft into a film, and the final panel (unnumbered) projects to the future, the sequel to his high school lessons ("Reel Learning II, The college years"). Below each panel in the storyboards are three boxes: the first for what and where, the second for music, and the third for transition to the next panel. In the first draft panels, for example, panel 11 depicts Johnson typing at the computer with notes on his desk. Below the panel the first box names the scene "Work w/notes/start typing," the soundtrack is marked "Music to study by" and the transition is not to panel 12, but back to panel 9, "Watching movies/taking notes" which transitions to 10 ("Call parents/friends; talk with roomie"), which transitions to 11 again. In short, panels 9-11 represent a recursive process of consulting sources (film and human), taking notes, and writing (Image 10). In the interview, Johnson discussed the process he had followed, what had motivated him to take this approach to the assignment, and how he felt about this assignment.
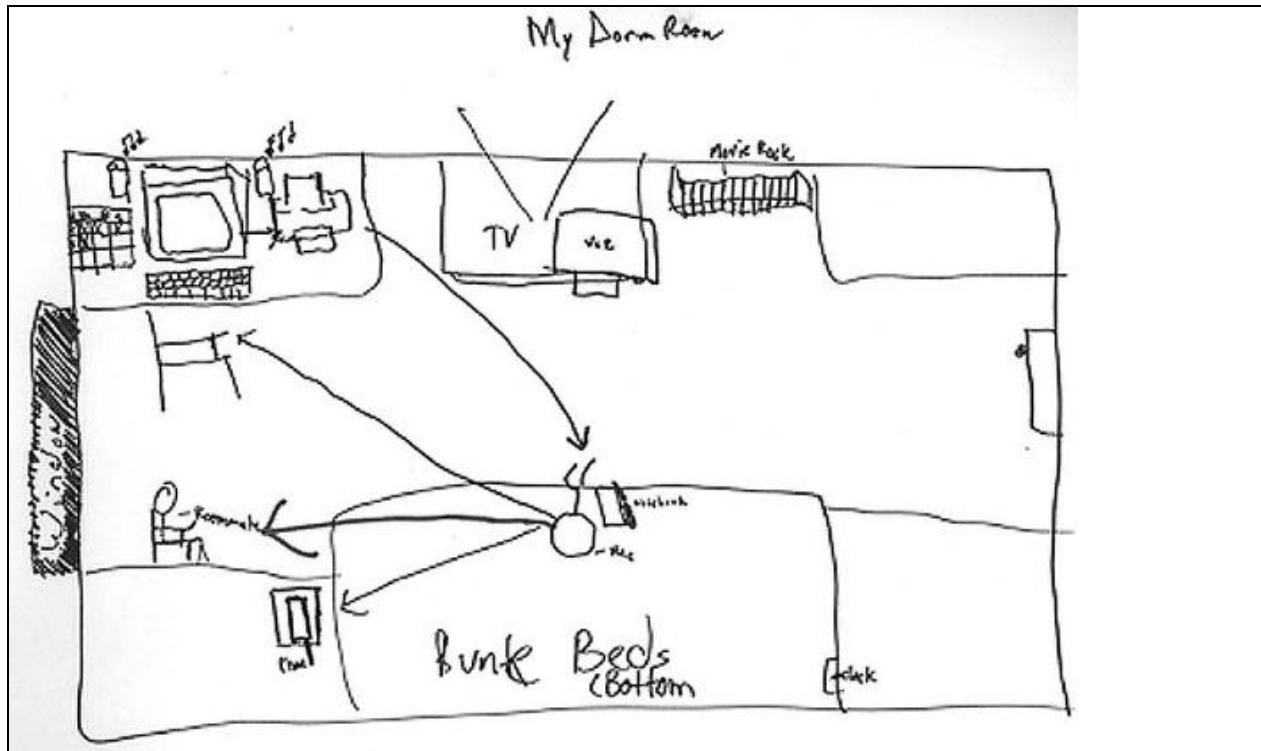
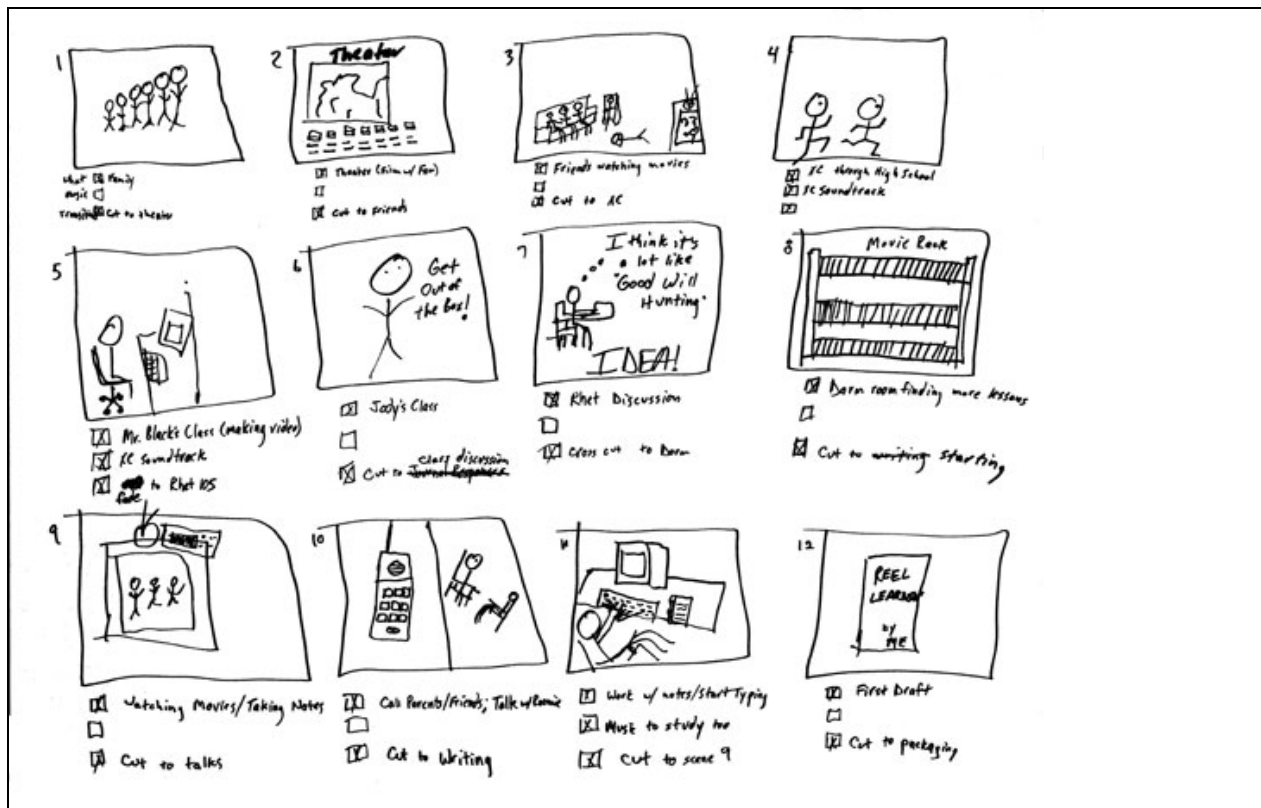Image 7. Johnson's drawing of a scene of writing

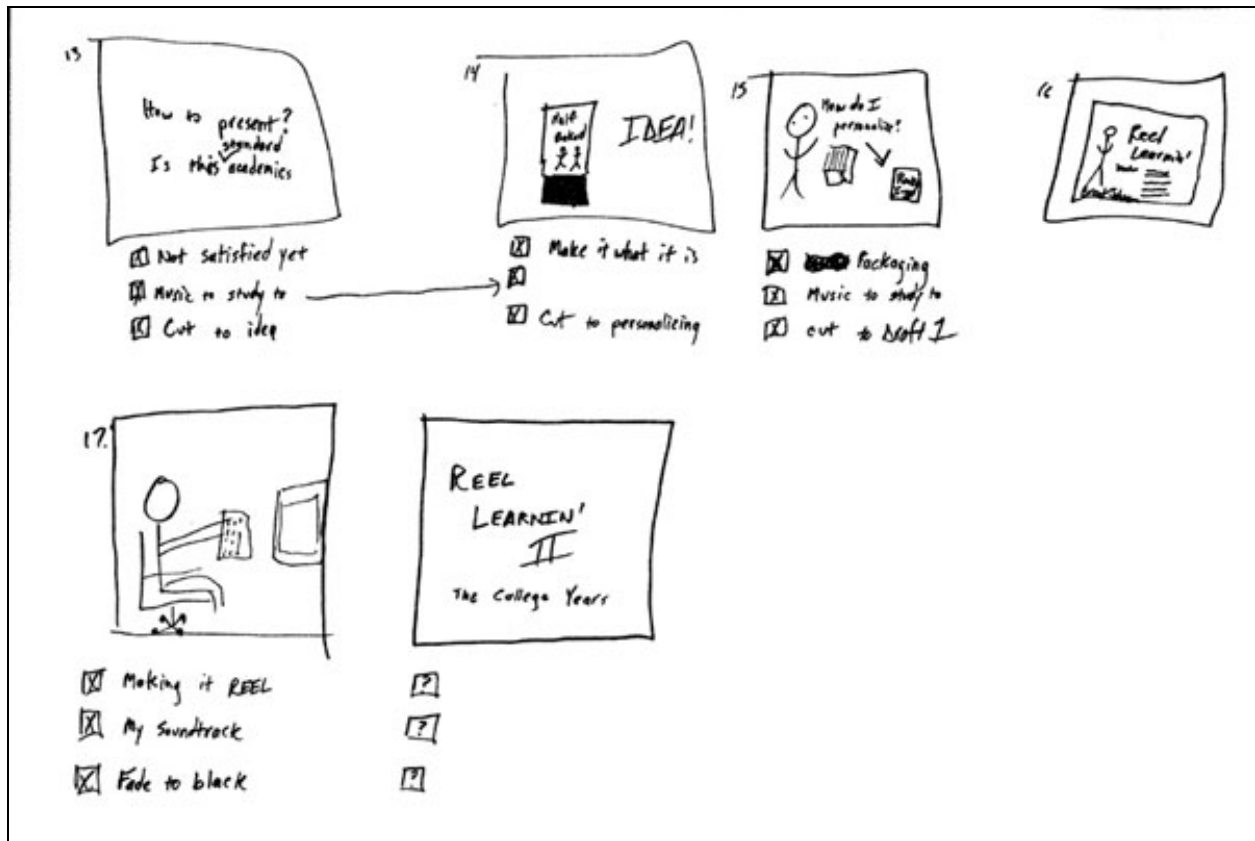Image 8. Johnson's drawing of the writing process (Page 1)

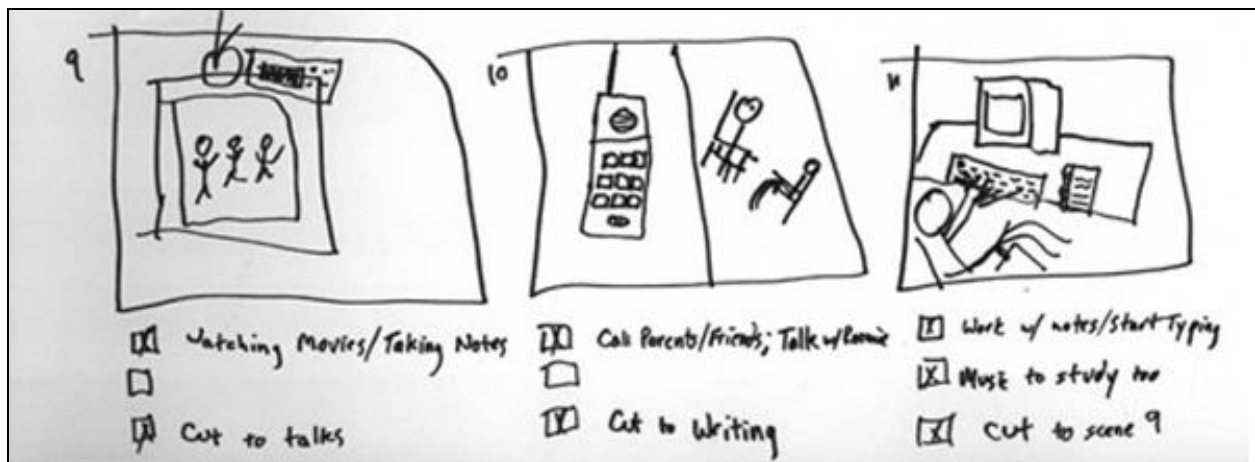Image 9. Johnson's drawing of the writing process (Page 2)

Image 10. Panels 9-11, a detail from Johnson's process drawing, page 1

More generally, his project highlights the co-genetic character of chronotopic trajectories. He is producing autobiographical reflections, and many of movies he re-purposes tell the story of a person. He emphasizes his high school experiences running cross-country, where a painful injury ended a race and his running career. The video he made in high school was about these running

experiences, and one of the movies he refers to is *Prefontaine*, a movie about a runner who faces a painful injury during a race. In his first draft of the paper, he wrote in part:

> Prefontaine represents the time when my life was dominated by running, but it also represents the tragic ending to my dreams. Just as in the movie, Pre drops in his only Olympic race to a heart-breaking fourth place, so too did I suffer a terrible defeat at the height of my career. Two stress-fractured legs seemed to demoralize me just as Steve Prefontaine had been demoralized. Rededicating myself to a sport so cruel and unforgiving seemed an unachievable ideal. As I watch Pre stager to his devastating finish, I see the very race where both my legs gave out on me. His pain becomes mine. The reality of the moment is far too real for film, it is my memory.

When Johnson sat down to write about lessons he had so far learned in his life, he could draw on the thickly threaded trajectories of biographical and autobiographic genres in print and film, on the embodied and representational chronotopes of running and injuries, and on many chronotopic moments in which he was watching films (always with certain people, in a certain mood) and eventually making his own films.

Michelle Kazmer is a graduate student working on her Ph.D. in Library and Information Sciences. In her interview, she discussed work on her dissertation prospectus, which was then still in progress. In her first drawing (Image 11), she depicted the two apartments she regularly wrote in, one belonging to her and the second to her fiancé, whom she termed "curly-haired guy" throughout the interview. A black line separated the two spaces, but the line was crossed by a road. Both apartments were adjacent to city parks, so both had trees outside. Kazmer focused on the office or work space of both apartments, not representing them except by the words "rest of apt" along one wall (with "rest of world" along a second wall). In her apartment, she represented the computer, files, chairs, books, and the printer (bolded because she prints out constantly as she writes). She also represented the piles of papers that surround her as she writes. The second apartment again showed a desk space, papers, a computer and a portable file. It was also split with a dotted line to separate her workspace from that of curly-haired guy, who often worked there at the same time, back to back. Among the material conditions she described was the fact that both her computers used two keyboards, one of which was set at her feet so that she could hit the space bar and the backspace key with her toes and thus relieve stress on her hands and wrists.

In her second drawing (Image 12), Kazmer traced a series of steps that began as she shifted from the idea for dissertation research that she had brought to graduate study to a new plan that emerged from work as a research assistant. Kazmer's dissertation proposal process stretched across three years, beginning in 1998 as she was working as a research assistant, doing telephone interviews and transcribing them. (These experiences introduced her to qualitative research, leading her to pursue qualitative designs in her own work.) The drawing went on to represent a series of struggles as she worked to develop her prospectus. The middle of the page depicts discussions with curly-haired guy at a local bar. The conversations dealt with the content of her

proposal, but were especially critical in managing affect and motivation at a point when she despaired of finding a way to write the prospectus:
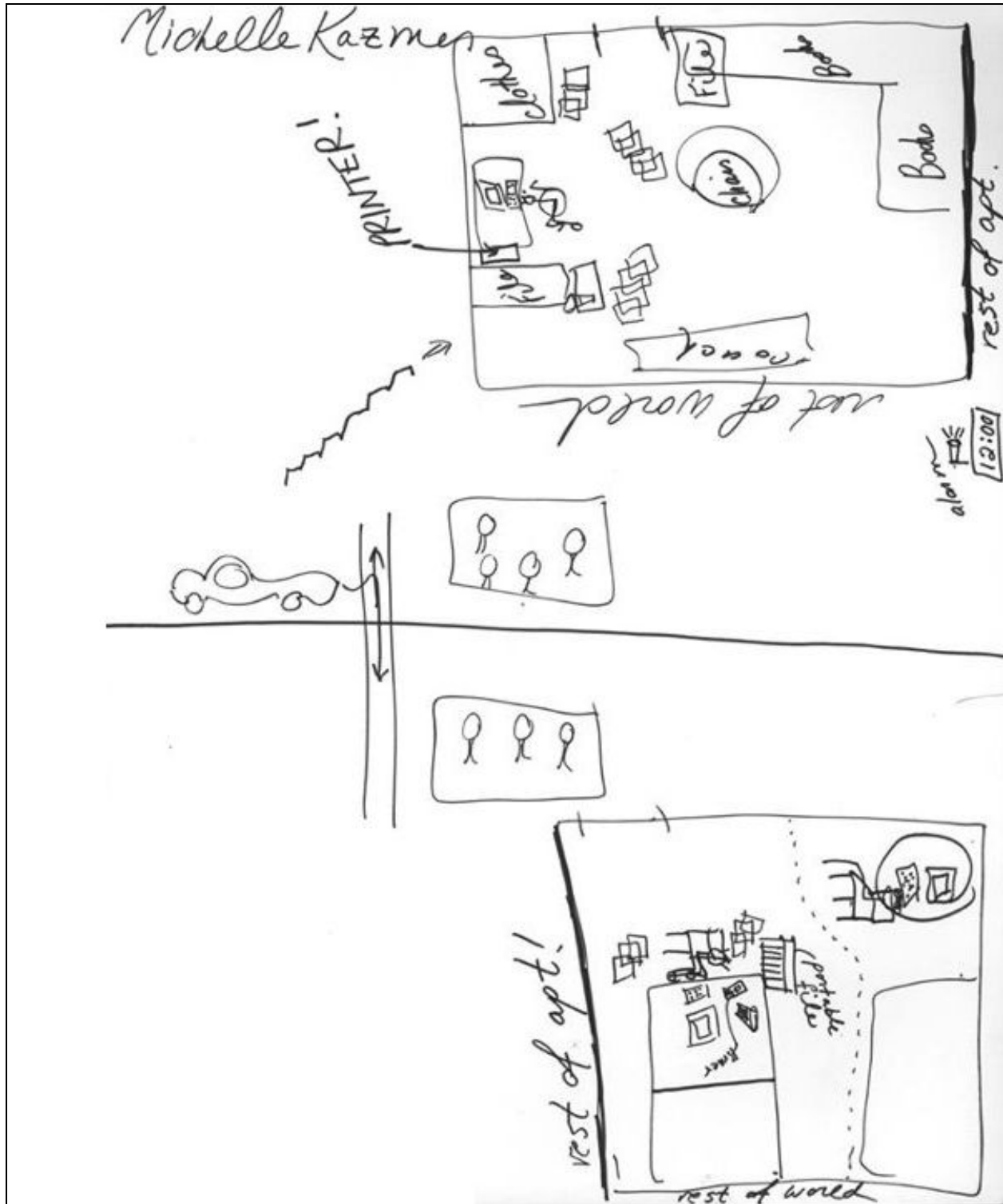

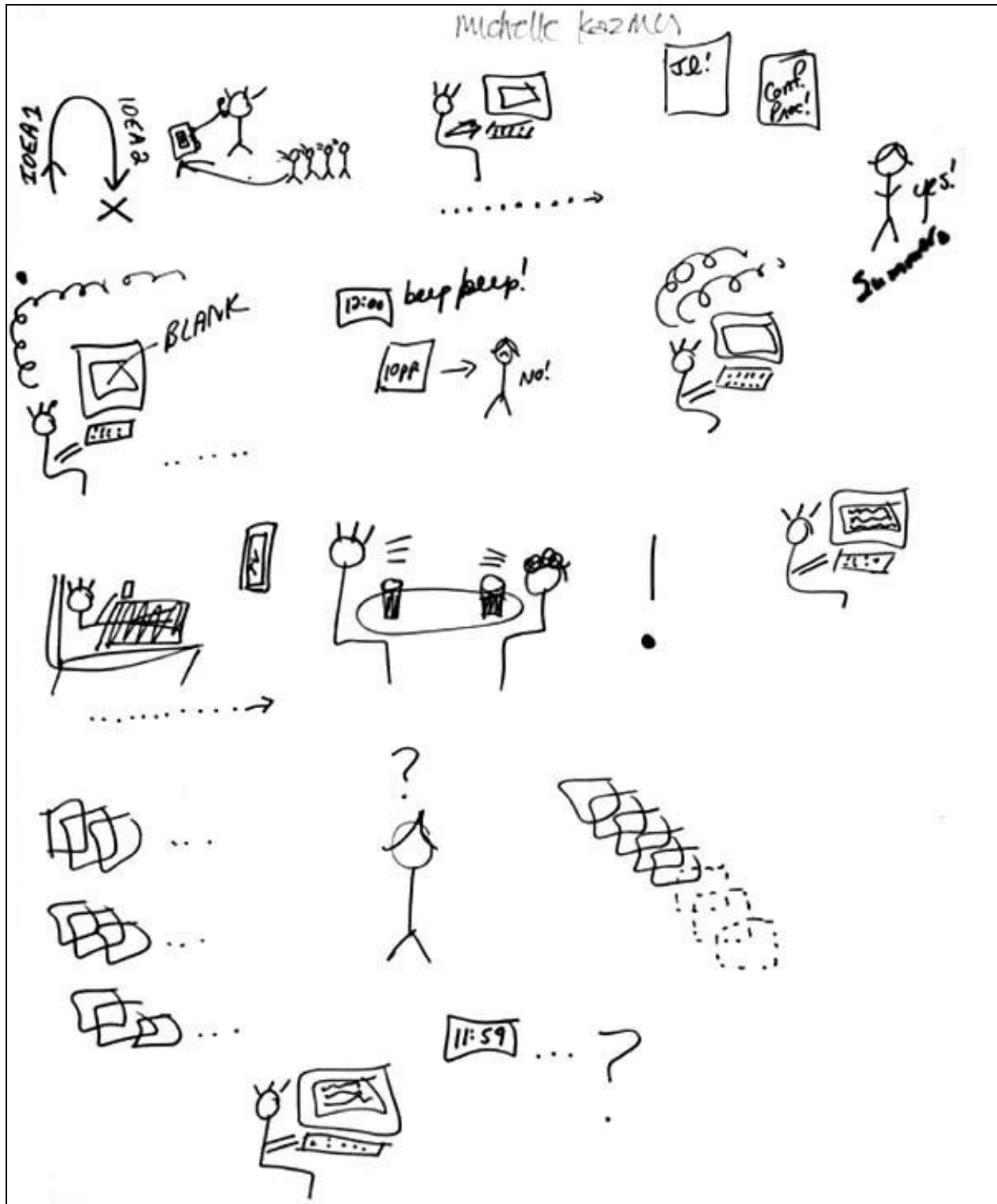Image 11. Kazmer's drawing of scenes of writing

Image 12. Kazmer's drawing of the writing process

Curly-haired person comes in here, living large because, um, it was, this is
the Esquire—it's kind of hard to tell because it's a little table and that's-
they're pints there at the Esquire and this is us talking back and forth. And,
um, finally I said, I have not been here for three and a half years to walk out

of here without a degree. This is stupid! You know, I just, I can't sit in front of the computer and just go, "heeh, heeh, heeh." You know? I just have to write something. It doesn't have to be the best dissertation proposal ever, it just has to be good enough to pass and, you know, that's what people are always telling me, right? So, curly-haired person and the beers and the Esquire and, you know, I finally get to that point where it's like, "NO!" Okay, fine. There's typing on the screen now

In the drawing (Image 13, detail from process), we see Kazmer's representation of herself at home watching TV (not writing and depressed), at the table in the bar, and then back at the computer writing again. The bottom sequence of images depicted her on-going work to complete a draft.
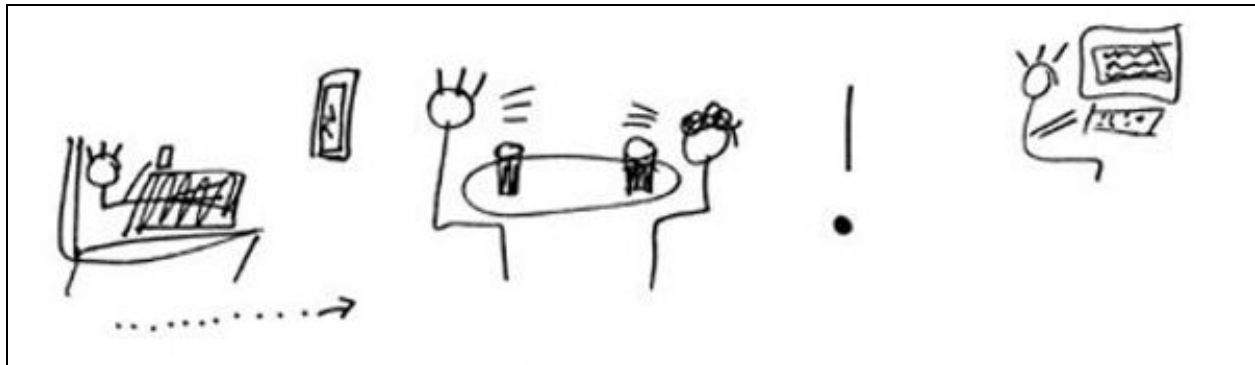
Image 13. Detail from Kazmer's drawing of the process

Kazmer brought a journal that she kept in addition to a thick sheaf of drafts and e-mail messages from her advisor. As she looked through her journal in the interview, she described its diverse contents (e.g., Image 14).

These are truly all-purpose. I mean if I flip through here, I will probably find for you things like, um, you know, yeah—here's one. This is actually an attendance sheet. This is which of my students were in my lab on this day and which ones were missing. Um, you know, on the other hand, this was precded by notes from an actual meeting from my advisor about my proposal. And followed by some, some much more densely written notes to myself and this actually I know from looking at them—this is when I was wrestling in here somewhere—where I was trying to deal with this. Um, just here—you know. Stuff like this. "I have no idea what that means." Okay? Um, stuff like this "85 citations, 36 pages double-spaced." I read somebody else's dissertation proposal and, you know, content-schmontent! You know. What I wanted to know was how long is it and how many citations do they have. So I wrote that down. Um, you know, notes on somebody else's doctoral dissertation. Um, notes on a book that I'm reading that's relevant to my stuff. Notes from a meeting the doctoral students had with the dean at GISLS that has absolutely nothing to do with my personal work—just miscellaneous kinds of stuff. I mean, really, "still have Mishler?" [inaudible] "Yes." yeah. Okay. This is in the middle of me, like, randomly writing stuff down about my proposal. I wanted to know, "do I still have the Elliot Mishler research interviewing book at home or did I return it to the library. Well, I found it. I have it at home. Um, but it really goes, you know, across, you know, to a

faculty meeting I went to because the doctoral student representative to the faculty canceled out that day. Um. . um, right. I was in a lecture one time. You know, funny notes. Somebody said "climactic" when they meant "climatic," of course, which I found to be really hilarious and, and, you know, promptly, promptly wrote it down. Um, these are actually—this notebook actually went with me when I defended—when I did my oral defense of my specialty exams. These are the actual—this is the actual oral for my specialty. This is the paper that I had in front of me, you know, where people are coded by initial and the things that they said, um, me buying time, thinking while they asked a question…. periodically what I'm doing with you now, like whatever notebook I've been working with most recently, I'll flip through it and, you know, cause—oh wait! [Shipka: "Hangman?"] YES!!! [Shipka laughs] YES!! Curly-haired guy and I play Hangman incessantly. I'm a crossword puzzle-, and we play Hangman incessantly! As a way of thinking. We have our own special form of Hangman where things have to connect up but the connection can be as obscure as you want them to be. Um, notes during lecture, what have you. But yeah. So obviously, this, this notebook we probably went to a bar, talked about work and so there's notes from that, um, idea about putting my own picture on my business card, right? … I can flip through and I see things like me trying to set up my schedule—my work schedule for the semester. Well, yeah! You notice, well you notice I'm at a conference while I'm doing this, right? I'm sitting in a conference session actually taking notes on the conference sessions. You know, the presenter
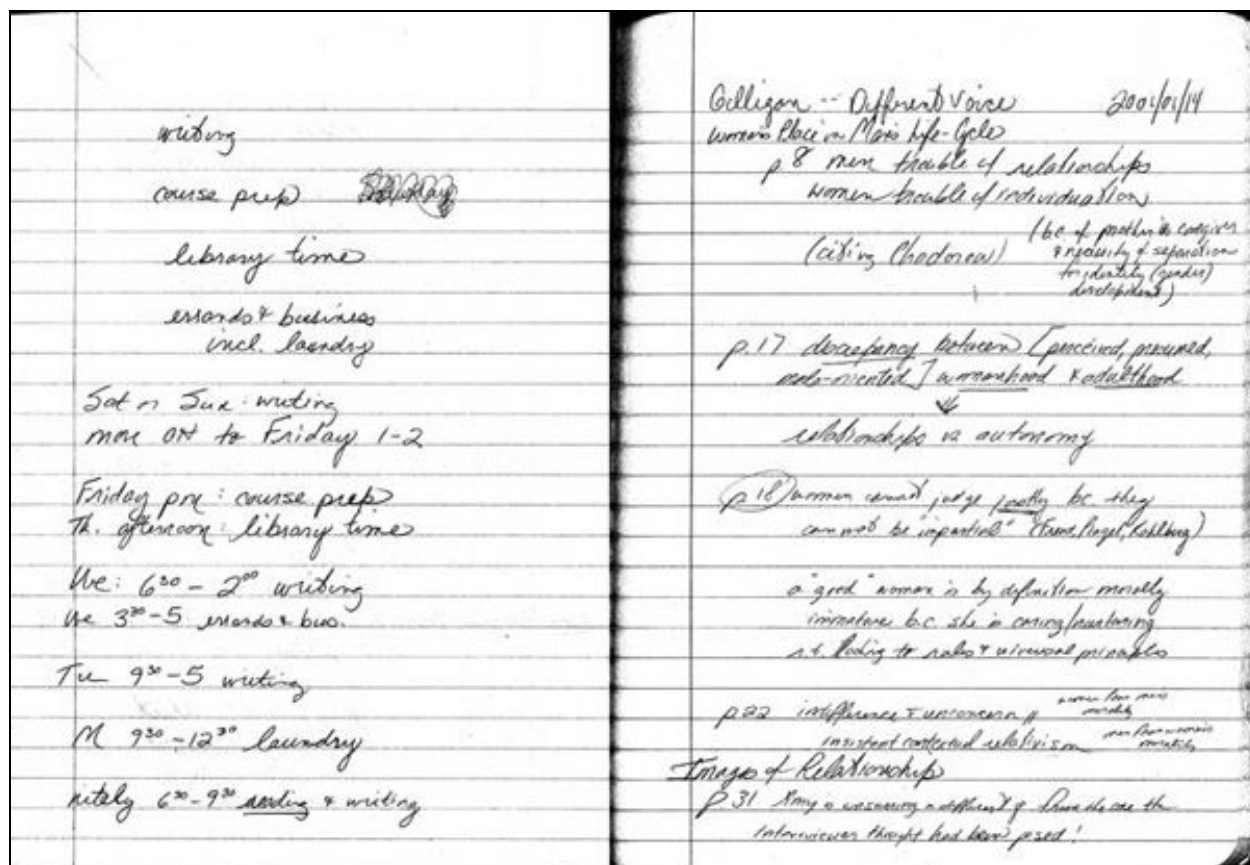
Image 14. Pages from Kazmer's journal

> and what they talked about and the URL that they gave in the middle of trying to figure out my work schedule for the semester. The session must not have been all that interesting!

The notebooks Kazmer brought to the interview thus indexed the complex historical and interactional lamination of her academic activity.

Melissa Orlie is an Associate Professor in the Departments of Political Science and Women's Studies at the University of Illinois. She has published articles, book chapters, and a book, Living Ethically, Acting Politically (Cornell University Press, 1997) that drew into dialogue the work of Hobbes, Foucault, and Arendt. In the interview, Orlie talked about an essay she was writing on walking as a practice, an essay that would link Nietzsche, Emerson, and Thoreau. The essay, in turn, was intended as part of a book that especially addresses Nietzsche, Emerson, and Freud.

In her first drawing (Image 15), she depicted the space of her home, focusing on two rooms, the living room and her office. She noted in this space the furniture, the placement of books, the position of windows, and various objects that helped create a mood, including a fountain with running water and a statue of the Buddha and, on her desk, a cup of black tea, a candle, plants, and incense. In her second drawing (Image 16), Orlie represented a split world of public and private settings. The top of the drawing abstractly evoked as empty rectangles the worlds of public presentation, peer review of manuscripts, and publication. The bottom two thirds of the drawing, representing the work process, appeared under a heavy black line and the words "I like to live in this world" with an arrow pointing down. This section of the drawing contained a number of boxes—foregrounding her practices of notebook writing and notation of texts in relation to writing on the computer, her processes of reading in various places, and her habit of walking (directly relevant to the content of the essay she was writing but also a typical part of her process)—as well as and a stick drawing of her partner, Sam, who was a key reader and respondent to her drafts. Orlie also brought along three (of the many) notebooks (Image 17) that she used extensively in her writing and a copy of a book (The Portable Nietzsche) that she had densely annotated (Image 18).

Overall, her discussion of her writing ranged widely over practices of writing, feedback from close and distant audiences, the material contexts of her writing, and the various kinds of struggles that writing encompasses. It also ranged widely over time, reaching back to classes, professors, and thinking she engaged in as an undergraduate at the University of California, Santa Cruz. She talks about varied moments of writing, reading, walking, and gardening. However, we would go beyond the interview to the introduction to her book as it offers a powerful account of chronotopic lamination and writing. Orlie (1997) writes about ways that experiences "living in New York City crystallized for me ethical problems and political questions that have reached one culmination in this book" (p. 2). In particular, she links her dwelling with her scholarship:

> Chapter 1 begins with a meditation upon our need to secure a home in the world (I mean a place to sleep and eat, not an ontological sense of belonging)
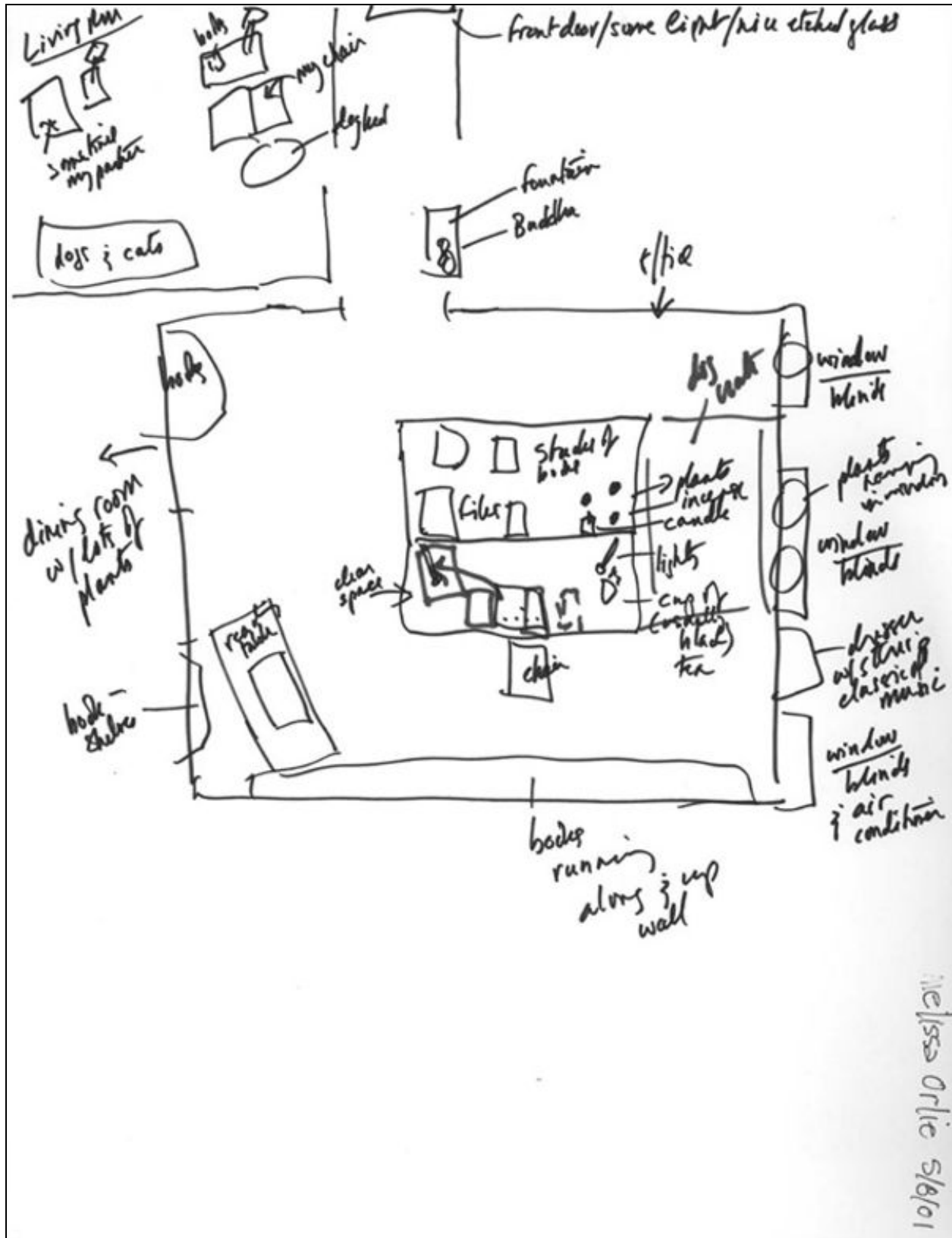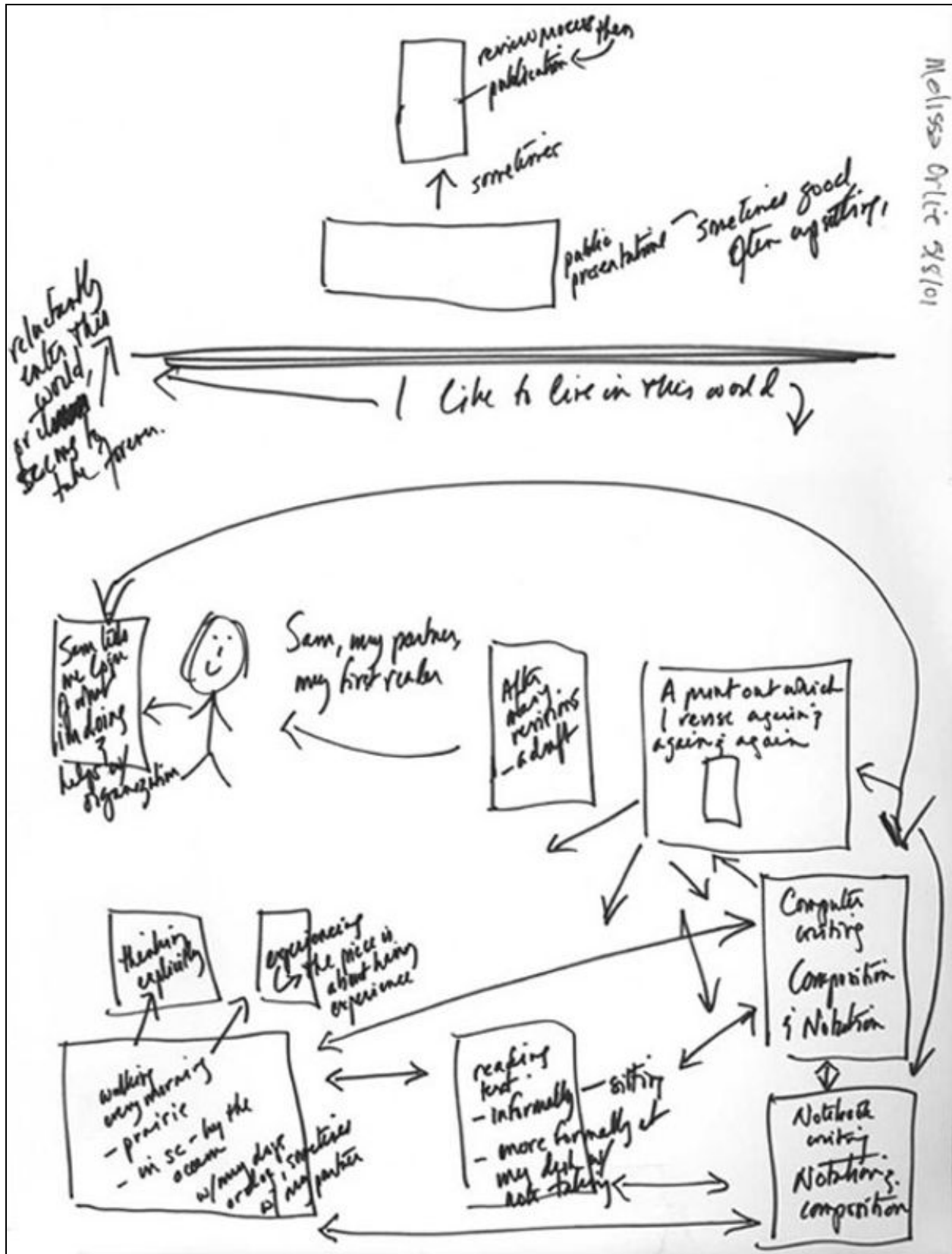
Image 15. Orlie's drawing of a scene of writing

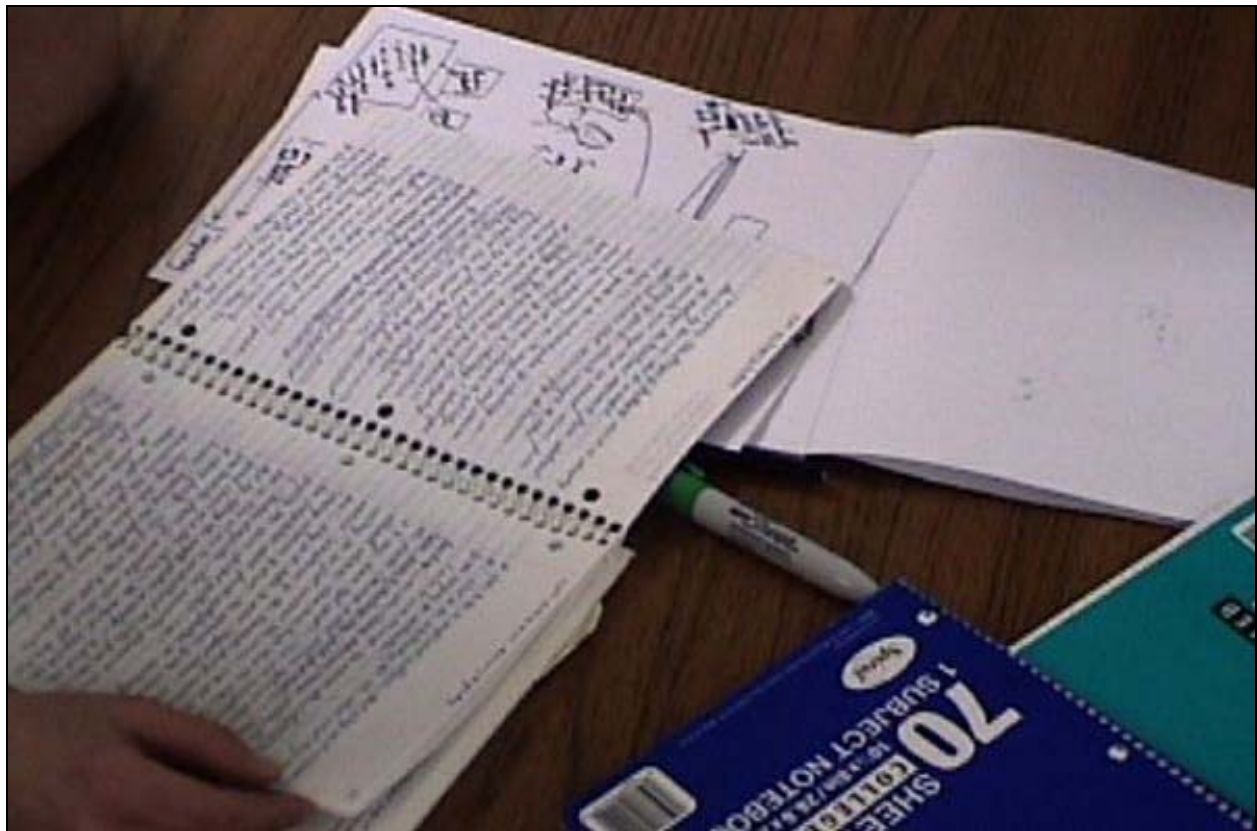Image 16. Orlie's drawing of the writing process

Image 17. One of Orlie's notebooks open to show her notes

Image 18. Orlie's marked, annotated and sticky-noted copy of *The Portable Nietzsche*

> and how this need implicates us in trespasses against others, specifically in processes that render others homeless. This claim is based upon observation, not speculation alone. Renting an apartment in a neighborhood undergoing gentrification was a constitutive experience for me and this book. When I moved into the then less-than-fashionable south end of Park Slope in Brooklyn, every building on my block was or was about to be in a state of renovation. But (don't tell my mother) crack sales and police sweeps were still the order of the day, and frequent auto break-ins infused capital into the underground economy. In 1991, when I left my Brooklyn neighborhood, the crack was pretty much gone, the buildings looked pretty, and the inhabitants of my apartment house were no longer elderly and working-class people of color but white upwardly mobile folks like myself. Progress? From one perspective, yes. But where did those other folks go? I have situations like this in mind when I speak in chapter 1 of a making from one perspective being an unmaking from another perspective. Good and harm are done simultaneously and in ways that perpetuate power relations that precede new activities. Such situations, manifest in the places we live, the food we eat, the clothes we wear, the other goods we use, and the activities we pursue, pose, I believe, the principal ethical and political challenges of our late modern time. (Orlie, 1997, pp. 2-3)

The remainder of Orlie's book focuses on the authors she is entering into dialogue with and on the issues she is pursuing. However, the quote above notes the way that specific embodied experiences may set an agenda that is then worked out in future texts (perhaps with no explicit mention of this precipitating context). It also illustrates the way chronotopic lamination melds together supposedly separate domains of life.

When asked how she felt about the project she was currently working on, she replied:

> Well, I really love this project. [laughs.] Um, it's, you know, other things get in the way of it. Um, I just, other projects—sometimes I've had to read things or do things that don't interest me or, you know, but this project is like, I mean all I have to do is read as much Emerson and Nietzsche and Freud as I can [laughs] and, and write about them and, and think about specific questions that I have in relation to them. And, and there's a way in which I am very clear that that's a lifelong project and, so, you know, I'm always both, trying to expand it but then also I can focus in on particular things, so, it, this is like a project I'm always wanting to get to and I really want to have the leisure to really dwell in it

For Orlie, questions about writing seemed hardly separable questions about life so pervasive were her literate practices.

The chains of invention and inscription these writers represented involved much private time. Each talked of hours of working alone, and each talked of specific practices of seeking solitude. Neuman said she did not write when her roommates were in the room. Johnson—uncharacteristically—closed his dorm door as he worked on this project because he wanted to concentrate. Kazmer described many hours sitting alone in front of the computer working on her prospectus. Orlie sought time alone and complained of the noise of the neighbors. Yet, this private time was never the whole story. Each reported seeking out other people for ideas and

support, often people who had no formal or official position in the writing process—friends, family, partners. Every one of the process drawings included representations of other people. Orlie talked extensively of how important her partner, Sam, was to her writing, as a knowledgeable critic who pushed her to clarify her arguments for her readers. Neuman told of friends at school and at home whom she talked with to get ideas for her list of values, for feedback on whether her idea would work in the class, and for encouragement to go forward with her plan. The figure of the instructor also appears at key junctures in her account of the process. In Kazmer's accounts, for example, we heard much of her advisor as well as her partner, both of whom were involved in working out content and in managing motivation. Writing in these cases then emerges as complex dispersed activity that is, across time and space, both intensely private and intensely social and collaborative.

Reflections on Chronotopic Lamination

These accounts raise a critical issue. How (theoretically, but especially methodologically) can we conceptualize and trace the dispersed, chronotopically laminated nature of acts of writing? How should we approach writing practices that are partially performed in private? While Writing Studies has learned how to look at interactional activity, at people responding to and co-planning texts in talk and text, it is not clear how to approach an individual sitting alone in a room and working on a text for hours. How can we trace chains of invention when prior experiences are recruited to present tasks or when writing tasks so suffuse the lifeworld that writing is occurring all over?

CHAT has acknowledged, if not always deeply, the fundamental heterogeneity of activity. Leont'ev's (1981, 1978) model of activity analytically distinguishes three levels: sociohistorically developed *activities* with their associated collective *motives*, individual *actions* driven by conscious *goals*, and equipped *operations* with *unconscious goals*. This model offers an analytical framework to decompose acts so that we can consider their heterochronicity (Hutchins, 1995) and their varied modes of being. Leont'ev (1978) asserted that activity is always multimotivational.

> …activity necessarily becomes multimotivational, that is, it responds to two or more motives. After all, the actions of a man [sic] objectively always realize a certain collectiveness of relationships: toward society and toward the person himself. Thus, work activity is socially motivated but is directed also toward such motives as, let us say, material reward (p. 123).

A potential terminological and conceptual confusion arises in activity theory. *Activity* names the whole, but it also technically names one of the parts of the whole. Activity[1], the whole, is concrete historical practice, the total, the union and disunion of all the things going on; it is what is happening. Activity[2] is the analytical plane that pulls out the collective and motivated as opposed to action and operational levels. Activity[2] points to durable human life projects, like getting food, establishing shelter, creating social relations and institutions, providing for security, reproduction (literal and social), play—all immensely transformed and complicated by the

sociohistorical development of specific practices. (Consider the distance between gathering local plants to eat and the many networks of economic, political, technological and everyday activity that bring grapes from Chile to homes in the U.S. during winter.) Thus, when Leont'ev (1978) says that all activity is multimotivational, it signifies that activity[1] always involves multiple, co-present activity[2]'s.

However, Leont'ev sketches this multiplicity only in the most abstract sense (e.g., people working in a factory making products are also engaged in making social relations). We must also take into account that activity[2]'s, individuals' actions, and the operational ground of artifacts and tools trace historical trajectories and are all co-genetic (Cole, 1992, 1996; Holland & Cole, 1995, Prior, 1997, 1998), always developing in association with other activity[2]'s, actions, and artifacts. Cole (1996) explores the co-genesis or co-evolution of mind, brain, and society in his discussion of modularity, presenting an image of densely interlaced trajectories to represent "the interweaving of modular and contextual constraints which denies temporal priority to either and which provides for 'leakage' between modules in microgenetic time" (p. 216). The historical development of domains such as industry, labor or schooling is not insulated from the historical development of race and gender relations, for example. They are co-developing (and here, of course, development doesn't necessarily mean improvement). This is one of the reasons why gender, race, sexual orientation, nationality, religion, and so forth are not irrelevant to, say, scientific practice. They're always already there. Goffman (1981) suggested that people routinely hold multiple footings, operating with multiple frames co-present and holding particular stances toward those frames; we are suggesting here that it would be useful, as a corollary to seeing activity as laminated, to take up a notion of multiple activity[2] footings.

Engeström, Engeström, and Vahaaho (1999) suggest the notion of *knotworking* to refer to "rapidly pulsating, distributed and partially improvised orchestration of collaborative performance between otherwise loosely connected actors and activity systems" and the "pulsating movement of tying, untying, and retying together otherwise separate threads of activity" (p. 346). They describe knotworking as a new way in which work activity is being organized and performed. While we do not question the changing nature of the work practices they document, we would argue that the basic description of knotworking is, in fact, a mundane and longstanding practice, a part of the normal and routine management of multiple activity footings. In this sense (like the absence of visual and material semiotics from English instruction in high school and college), what is historically striking are the institutional practices that so foreground single activity systems and so codify and formalize practices that it appeared, at least from a certain perspective, that the work activity was ever a single, solid, and rule-governed phenomenon.

Writing Studies, with its focus on process, has in some ways been attuned to the complex structure of acts of writing, yet most studies of writing processes have focused on immediate, short-term actions and operations (as in the cognitive protocol studies, e.g., Flower & Hayes, 1984) or, when longer sequences of acts and scenes have been traced, have continued to live within the circumscribed space of some institutionally defined world, the school or the workplace in particular, thus attenuating the laminated character of dispersed action. Without a

theory of activity[1] that attends to the intersection of durable projects, individual goal-oriented acts, and the affordances of mediational means and that also acknowledges the fundamental heterogeneity (and hence lamination) of activity, studies of writing have typically continued to rely on ideologies that see writing as a general skill of transcription and on everyday mappings of the social world, which seem to suggest that a named social space is a bounded, definite object. LeFevre's (1987) reworking of the rhetoric of invention as social is striking for its break with these models. LeFevre considered ways that broad sociohistorical movements, individual collaborations, and various forms of support (even as simple as bringing coffee to a writer in the morning) all fit into the social bases of invention. Latour's work in science and technology studies (e.g., 1987, 1993, 1999) has also argued against living within institutionally defined domains. He proposes following actors and objects wherever they lead as they form fleeting and hardened networks. Russell (1997) sketches activity networks of biological genres, considering key discursive interfaces among a variety of activity systems. Bazerman's (1999) study of Edison's material-semiotic activity offers a fine-grained case study of what he calls *heterogeneous symbolic engineering*, a rhetorically inflected version of actor-network theory, wherein the electric light emerges as a collective project emerging out of a bed of multiple technological and scientific trajectories, linking laboratory practice to media manipulation, patent law to charismatic personality, corporate development to classed and gendered aesthetics. Kamberelis (2001; also Kamberelis & Scott, 1992) and Dyson (1997) provide detailed accounts of the profound heterogeneity and lamination of elementary school students' oral and written texts, especially of the way mass media characters, themes, and utterances are redeployed by kids in classrooms. Such studies suggest the promise of seeing writing as concrete, historical, laminated activity.

CHAT and Writing Studies must further address the chronotopic lamination (and hence co-genetic character) of activity systems and further develop ways of attending to chains or trajectories of activity[1] that are often ambiguous and fuzzy; that may be tied, untied, and retied; and that stretch across official cultural boundaries. Academic writing is one domain replete with such extended and fuzzy chains of invention and production.

Sense, Affect, Consciousness

> Thought has its origins in the motivating sphere of consciousness, a sphere that includes our inclinations and needs, our interests and impulses, and our affect and emotion. The affective and volitional tendency stand behind thought. Only here do we find the answer to the final "why" in the analysis of thinking. We have compared thought to a hovering cloud that gushes a shower of words. To extend this analogy, we must compare the motivation of thought to the wind that puts the cloud in motion. (Vygotsky, 1987, p. 282).

For Vygotsky, Voloshinov, Leont'ev, Bakhtin, Luria, and others operating in Russian traditions, a key semiotic and psychological distinction is captured by the terms meaning (*znachenie*) and sense (*smysl*).[8] Meaning refers to the conventional social sense of a word, like *table*, with its usual referents (the various types of furniture) and conventional metaphorical extensions (tabling

a motion in a meeting). Sense though refers to the individual's subjective and particular versions of *table*, where a particular history of experiences (direct and indirect) and associations with tables is registered. For example, *table* may be saturated with the experiences of a family that eats together at a table, a table laid chaotically and informally with paper plates and plastic cups and utensils or a table laid in strict conformity to some etiquette with bone china, silverware, and crystal, a table with affective colorations of warmth or intense conflict, with a specific set of roles linked perhaps to gender and age (who sets the table, prepares the food), with conversations that may be strained, personal, philosophic, or filled with news.[9] And of course, these tables then sit in houses in neighborhoods in worlds of a certain era, tables that register the impacts of personal and public tragedies and triumphs. Sense then is rooted in the chronotopic interface of the embodied and representational, the social and the personal. It foregrounds subjects' consciousness without making consciousness an asocial, neoplatonic realm. In fact, meaning becomes in this view simply a stabilized field of sense, centripetally formed by cultural-historical forces.

> Meanings do not have existence except as in the consciousness of concrete people. There is no independent kingdom of meanings, there is no platonic world of ideas…. Is it possible really for "nobody's concept" to exist? (Leont'ev, 1978, pp. 169-170)

When we look at writers' private processes, chains of invention, and accounts of affect and motivation, it is difficult to ignore sense, affect and consciousness, even if these terms carry us into contested terrain.

Each of the writers drew representations of, and talked about, interior worlds of sense and affect as fundamental elements of writing. Each talked of struggles to capture in externalized semiotic forms for other people what they were experiencing internally. Their accounts illustrate the power and pervasiveness of sense and affect in literate activity, the ways that worlds of writing are deeply woven through with personal experiences and sense against a background of affective and motivational forces.

Writers' Accounts of Sense, Affect, and Consciousness

Asked how she felt about writing, Orlie contrasted the productive intellectual working out of ideas (which she called the notational phase, dominated by reading, note-taking, and journal writing) with the need to communicate in academic fora (which she called the compositional phase).

> It's, um, it's something I enjoy a lot. I mean, writing in my note, notebook … I wouldn't go so far as to say I'm a journal writer like Emerson or someone like that, but there's really a sense of, um, a lot of the people I write about like Emerson or Nietzsche, you know, if it's, if it's writing as a daily practice and then drawing from that sort of notational system to compose something, I think that's how I work. So, and, when I'm in that notational process, I can often really enjoy that although, of course, then I reach a point where, you know, I'm frustrated because I need to get more compositional. And then, if

> I've got enough in the notational, then again, the compositional can also be …
> enjoyable and fulfilling, and I can feel like I'm, um, you know, I'm expressing
> myself. I'm always working through something, writing is very personal to
> me.

Orlie talked at varied points in the interview about, and represented in the bifurcated spaces of her process drawing (see again, Image 16, above), the struggle to communicate her ideas clearly and the critical responses she sometimes got from readers who didn't feel she had succeeded or who failed to get her arguments.

Orlie talked about the struggle to move from her ideas to expression/communication, even as she acknowledged—with a clear sense of contradiction and puzzlement—the difficulty of squaring her experience as a writer with her theoretical commitments.

> Shipka: …I'm also wondering about that, that voice—you know, who are you
> editing for or to? Is it yourself—that it doesn't seem right to you? Do you
> think about, you know, Sam's influence, where it's all of a sudden, "okay,
> Sam will think this, so I'm going to catch myself" or is it—
>
> Orlie: I think it's—there's an abstract audience but it's so abstract that it
> can't really be present. It's much more about, um, it's about a relationship to
> myself, have-, you know, I have this experience—I don't think it's, you know,
> I don't think I could defend this conception because I don't think it fits my
> understanding, you know, of the mind—it's relationship to social reality and
> stuff like that—but I think that I, I write as if—my understanding of my
> process is something like I seem to think that I have something that I'm
> trying to say or that I see and it's inside. And you know I'm trying to say it
> really to myself. You know? So I don't know if I think it's a truth. I don't think
> I think that. I think it's a, a, you know what I (see and have to say), but I'm
> always amazed like, "Oh look at, there's a connection here," you know, it's
> like I'm bring-, **I'm mapping an internal world and sort of bringing it
> out, and sort of telling my truth, I mean, I think that's kind of silly,
> but I-, probably that, that seems to be how I understand what I'm
> doing**. [emphasis added]

What is striking here, besides her obvious (*that's kind of silly*) struggle to align theory and experience in this domain, is the image she arrives at of "mapping an internal world and bringing it out." This image suggests a kind of semiotic translation between an iconic, and still somewhat unknown, interior world and a linguistic articulation that must be formed and externalized for others to apprehend. Her sense of this expression as her truth, and of the fragility of its reception, seems to echo Bakhtin's (1981) notion of internally persuasive discourses, which may be "denied all privilege, backed up by no authority at all…not even acknowledged in society" (p. 342).

In his interview, Johnson described how he struggled to make the form of his text match up with his sense of the message and to make his project personal in form as well as content.

> I just printed out and then the next big issue for me was, ah, how to present
> this because I didn't like handing in the paper after after I had done this—I
> didn't think a paper fit it at all and, ah, so, you know, how to present it…and

> then, ah, like I just got the idea when I was writing and putting a movie back
> in the case, I was like, [snaps] "Whoa, that's it." Um, and so, I knew I'd do
> something with all the different boxes and put something inside of them to
> represent what they meant to me as opposed to just the movie…. And, ah, so
> I had five movies then with five distinctly different lessons but it still wasn't,
> you know, it wasn't real personal—you wouldn't know anything about it until
> you looked inside each one, what they meant, and, so I kept having the
> problem, you know, how do I personalize it? How do I get something outside
> that, you know, this is me, inside is the movies and inside of that is that like,
> kind of a hierarchy of everything, and so, like, I just was looking for a movie
> one night, and as I was looking at the rack, I saw this box [referring to the
> cross-country video he made in high school] and I, you know, it's just one of
> those things that hits you, and you're like "that's it," and, so, you know, you
> come up with something to put around the box, to personalize it, I wanted my
> picture there and just several different things I wanted to be represented on
> the very outside of it. Like the cover. Um, and so I got the box put together.
> Um, then from there I handed that in, and that was my first draft and going
> back and revising it was a matter of going back to what I did in high school
> and putting it in as an actual movie adding the, ah, soundtrack…

Here then, Johnson explains how he moved from a conventional paper in which movies were content to a series of texts inside the boxed covers of the movies he was writing about, and then how he eventually ran across his own videotape of his cross-country experiences and added that to the whole package. Nor did the process have a sharp finalization for Johnson.

> …I don't want to roll the credits on it yet because it's, like, a real, a great
> project I've had—it's something that, like, every time I watch movies now or
> something I'll still equate things with that. And I always think about this
> project and, just different ways I could go off with it now. And I don't really
> have the opportunities now but, ah, it's something I'd like to go back and do
> more of the same sorts of things, so there's a, a second edition awaiting
> hopefully.

In the text of the paper he brought to the interview, Johnson speculated on why he was so drawn to, so taken with, film as a medium. In effect, his paper itself raised issues of sense and affect.

> Cross country represented some of my best times and my best friends from
> high school. And as captain of that team, I decided for all those that had run
> with me, and for myself, that I would make a cross country highlight/memory
> tape. This movie may have the most powerful effect, because not only does it
> represent four years of several of my fondest memory, but it also contains
> the actual memories, as **for the first time, the images on the screen
> seem to match perfectly the images streaming through my mind**.
> (emphasis added)

Johnson seems to be articulating the reality effect of film, an effect intensified here by his own strong sense (as a participant in the events) of the historical-material indexicality of the film. He also, however, seems to be celebrating the heightened coincidence between the full sensory experience of this production and the events as he personally remembers them. When Vygotsky (1987) discussed the infusion of sense, he gave as examples titles of literary works like *Dead*

Souls and *Hamlet*, which come to indexically signify the reader's experience of reading and reflecting on the works, perhaps across multiple occasions in a life. Johnson's paper was premised on this kind of infusion of sense and affect, though he chose whole films as his examples:

> It seems odd that at times where I miss my own mother I don't necessarily need to call her, but rather throw the movie *Entrapment*, the last movie we watched together prior to my leaving for school, in the player and the pain seems to subside. My VCR seems to become as important to me as any person down on campus has, for it knows all my memories, and seems to play them out perfectly each time, giving me exactly what I needed to see, even though that vision isn't necessarily embedded into the film.

Neuman's interview focused on the sharp tensions as her sense of her values as a work in progress and her word jumble as a creative expression of this view collided with the instructor's sense of the text as an evasion of commitment, an expression of uncertainty rather than resistance. Neuman was particularly upset that the time she spent and her attempt to approach the task seriously and with integrity went unrecognized, while classmates' insincere and perfunctory texts won praise and points.

Neuman explained how the task of articulating her core values into a mission statement offered her an opportunity to express her general resistance to the course material.

> Um, we have three basic books that we use, and the core values one is a book … called *Emotional Intelligence*, and, ah, I really don't like the readings, but I read them just because I want to know what's going on in class, and I usually tend to disagree with them, but, um, and, and this, this was also my way of, like, showing that I, I disapproved of the book's, um, way of talking about values because they were saying, it, it's like set in stone, and, I I didn't think that at all, so this was, like, and so, it was kind of exciting cause I could kind of, like, voice my opinion….

As for the explanatory page (see again Image 4, above), Neuman described its purpose in terms of anticipating potential misreadings by the instructor.

> I, actually, it took about, um, 15 seconds before I realized that I wanted to do this, so, cause I sent this and I'm like, "Oooh, I want to say why I chose these words," cause I didn't think that she'd be able to get it necessarily, like, she'd be like, "oh you value fury?" Like, "okay." So I wanted to put while, like, I said, while I shouldn't, while it shouldn't be valued, it often is. And I thought that she probably didn't—I didn't really do it for me but I did it because I didn't think she'd probably get it.

When asked why she enjoyed doing the word jumble, Neuman said, "I was just really proud because it was, ah, for me, like, it meant a lot."

Neuman was disappointed that the instructor neither got the point nor recognized her effort. Beyond the grade itself (2 out of 5), the instructor's comments on the content were negative.

> Um, well they give you feedback when they give you the, the grade for it.
> Um, she said that it was, um, nice but what did that mean about my values?
> Did it—I didn't answer the question for her, um, did it mean that I was
> adaptable, did it mean that I was changeable, like what, what does that mean
> about my values?

In contrast, when asked why she didn't bring her final mission statement to the interview, Neuman said: " I don't really, like, consider that, like, my, my mission statement, you know? I just, that's what I turned in because that's what I needed to do…." Describing the text, she elaborated:

> …you had to put in why it was a goal and how it related to your mission
> statement, so I just had really generic topics like love, determination and,
> like, um, family. I don't even—I don't remember what they were cause I don't
> really care, but um, and so I just had to take really general topics and try to
> put them into, like, a paper basically…

Yet in this case, the instructor's response was very positive.

> **Shipka:** What was, and what was her response to this version—when you got
> your grade back?

> **Neuman:** "Wonderful. Good job." Like, um, "I, I can see that you, that you,"
> like, as she sees it as, like, the class has helped me find my, my, goals. Or,
> not my goals but my values, and I don't see it as, like, ah, one class and, like,
> two weeks can make me suddenly find my values. So, I thought that was kind
> of bogus.

Neuman's story of her mission statement could be interpreted (again) as a conflict between internally persuasive and authoritative discourse in a dual sense. Her initial texts, which she believed in, could be read as internally persuasive discourse, whose sense seemed to evaporate in the instructor's reception. Likewise, her re-do of the assignment, which she felt as empty of sense and purpose and over which she disavowed any ownership, were lavished with praise and points. That text seemed to be considerably amplified in reception. However, such a reading seems problematic on two counts. First, unlike Bakhtin's (1981) assumption that internally persuasive and authoritative discourses represent some general social evaluation, we read Neuman's word jumble and list as creative and valuable texts. Of course, we also read her texts clued in to their import and to her intentions, contexts that the instructor did not seem to have available. Second, the gap here is not simply one of meaning, but also affect and effort. Neuman is pained by the instructor's lack of recognition of the sincerity of her first texts and of the time and care spent in doing the task and by the lack of recognition of the emptiness and disengagement of the re-do.

Kazmer's interview also pointed to communicative tensions, but highlighted the affective and motivational challenges that can block writers and even lead projects to be dropped. Narrating the process drawing, Kazmer described completing the first draft, getting written responses from her advisor, and then a scene so traumatic she had not even drawn it.

I finally did get something that looked more like a workable draft—something on the order of thirty pages, I sent that to her [Kazmer's advisor] and she came back with a page of comments guiding me about what I should do next … and this cost me—when I first read it I was really, really happy. I was like, "Oh great! She read it, she understands where I'm trying to go, she's giving me specific things that I need to do to fix it. I know exactly what I need to do." When I sat down to try to implement this into this text, I actually wound up here again [Kazmer points to the image she drew of her sitting, not writing, in her apartment], but it was so much more traumatic that it's not even in the picture. This was me writing and this is me with all these bazillion drafts. And I just really—totally left this part out. Because this had me absolutely paralyzed for about two weeks. I mean, paralyzed. I sat in front of the computer and would cry. [Shipka: "the fact that you couldn't incorporate"] Yeah. [Shipka: "what she had sent."] I couldn't figure out how to incorporate and she's really busy and, and I had met with her once about it, face to face and I was just like, I was just like, "I can't do this. I can't go and talk to her again and I can't write this!" And I tried. I mean, I wrote all over this stuff! I wrote here what her notes are. She had notes in the document. I went back in and, and interpolated my own notes in the document, trying to figure out how to do all these things to this. It never, it never happened!

She went on then to describe how she got past this serious block.

When I finally got started working again, it was not with this… It started out with this draft actually. But, not these comments… So, this is when I wound up splitting the thing into the multiple files and, and really sitting there and just trying to hash out—I mean I, I had all these techniques for getting yourself un-panicked and, and one of the things that worked was that this is me breaking up into the three files and the time with each one and the, and the continuing things and what really helped me was, um, just focusing on, like, a little tiny thing. like, okay, one thing I know I have to do with this is I have to go through it paragraph by paragraph and make it less chatty. Okay. I can do that. I can turn something that sounds chatty into something that sounds academic.

Interestingly, Kazmer found that changing the tone of the language revealed content issues she had not recognized.

But what happened from there was that I started realizing whether there was content missing. Because when I flopped it from a chatty style where you can get away with saying things like bleah-bleah-blah blah blah and you try to turn it into very specific academic type writing you start to notice content missing. Well, that's okay. I can fill in missing content! OOH! And then, it's, then it started to go together!

Kazmer's tale of emotional upheavals and of strategies for recentering herself and her work points to the centrality of affect and motive in writing.

Reflections on Sense, Affect and Consciousness

Writers frequently articulate the experience that externalized utterances (oral, written, graphic) do not do justice to, do not fully express, the sense or tone that was intended. Expression then often produces a sharp, disturbing sense of loss and disorientation. Vygotsky (1987) pointed to some of the transitions that occur in expression.

> Thought does not consist of individual words like speech. I may want to express the thought that I saw a barefoot boy in a blue shirt running down the street today. I do not, however, see separately the boy, the shirt, the fact that the shirt was blue, the fact that the boy ran, the fact that the boy was without shoes. I see all this together in a unified act of thought. In speech, however, the thought is partitioned into separate words… What is contained simultaneously in thought unfolds sequentially in speech. Thought can be compared to a hovering cloud which gushes a shower of words. (p. 281)

Beyond the shift from a holistic and multi-sensory semiotic to a linear-verbal semiotic, there is also the question of the observer's feelings about the scene, questions of tone and evaluative orientation. Is the barefoot boy celebrating with abandon a beautiful summer day, evoking perhaps a complex mix of joy and nostalgia? Or is the barefoot boy a starving and ragged child running from soldiers and explosions, producing quite different emotions and motives for action? In any case, squeezed into an externalizable form something is lost, not only the holistic world of inner representation, but also a world that is embodied, affect rich, and deeply dialogic. At the same time, the externalized form adds to and amplifies certain meanings, producing resonances not intended or felt by the writer.

Bolter and Grusin (1999) present an extended series of reflections on media, new and old. They argue for the centrality of the notion of remediation (which we prefer to write as re-media-tion to keep it distinct from other potential readings of the word). Re-media-tion points to the ways representations move across media, the way for example a book may turn into a screenplay and storyboards into a movie and then a game and so on, a process that is in some cases termed re-purposing (as Brent Johnson re-purposed movies and the videotape boxes and ultimately his own text). Bolter and Grusin stress that re-media-tion is an on-going dialectal and nonlinear process, with old media shaping new media and vice versa and with old media continuing to be used after new media are developed. The range of media they are interested in ultimately may be suggested by a passage they cite from McLuhan (1994):

> The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph. If it is asked, "What is the content of speech?," it is necessary to say, "It is an actual process of thought, which is itself nonverbal." An abstract painting represents direct manifestation of creative thought processes as they might appear in computer designs. What we are considering here, however, are the psychic and social consequences of the designs or patterns as they amplify or accelerate existing processes. For the "message" of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs. The railway did not introduce movement or transportation or wheel or road into human society, but it accelerated and enlarged the scale of previous human

functions, creating totally new kinds of cities and new kinds of work and leisure. (p. 8)

McLuhan's comments are interesting in two senses. First, they suggest media theory's many resonances with CHAT accounts of mediational means. McLuhan's analogy of the railway echoes Vygotsky's argument that mastery of new material and psychological tools leads to a functional reorganization of elementary processes that may have revolutionary consequences. Second, McLuhan signals his willingness to move beyond new media into those primordial human media: perception, thought, and spoken language. Although Bolter and Grusin do not treat these media (coming closest when they discuss how new media are re-media-ting identities), we believe that the notion of re-media-tion may help to frame some key issues that many writers have noted, the struggle and sense of loss in expression. Vygotsky treated this issue in his discussions of interiorization and externalization, suggesting that he saw an internal multi-sensory and sense-laden semiotic medium of thought, which is reorganized by and infused with, but never replaced or totally dominated by, inner speech, which in turn has to be re-media-ted again when externalized. Vygotsky (1987) made these observations about relations among thought, inner speech, and external utterance.

> External speech is not inner speech plus sound any more than inner speech is external speech minus sound. The transition from inner to external speech is complex and dynamic…. External speech is a process that involves the transformation of thought into word, that involves the materialization and objectivization of thought. Inner speech involves the reverse process, a process that moves from without to within. Inner speech involves the evaporation of speech into thought. (p. 280)

This image of internalization and externalization as re-media-tions can also be related to Hutchins's (1995) views of distributed cognition as the transformative "propagation of representational state across representational media" (p. 118), each of which, including human minds, have particular properties as media.

Voloshinov (1973) presents a similar view of utterance, wherein inner speech and inner genre are continuous with externalized speech and genre. Discussing the effects of expression on experience and experience on expression, Voloshinov suggests:

> The claim can be made that it is a matter not so much of expression accommodating itself to our inner world but rather of our inner world accommodating itself to the potentialities of our expression, its possible routes and directions. … We shall use the term behavioral ideology for the whole aggregate of life experiences and the outward expressions directly connected with them. Behavioral ideology is that atmosphere of unsystematized and unfixed inner and outer speech which endows our every instance of behavior and action and our every "conscious" state with meaning. (p. 91)

Voloshinov sees established ideological systems such as religion, science, and law as "crystallizations of behavioral ideology" (p. 91). He also suggests that there are different strata of

behavioral ideology, ranging from the lowest, most fluid, quickly changing, and erratic that finds little or no support in social expression to the upper strata, most closely linked to ideological systems. Voloshinov saw these upper strata as the most intense interface of the person and the social, an interface where novel, creative, and radical energies might emerge that change established ideological systems, but also as the strata that most fully and deeply incorporate and are influenced by existing ideological systems.

In the course of discussing creative individuality, Voloshinov offers a striking statement of how semiotic re-media-tions relate to the on-going production of individuals and social formations.

> What usually is called "creative individuality" is nothing but the expression of a person's basic, firmly grounded, and consistent line of social orientation. This concerns primarily the uppermost, fully structured strata of inner speech (behavioral ideology), each of whose terms and intonations have gone through the stage of expression and have, so to speak, passed the test of expression. Thus what is involved here are words, intonations, and inner-word gestures that have undergone the experience of outward expression on a more or less ample social scale and have acquired, as it were, a high social polish and luster by the effect of reactions and responses, resistance and support, on the part of the social audience. (p. 93)

For Voloshinov as for Vygotsky, human sense, affect, motivation, and consciousness are fundamentally sociocultural phenomena, but never transparent and mechanical.

> ...not even the simplest, dimmest apprehension of a feeling—say, the feeling hunger not outwardly expressed—can dispense with some kind of ideological form. Any apprehension, after all, must have inner speech, inner intonation, and the rudiments of inner style: one can apprehend one's hunger apologetically, irritably, angrily, indignantly, etc. We have indicated, of course, only the grosser, more egregious directions that inner intonation may take; actually, there is an extremely subtle and complex set of possibilities for intoning experience. (p. 87)

Affect, motivation, and evaluative stance are as central to sense and consciousness as specific referential experiences. However, it is worth asking if sense has been at the center of CHAT or for that matter, Writing Studies.

There have been studies of writing processes and writers (e.g., Emig, 1971; Brodkey, 1987; Chiseri-Strater, 1991; Herrington & Curtis, 2000; Brandt, 2001; Casanave, 2002) that have addressed questions of sense and affect in some fashion. However, the dominant approaches have focused on textual practices and contextual perceptions and have generally stayed within the bounds of some institutionalized scene (writing at school, writing at work). Think-aloud protocols could have given us not so much a window into inner speech and thought, but a dialogic threshold at which explorations of sense could have commenced (see Prior, 2001). Instead, this threshold was quickly boarded up and buried with boxes of cognitive operations and issues, in effect, of meaning. Geisler (1994) reports a case where sense broke through this boarding up because one participant's affectively charged inner dialogues dominated her

protocols. However, Geisler interpreted this eruption of sense as an absence of dialogue with the assigned sources of the research task, as a mark of egocentric thought and novice disciplinary expertise.

Although Vygotsky and Voloshinov were clearly concerned with sense, affect, consciousness, and personality, with these semiotic processes of translation, CHAT has subsequently tended to steer away from these issues, focusing instead on specific psychological systems (like memory, classification, and reasoning) or on social practices (typically the ontogenesis of the practice or its structure in systems of activity). Discussions of sense and affect (as in Vygotsky 1987) have tended to be marked by a shift to literary discourses (e.g., Engeström, 1987) or to the genre of hypothetical *someone* stories[10] as in Leont'ev's (1981, 1978) students studying for an exam or collective hunters. Valsiner (1998) suggests an alternative methodological approach as he turns to personality psychology and anthropology, with their detailed case studies of particular individuals (especially in the former) and triangulated delineations of collective subjects (especially in the latter). Indeed, CHAT-oriented anthropological studies (e.g., Holland, Lachicotte, Skinner, & Cain, 1998) offer explorations of sense and affect in individuals as a way to build understandings of collective subjects and their arenas of activity. Similar methods are visible in John-Steiner's (1997, 2000) studies of creativity, as she takes a very holistic view of the creative person, drawing together anecdotes, artifacts, and interviews. Her studies also emphasize the struggle to move from condensed forms of inner speech and other inner modes of representation to externalized communication of those thoughts, emotions, images, sounds, movements, and objects in varied creative endeavors. She highlights as well the complex chains of acts that are woven together in creative production and the oscillation between intense collaboration with others and work in solitude.

In concluding his final work, Vygotsky (1987) made the famous statement (quoted above) that has been taken up as a call for activity theory, as Leont'ev and others sought to describe those affective and motivational spheres of consciousness. However, reflecting on the complex relations of thought and language, Vygotsky also concluded that "only an historical psychology, only an historical theory of inner speech, has the capacity to lead us to a correct understanding of this complex and extraordinary problem" (p. 284) and that his own investigations had "brought us to the threshold of a problem that is broader, more powerful, and still more extraordinary than the problem of thinking…to the threshold of the problem of consciousness" (p. 285).

Here again, CHAT and Writing Studies alike need to further develop approaches that attend to sense, affect and consciousness, especially ones that trace the active commerce between individual and collective subjects and that integrate studies of psychological systems and activity systems with the study of particular persons-in-practice. Finally, any study of sense, affect, and consciousness must be sensitive to chronotopic lamination, to the interanimation of the many concrete and figured (Holland et al., 1998) worlds that subjects have available to them at every moment. The problem of consciousness in this perspective is not a question of identifying the operation of some transcendent mentality, but rather of defining some very human, very mundane ways of being in the world. In the next section of this paper, we examine a key

intersection of consciousness and chronotopic lamination in literate practices oriented to regulating attention, affect, motivation, and sense/meaning.

Tuning Consciousness through Selecting and Structuring Environments

> The dictates of the environment on consciousness frequently lead us to "isolate ourselves" in order to avoid interfering with "interior life." It is as though we were attempting to avoid the "outside semiotics" interfering with the "inside semiotics." Mostly, however, what we do in attempting to isolate ourselves is to situate ourselves in an external environment that is in tune with the mental state we want to attain. This search for being in tune is no coincidence. The outside semiotics and the inside semiotics are parts of the same system. (del Rio and Alvarez, 1995a, p. 394)

The formation of consciousness has generally been discussed as the durable equipping of mind with the legacy of cultural tools and practices. Del Rio and Alvarez (1995a, 1995b, also Alvarez & del Rio, 1999), for example, have talked of the fabrication of sociohistorical architectures for mind and agency, but what of the production of more fleeting ambiences, perhaps an interior decorating or a *feng sui* of the mind? Sensory deprivation experiments are one index of this constant (re)tuning, this on-going production of consciousness. Studies (e.g., see Soloman et al., 1965; Barabasz & Barabasz, 1993) have repeatedly found profound alterations in consciousness when sensory input is either radically decreased or frozen into a uniform, unchanging pattern. Paradoxically then stabilization of consciousness is grounded in (certain types and levels of) destabilization in perception and attention. Consciousness itself is, thus, shown to be fundamentally distributed; furthermore, it involves people's active practices of stabilization and destabilization, of seeking and managing order and change. In our interviews, we found a recurrent theme: the writers' environment-selecting and -structuring practices (ESSP's), the intentional deployment of external aids and actors to shape, stabilize, and direct consciousness in service of the task at hand. Del Rio and Alvarez's comments (quoted above) about tuning consciousness may be seen as part of the broader processes of dynamic, interactive stabilization of human and material agencies that Pickering (1995) also refers to as tuning. In effect, these findings extend our analysis from looking at the fact of chronotopic lamination to looking at on-going processes of chronotopic production.

Writers' Accounts of Tuning Consciousness through ESSP's

In her interview, Neuman explained that she did much of the work on her values mission statement in her apartment. She indicated that she worked alone (when her roommates were elsewhere) and with the TV off. She surrounded herself with key resources for this task (dictionary, thesaurus, paper, the computer). Also central for this task was seeking out others to talk to about her ideas.

> I knew what I wanted to do and I started doing it, like, right in class and then I started, like, telling everybody about it, and they were, like, "You shouldn't do that," "You're not going to get a good grade." And so then I went back to my place and I, I worked on it, and I called a couple of people and some told me no but then my friends back home [said] to go for it and they gave me a couple of ideas…so, I wound up calling actually a lot of my friends back home and, like, just asking them, like, what values they had, they have as well as what other values other, they think other people value, and then incorporated that….

Neuman sought out friends who would not only help her to generate a diverse list of values, but who would also help sustain her motivation. When her classmates told her the word jumble was inefficient and would not be graded well, she sought out friends from home, other voices, who would shore up her courage. Her account then displays intentional structuring of the social as well as the physical and symbolic environment. Seeking out particular social interactions was, in fact, a common feature for all four writers.

Johnson worked on the first draft in his dorm room, where he could watch movies, take notes, talk to his roommate, call family and friends, and write at his computer. Using the affordances of his room, he drafted extensively: "Every time I'd do something different, I'd print it out and look at it, see what I think about that, go back, do the same thing, it's sort of a cycle in there." He also scheduled his work: "I hated working during the day so I [drew] a window with lots of black in it cause I always [worked] on it at night." To avoid distractions, he kept his dorm room door closed, something he didn't always do, even when he was doing school work: "Usually the door is open but wherever I sat down to do that it was one of those things where you kind of close yourself off from everything else that goes around there as opposed with other homework." Like Neuman, while he avoided certain interactions (people in his dorm), he also sought out other interactions with people (family and high school friends) who could support his work. In particular, Johnson sought to draw on others' memories to supplement and trigger his own: "I'd call my parents if I was doing it on something on the past that involved them, calling friends if it was something I'd done with them and just kind of get things going through in my head." He also liked to work with his roommate because his roommate was a high school friend:

> We'd watch the movies together, and as I was taking my notes for, you know, what I was thinking about particular things and stuff that involved him directly, and some of the things he could help me with like, he'd always help me while I'm taking my notes, you know, running through ideas. You know, how was this? How was that? You know, when we did this, you know, what did we do then?

Tuning for memory was also an issue Johnson brought up as he reflected on what music he listened to during this process.

> **Shipka:** Um, in this space, what kind of music would you listen to when you were working on-

> **Johnson:** I was trying to think of that and I don't, offhand, remember—just, like pretty standard. Like the stuff I normally listen to, you know, whatever you'd hear on the radio, songs I'd download—nothing that, I don't remember if any of it had particular meaning. Like when I'd work on the cross-country portion of stuff, I'd always play stuff from that soundtrack just because, you know, it gets you in the mood. It reminds you of this and that. And, like, cross-country was the biggest one, like, with my friends, like I'd also listen to the genre of music that we'd listen to, like, they listen to a lot of rap music and just other things and, so, different things I'd associate with them. Like, I'd try and just, you know, get in that sort of an air or whatever and then cross-country had its own songs and, so, for that portion, do that sort of thing and just as much as I could, try and get back the feelings that you have when you're actually there.

At first, he recalled nothing specific about the music he had listened to, starting to give a generic answer, but then recalled listening to the cross-country soundtrack. At that point, he pointed to ways that he used music as a trigger to get back into the atmosphere and feelings of the past experiences he was writing about.

When asked about whether he had strong experiences of "getting it" or of getting frustrated during the writing, Johnson recounted this story of how his review of his videotapes led to a significant resource and, in effect, a major revision of his project.

> Originally, I hadn't decided to use the cross-country video. And then, um, cause I had—that's in its own little case, you know, it's not like one of those regular movies where you're looking through—"okay, it's this, this and this." And when I realized, one night, "Whoa, I've got this down here." I watched that, and that opened up all sorts of things and just got my mind working in different ways…like the cross-country video was the big thing that, said that, you know, this is a representation of me learning, like everything I learned throughout cross-country and, you know, what that meant to me and that was an actual, like, basically, it was a lot like the assignment—already completed.

ESSP's include the goal-oriented searches of already structured environments that are made during inquiry, the structured reading, observing, and making that people engage in, sometimes with serendipitous results. Johnson was reviewing his movie collection and watching movies to write his paper, but along the way he found another movie, the one he'd made about his cross-country experiences, and that movie then became the core of his project.

For Orlie, structuring the environment was a major and explicit part of the writing process. Furnishing and organizing her office was a matter she clearly paid attention to: she reported periodically reorganizing it as well. In fact, at the time of the interview, she was planning to move out of the city into a country setting to create conditions even more conducive to concentrated reading and writing. As she described her office, she noted:

> There aren't kids in the house and so, ah, but neighbors. I don't like (noise) which is why it's important to have an air conditioner [laughs] so you can close it up. And that's one of the reasons I'm moving to the country, is cause

> I'm tired of noise. Um, so, then I have two desks. This is a, um, an actually, this is an old school desk and I don't sit at this desk. I did for a while and I couldn't write because my legs were confined. So, I brought back my old computer table, which is a very open and, in fact, I even have the legs configured in such a way that I can really just sit in a really relaxed manner. And I, this is a fairly clean space, with my computer, room for papers and books. Um, there's little plants there, candle which I often light, incense, another little Buddha. Usually, there's a cup of black tea. [laughs] And then over here, there's a reading table that had—I can't remember what it's called but—oh, it has, it's like an editor's table. Ah, sometimes I read on that— sometimes I'll edit on that.

Orlie's descriptions not only detail the furnishing of the space (desks, chairs, an air conditioner, books, a computer, a Buddha, plants), [11] but also point to ambiences (a candle lit, incense burning) and bodily practices (a stimulating cup of black tea to drink).

Like Johnson, Orlie reported structuring time as well as place, though her motives and the preferred time of day for work were quite different.

> And I think that writing has to be daily practice. I constantly have to be thinking about these projects. I try to get up at five—you know that, that's my ideal, I mean the way I master it is I get up at five a.m. and I try to work, ah, until my partner gets up and she wants me to pay attention to her … I've done that since I was an undergraduate that, you know, the way to get work done is to get up at five o'clock in the morning and work until eight before, you know, and then you've at least got a few hours, um, you know, where people can't bother you anymore.

ESSP's involve not only setting up a context, but also the ways the writer inhabits and acts in the space. As Orlie talked about how she inhabits her office as she works, she quickly shifted to broader questions of structuring her ways of being and acting in the world.

> **Shipka:** And what about intrusions in this space? Like, for instance, if you sit down and say you're aiming for four hours of work that day. Would you do two, leave, come back or is it pretty much, "I stay in this space, work"?
>
> **Orlie:** No. I, I get up and move around a lot. I think, um, I mean since, you know, post-tenure has really made a difference. When I was, when I was working to get tenure and finish my book, I had, I wore a, a watch that had a timer and I would set it for an hour and a half and, you know, I would try to sit there for an hour and a half. And then I was working, you know, I'd need four of those a day or whatever at the very least. Um, and I would try in that time not to go to the bathroom, not get a drink or, or not- no, that's not true, I'd get a drink, go to the bathroom. There's other activities now that I haven't represented on this other page. It's like I can't do other activities like, more like, I guess, the answer to your question is this: Maybe I'd work for an hour and a half, and then I'd do the wash or work in the garden or I'd go to the grocery store. And, um, it's very important to me, I don't see the tending to my life as an interruption. Um, from the time, I remember it from being reading Marx as an undergraduate that I had this whole sense of, you need a really broad definition of work. And that the, **the conditions of work, you**

> **know, having good food, having the garden watered—all those things
> are about creating a sense of well-being for me so that I can work,
> and I don't consider them things not, you know, not to do, um,
> they're actually part of the process and I have to create time for
> them.** [Emphasis added.] But I once had a colleague drive by, ah, who also
> didn't have tenure who said, you know, "How do you have time to work in
> your yard, [laughs] you know, when your book's not done?" And I'm like, you
> know, "I have to work on my yard so I'll get my book done." And, you know,
> at that time it felt like it was a wager, you know, maybe I was wrong, maybe
> I was wasting time, but my sense was that I had to take care of myself in, in
> all these different ways in order to be able to work.

Later in the interview, Orlie returned to the wager she'd made, to the relationship between her
writing and other life activities:

> I did get my book done and I have finished other things and, um, still was
> able to, you know, I created this really great yard at my house, and you know
> that was because I spent, you know, entire Saturdays, you know, instead of
> writing, working in the yard and that's just what I needed to do. Ah, and
> there really is I think—I guess I really ultimately do revert to fairly organic
> metaphors that, um, there are periods of gestation and, you know, periods
> when things are really sprouting and just, you know, express a lot and then,
> um—and then sometimes you just need to get things set up, you know,
> where are you going to live? How much you going to get paid, you know, all
> that stuff and once that stuff gets in place, then I'm generally able to, um, to
> work

In these comments, Orlie touches not only on the value of other activities as a break, a period of
inventional gestation, but also as material, affective, and motivational context-building, creating
the conditions that would best serve her tasks of concentrated thought and writing. We should
stress here that our argument is not that some ideal general conditions exist. For a quite different
version of ideal conditions, see the *Paris Review* interview (Plimpton, 1976) with Jack Kerouac,
who sought out intense, wild, even dangerous events and people as a resource for his writing and
who reported writing some of his best work in extreme conditions.

While seeking isolation in her composing, Orlie also sought out and relied heavily on her
partner, Sam, as a respondent. She felt her book might have been more successful had she not
written it in relative isolation, had Sam been around then to respond so intensively to her work.
Orlie noted that she was "bad for trees" as she printed out and revised draft after draft of her
current essays before eventually passing the drafts on to Sam, who she described, laughing but
seriously, as "the greatest invention in my life in terms of writing." Describing herself as
someone with lots of big, but chaotic ideas, she found that Sam could identify the logic of her
argument and really help her bring that logic to the fore, to organize her texts and reshape her
sentences so that readers might more easily get the point.

Asked about why some of the journals she brought to the interview were indexed, Orlie
described how in her notational, journal-writing, text-marking practices (see again Image 17 and
Image 18, above) she employed elaborate strategies to organize these external textual memories.

> Well, I think I need them. Particularly for—I don't need them for, like these…. This is the Nietzsche text and commentary, this is, um, this is like a general journal but for the Nietzsche essays and book, so I need less of an index here cause it's really everything having to do with this process. And this is more, you know, my notebook from, you know, June 23, 1999, um to um, you know, to the present. And like I said, notice like I, I'm just writing here a lot less. Um, because I'm, I'm writing in some other notebook. But I'll come back again to um, probably to having another notebook like this. But this is become more my daily notebook. But this notebook that is, you know, a notebook I'm writing in everyday about everything, you know, a project on commodity consumption, Nietzsche, whatever. Um, I need an index. You notice sometimes—well, I don't know if I was doing it here—I've gone back to having, uh, notebooks for particular figures because I was losing stuff so I had the notebook I think that preceded this one that, um, well like here, I'm reading [inaudible] but I have another notebook, like, you know, I did a reading of Freud's um "Mourning and Melancholia." But then, you know, I also thought I cannot put that in my daily notebook cause I'll lose it so I returned to something I had done, um, at a younger stage where I had a notebook for [inaudible] and so now I've got my Freud notebook. But it's kind of funny cause I was, I have the little Princeton notebooks, from 1986, my notebook on Hobbes or something like that. Um and so that's how I'm keeping more control of the material. But for these daily ones I sort of need more index. But I don't do it consistently.

Orlie reflects on notebooks tailored to particular figures (a key part of her approach to political science being extended engagements with particular people, Nietzsche, Freud, Hobbes, Arendt, etc.) or to particular projects (like her reading of Freud's essay) as well as a daily journal with diverse content. She also noted ways she carried these practices over into electronic environments:

> And the other thing is, I guess, I would say that on my computer there's something parallel to this. This is something I learned when I was writing my first book, um, that I would, I have for every chapter, I had, ah, a file that was called "notes," and they were all dated and each day—cause there's obviously something in terms of my feeling like I'm getting somewhere or, like, I'm doing what I'm supposed to be doing that, you know—so, just each day I'd have a file. And, often, in that file, you know, there might be five pages of writing that I then just cut and paste and put right into a chapter but somehow I needed that representation.

The production and use of certain textual artifacts represents one type of ESSP.

Another extended, being-in-the-world practice for Orlie was her walking, particularly in tune with the essay she was working on, about walking.

> I usually go walking every morning, ah, now that my partner's living here or when I Santa Cruz [inaudible] we'd walk sometimes short, like, in the forest nearby or sometimes, like today, we went to Mahomet. And, um, with my dogs and—I consider this part of the writing process, well, particularly since I'm working on an essay on walking, I really can make it part of the writing process then, um, but there's just something about—sometimes I'm dri—on,

> like I say, here—sometimes I'm thinking explicitly about work and, and so is Sam and so we're not talking. Cause we're each just thinking about our own things. Sometimes we'll have a conversation about her project or mine. Um, but, often, you know, there's just, I think, you know, I'm working on it implicitly or less consciously, I'm preparing to be able to work…but I guess, particularly when I walked alone, um, you know, it was just—it gets me out of myself, in a way that you need to be out of yourself to write. Like, out of, um—cause one of the things I'm writing about in this project is the different, different manners of experiencing oneself and different manners of thinking and a form of thinking that is about kind of having experience and opening yourself to experience or having insight and then, you know, in contrast to sort of the neurotic, you know, sort of ego constantly circling, ah, around things. And, you know, both those things can happen in walking. But what I try to do is, is more of walking meditation, not necessarily slowly, but, you know, the point is to experience each step, to experience the environment, not to be in my mind, okay, so I think what I was saying is that the point of walking is not to be in my mind in that obsessive way but to get out of that, but that's not, you know—as Thoreau says—that's not necessarily easy to do, you find yourself walking and you realize you're obsessing about the day rather than actually experiencing the walk…

Just as Orlie has different books for different purposes, she also has different practices of walking, from walking with Sam and talking about ideas in a specific text she is writing to walking alone and striving to be mindful of the environment and her movement. (For another interesting discussion of walking as an embodied practice in writing, see Syverson's, 1999, account of Reznikoff's composing processes.)

Like Orlie and the psychology professor mentioned in the introduction, Kazmer described using a timer to regulate her writing. As she was describing her drawing, Kazmer noted:

> The only reason I go in [in the kitchen] is that I use my microwave oven—the kitchen timer on my microwave oven—as a timer. I'm one of those people who has trouble working and after I read, you know, [inaudible] article about how to make yourself work and and setting a time and what have you, so that's the alarm and the little alarm sound there.

Kazmer reported that she set the timer in two-hour intervals, which she might repeat two or even three times a day. She identified these periods as "bottom on the seat" time, intervals, where she sits and only works on her writing.[12] She also reported a process where she constantly moved from screen to print text: " The reason why I have the printer marked so heavily is that I'm one of those people who likes to print a lot. You know, I write a little bit and then I print and I scribble on it and then I type some more." Here again, it is important to see these writing practices not only as the production of a built symbolic environment, but also as regulated patterns of action and attention.

Kazmer also noted ways that she worked to optimize her work through scheduling her writing, including a fascinating example of social facilitation:

> I need to work in the late morning and early afternoon. And I tend to—both of us tend to be very productive if we're both here. We work with our backs to each other so that we're not constantly distracted. But I find that the sound of him typing really motivates me. You know? If he's getting work done, I can get work done too and he finds that same thing. But he was coming home from work at three o'clock in the afternoon, which is my complete downtime. Three to six for me is useless. I mean, I can't do anything and it wasn't working. So, um, what he's started doing now is going to work in the morning really early when I go to the gym. When I come home from the gym, find some food, grab a shower. When I'm done with that, basically, he comes home from work at 10:30 or 11:00 in the morning and we work until about two, um, and then he goes back to work and I kind of wrap up what I'm doing and then take that time from three to six to run errands and do other kinds of stuff that doesn't take too much thought. And then we tend to back to this then in the evening for a few hours.

Coordinated scheduling for writing time in this case really amounted to a much broader structuring of her and her fiancé's ways of doing housework, exercise, meals, and paid employment.

Like Orlie, Kazmer also reported using notebooks as a key external resource and practice:

> Those are what I have with me so that—because you know people are always catching you. Your advisor catches you in the hall, or you run into a professor somewhere in another building or what have you, and they're like, "Oh, I was thinking about you the other day! I read this thing and you should--" What do you do? And these are also helpful too because they kind of go around with me everywhere, so if I think of an idea somewhere else I can write it down.

Kazmer reported that she liked the notebooks with the sewn backing because they made it hard to tear sheets out and thus lose track of things. Like Orlie, she was clearly interested in ensuring the accessibility of her notes, with not losing things. However, as is clear from the earlier quote about notebooks, Kazmer also used the notebooks for many purposes, from scheduling and planning to use as a prop in face-to-face interactions (i.e., she reported that she used writing in the notebook to give herself time to formulate answers during her oral preliminary examination).

Describing characteristics that she had found important for her writing, Kazmer again focused on many ambient environmental factors—noise, lighting, music.

> **Kazmer:** This place [speaking of the apartment] is always very quiet. I occasionally listen to the Benedictine Monks chant on CDs when I'm writing. Um, because I find that sometimes—more detail than you needed—I was raised Catholic, sometimes I find that the chant does actually help me focus in on something rather than not. Like, I don't use it as a distraction or what have you. I actually use it cause sometimes it really does help me focus down. …I live up in, um a neighborhood that tends to be a little noisy during the day—I live close to Central High School—um, and like I said, across from park … So especially like now when I have all the windows wide open, it can be kind of noisy and when the high school band is practicing in the park, forget it. I actually can't work there. And I was also made very crabby by the

> fact that there was—used to be a coffee shop in downtown Champaign where I actually could work. Um, I can't work at Kopi. There used to be a place called Jitters and Rush, which was an environment in which I could work, and that closed. And that actually really changed the dynamic here because it used be that I could be here and write but if I needed to read, there was someplace within walking distance where I could drink coffee while I read. And now there isn't anymore. Um,

> **Shipka:** Why can't you work at Kopi? What's the difference?

> **Kazmer:** It's dark! It's little and it's dark and Jitters and Rush was big and bright and wonderful! And so if I want, if I want to read, I have to really think about where I'm going to go. Do I go to the Champaign Public Library, which is fine except that you can't eat or drink there, you know? Reading's hard now.

Clearly too, Kazmer sought out different kinds of environments for writing (the private space of apartments) and reading (some public space, preferably with coffee).

The specific strategies writers reported were varied, depending on their tasks, the centrality of writing to their lives and work, and their own personalities and preferred practices. Neuman's task was most like a canonical class assignment, a bounded literacy event that lasted about two weeks, and her strategies seem the easiest to describe. She worked in certain spaces, sought out social interactions for ideas and support, and arranged her space with the resources she needed at hand—including not only the dictionary, thesaurus, pens, paper, and computer, but also the globe as a mnemonic device, an iconic reminder of the diversity of cultural value she was seeking to invoke. Johnson's task, while also a course assignment and involving a similar range of ESSP's, expanded as it aligned with past, leading to recruitment of past experiences and especially to a variety of ways to not only tap external memories, but also to trigger internal memories and moods. The chronotopic boundaries of Johnson's task, especially in the representational dimensions, were thus much broader.

Kazmer and Orlie, both of whom are engaged in focused academic lives in the disciplines of their choosing, engaged in writing that spanned months, years, and (for Orlie) decades. They describe ESSP's that amount to the delicate ordering of their lives around literate activity. ESSP's involved the structuring of their work conditions as well as their days, their long-term relationships with partners as well as focal interactions with others over texts.

Reading across these cases, we find elements in common for two or more writers, with elements as specific as the use of timers or a chronological journal, or as general as using music or structuring the time of day for work. Yet we are also struck by the very particular atmospheres, tones, and practices of each account. Orlie's indexed chronological notebook is, for example, much more focused on intellectual content and much more a textual source for subsequent public texts than Kazmer's journals. Neuman and Johnson both engaged in repurposing other genres for a classroom task, but Johnson's repurposing was officially sanctioned and better received than Neuman's. In addition, Johnson's multiple uses of film—as resource for invention, as content of

the text, and finally as medium—aligned with his long-term interests and practices while Neuman's word jumble did not display either clear roots or futures.

Reflections on Tuning Consciousness

ESSP's, the ways writers tune their environments and get in tune with them, the ways they work to build durable and fleeting contexts for their work, are central practices in literate activity. They call for attention to the agency of actors, to the production of environments, and finally to consciousness itself as a historied practice. CHAT has tended not to address these questions in its research. It has often treated tools and toolkits as givens, as cultural inheritances, as black boxes (Latour, 1987) that people use or fail to use depending on their learning, the current interaction, and their own preferences. The genesis of cultural forms has received limited attention (see however, Bazerman, 1988; Berkenkotter, 2001; Engeström & Escalante, 1995; Hutchins, 1995; Wertsch, 1995, 1998). Perhaps because of concentrating so heavily on learning/development in children, asking primarily how children become enculturated, how they encounter and develop some mastery over material and psychological tools, the central narrative of CHAT has focused on internalization and idealization, on the gradual move from externalized practice to interiorized practice, from external regulation of behavior (by environments and other people) to self-regulation (by inner speech).

This narrative is visible, for example, in the trajectory of play, which Vygotsky (1978) saw as fundamental in development. The trajectory was described as a movement from concrete to abstract-idealized activity, from play with objects that resembled the imagined object (a stick for a horse) to internalized imagination in adolescence. However, if we follow play today into adulthood, it seems to spiral to a higher level of concrete play: we find large-scale serious play (war games and disaster simulations, for example) with the actual objects (like tanks and airplanes or ambulances and hospitals) and people acting in their normal capacity (soldiers acting as soldiers and doctors as doctors) engaging in imaginary events for the dual purpose of individual-group training and cultural innovation (see Prior & Hengst, 2000). For Vygotsky, the sociogenesis of will was a critical concern; psychological tools were described first and foremost as a way of mastering one's own or others' behavior. In the accounts of literate activity by these academic writers, we see a similar spiraling trajectory in the development of will, in their use of ESSP's to tune consciousness, environment, and task. ESSP's highlight people's situated agency, their tuning to and of environments, their making of artifacts of all kinds. Critically, the ESSP's that we detail here not only involve externalizations, but externalizations meant to regulate thought and affect, to channel attention and action.

Some sociocultural work has attended more to these issues. Valsiner (1997, 1998) has emphasized not only the bidirectionality of internalization and externalization, but also questions of consciousness and situated agency that are seen even with young children.

> The child's behavior is interdependent with the possibilities that the environment provides, and the latter is structurally organized all through ontogeny. As the newborn develops, its actions begin to reorganize the

structure of the environment. Likewise, the people around the child
purposefully rearrange the structure of the child's environment so that it can
eliminate dangers (e.g., taking away dangerous objects) and promote socially
relevant goals (e.g., the integration of the child into the family's subsistence
activities and their participation in social rituals). (Valsiner, 1997, p. 172)

Alexander, Miller, and Hengst (2001) illustrate one way children select and transform their
semiotic worlds as they trace children's story attachments in U.S. families. Story attachments
appear as social (and increasingly commodified) practices that involve children and others
populating their world with artifacts and experiences related to a favorite narrative or narrative
world. For example, a child attached to a dinosaur story might read the story (or have it read),
watch a video of it, play with related toy characters, stamps, or coloring books, and then sit down
to a meal of dinosaur-shaped food. Kress (1997) sees emergent literacy as part of a broader
process of semiotic making using tools at hand. His examples involve not only early scribbling,
writing, and drawing, but also the re-purposing of a Panadol box (into the form of a person) and
the rearrangement of bedroom pillows and objects to make "a car."

In articulating his symbolic action theory, Boesch, (1991) highlights this active process of
selecting and structuring the environment:

> …in every moment of our life we not only find ourselves within a complex of
> conditions built up during our past or provided by the environment, but, in
> order to be able to act, we must select within this complex and arrange or
> transform it in view of the intended purposes (p.50).

Lang (1997) presents these ESSP's as part of a symmetric and reciprocal, material-semiotic
sociogenesis: "Throughout their ontogenetic development, not only are individuals building up
and modifying structures in the form of dynamic memory in their mind-brains, but they also
contribute to the formation and change of cultural artifacts in the physical and social space of
their group" (p. 185). Boesch (1991) and Lang (1997) have explicitly focused on people's
production of living spaces and their dwelling activities.

> Furnishing is more than just an additional way of forming space; it fills it with
> meaningful objects. They are meaningful in a double sense: first, they
> channel and support action within the room and second they symbolize
> mental contents of significance to the inhabitant…. Thus, space becomes
> place. (Boesch, 1991, p. 157)

In her studies of exceptionally creative individuals, John-Steiner (1997) argues that "the
structuring of time and space according to one's needs and values is part of the invisible tools of
creativity" (p. 74). In elaborating this point, she pointed particularly to Tchaikovsky's selection
of a home outside of the city (Moscow), his schedule of daytime solitude and nighttime
socializing, his daily walks with paper and pen wherein he often formulated germs of new
musical composition that he would later transcribe. John-Steiner concludes: "Sustained,
productive work requires more than mind for sheltering thought. It requires a well-organized and
well-selected workspace" (pp. 73-74).

While studies of writing have existed as special problems within fields, especially psychology, literature, linguistics, and anthropology, throughout most of this century, it was only in the 1980s that a field of Writing Studies emerged in the U.S., centered in English departments and linked to the pedagogical mission of developing students' writing skills both in general and in specific disciplines. The emergence of this field cannot be separated from the emerging understanding of, and pedagogies for, writing as a process. The process movement had no single precipitating event, but clearly a central influence was the publication of the *Paris Review* interviews (see e.g., Cowley, 1958; Plimpton, 1963), in which published, privileged authors shared their personal sense-making, often messy processes of text production, struggles, and contexts. Emig's (1971) seminal study of the writing processes of high school students (especially the detailed case study of one writer, Lynn) made the critical ideological shift from looking at privileged authors to exploring everyday writing and also offered a more formal methodological and theoretical framework for studying writing processes. However, the subsequent formalization of method in clinical studies of writing processes (which had the effects of tightly bounding the times of writing and of observing writers outside of their typical scenes of writing) combined with the emergence of an abstract cognitive processing theory (e.g., Flower & Hayes, 1984) as the initial analytic framework meant, in effect, that little of the rich texture of everyday writing processes was uncovered in such studies (though interesting findings did emerge on the fine-grained complexity of written acts, a complexity that could be critical in combating unitary images of writing—including Bakhtin's 1986 treatment of writing a novel as equivalent to a turn at talk). When research on writing did move into naturalistic contexts, these contexts were primarily school and workplace settings, and most studies remained firmly fixed on the official side of the writing, often tracing the intersection of some text (or series of texts) with some contextualizations arrived at either through interviewing or discourse analysis of face-to-face interactions in which texts were planned or responded to.

Recently, the notion of writing as embodied has been taken up in Writing Studies in part through a focus on the joint work of planning and revision accomplished in face-to-face interaction and in part as the deployment of "embodied knowledge," knowledge grounded in situated practice and at best only partially capable of articulation. Sauer (1998) discusses the way that miners' "mine sense" represents an embodied knowledge in conflict with the technical knowledge of engineers. Haas and Witte (2001) describe ways that city engineers draw on their embodied experiences of attempting to move bulldozers and diggers in city environments and of interacting with property owners as they question draft standards for channel easements. What we would foreground in relation to these discussions of embodiment are ways that acts of writing are themselves issues of managing a body in space and that embodied literate activity is woven out of profoundly heterogeneous chains of acts, scenes, and actors oriented to diverse ends.

CHAT and Writing Studies alike could benefit from further study of these processes of tuning, of ways that writers act to form and regulate worlds to regulate their own consciousness and actions. These processes amount to the production of embodied chronotopes, the production of a lifeworld with a certain tone and feel, populated by certain people and their ideas, calibrated to a

certain rhythm. In that production lies the warp and weft of consciousness and action, of those threads are contexts woven and unraveled.

Conclusion

> The process of speech, broadly understood as the process of inner and outer verbal life, goes on continuously. It knows neither beginning nor end. The outwardly actualized utterance is an island rising from the boundless sea of inner speech… (Voloshinov, 1973, p. 96)

We have in the previous sections argued that CHAT and Writing Studies could both benefit from a greater awareness of chronotopically laminated chains of acts, artifacts, and actors that are woven together and unwoven in polyvalent moments of being; from greater attention to sense, affect and consciousness, to the messy ever-moving interactions of individuals being-in-the-world; and finally from attention to the ways that people select, structure, and make environments to regulate their consciousness and promote or impede their actions. Within these broad contours, there is room for a variety of methodologies to explore the specific patterns and processes that emerge in local and dispersed literate activity. In conclusion, we return to the initial questions of how studies of writing might inform the evolving agenda of CHAT and how CHAT might, in turn, inform studies of writing.

For CHAT, studies of the inventional and affective-motivational processes individuals report and display in their literate activity invites serious attention to the problem of consciousness, to the historical psychology that Vygotsky called for in 1934. Much work has been done that addresses elements of this call, but little has been directed at the fundamental questions of personality and consciousness (see also Gonzales Rey's, 1999, critical reflections on CHAT). Methodologically, private and public acts, meaning and sense, affect and attention, tools and spaces, all need to be woven together into a single story of productive activity. In addition, the fact that some forms of literate activity (not all or perhaps even most) involve such extended and pervasive engagement, become the center of life projects, points to the continuing need to understand operations, actions, activities, and objects in, as, and through historical trajectories. Bazerman's (1994) reflections on the difficulty of taking speech act theory into studies of longer texts and Bakhtin's (1986) problematic attempt to equate oral utterances delivered in real time with written works produced over years and decades both suggest the importance of theorizing these long chains of discourse and action that some literate activity involves. In short, studies of such complex literate activity afford problems that CHAT has resources to address, but that it has rarely addressed as of yet.

For Writing Studies, CHAT has worked seriously to theorize acts as distributed and mediated, to provide analytic frameworks for understanding the varied vectors of social forces that bear on writing, and especially to consider learning/development as ubiquitous dimensions of all acts in the world, as the on-going (re)production of persons, artifacts, practices, and environments. CHAT, in effect, remains at the center of a movement toward a historical psychology, a historical semiotics, and an integration of the two. This movement is important to Writing

Studies because, to paraphrase Voloshinov (1973), *literate activity is, after all, a purely historical phenomenon*.

References

Alexander, Kristin, Miller, Peggy, & Hengst, Julie. (2001). Young children's emotional attachments to stories. *Social Development, 10*, 374-398.

Alvarez, Amelia, & del Rio, Pablo. (1999). Cultural mind and cultural identity: Projects for life in body and spirit. In Seth Chaiklin, Mariane Hedegaard, & Jaal Uffe (Eds.), *Activity theory and social practice: Cultural-historical approaches* (pp. 302-324). Aarhus, Denmark: Aarhus University Press.

Bakhtin, Mikhail. (1981). *The dialogic imagination: Four essays by M. M. Bakhtin*. (Caryl Emerson & Michael Holquist, Trans.; Michael Holquist, Ed.). Austin: University of Texas Press.

Bakhtin, Mikhail. (1986). *Speech Genres and other late essays*. (Vern W. McGee, Trans.). Austin: University of Texas Press.

Barabasz, Arreed, & Barabasz, Marianne. (Eds.). (1993). *Clinical and experimental restricted environmental stimulation*. New York: Springer-Verlag.

Bazerman, Charles. (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison: University of Wisconsin Press.

Bazerman, Charles. (1994). Systems of genres and the enactment of social intentions. In Aviva Freedman & Peter Medway (Eds.), *Genre and the new rhetoric* (pp. 79-101). London: Taylor & Francis.

Bazerman, Charles. (1999). *The languages of Edison's light*. Cambridge, MA: MIT Press.

Berkenkotter, Carol. (2001). Genre systems at work: DSM-IV and rhetorical recontextualization in psychotherapeutic paperwork. *Written Communication, 18*, 326-349.

Boesch, Ernest. (1991). *Symbolic action theory and cultural psychology*. Berlin: Springer-Verlag.

Bolter, Jay, & Grusin, Richard. (1999). *Remediation: Understanding new media*. Cambridge: MIT Press.

Brandt, Deborah. (2001). *Literacy in American lives*. Cambridge: Cambridge University Press.

Brodkey, Linda. (1987). *Academic writing as social practice*. Philadelphia: Temple University Press.

Casanave, Christine. (2002). *Writing games: Multicultural case studies of academic literacy practices in higher education*. Mahwah, NJ: Lawrence Erlbaum.

Chiseri-Strater, Elizabeth. (1991). *Academic literacies: The public and private discourse of university students*. Portsmouth, NH: Boyton/Cook.

Cole, Michael. (1992). Context, modularity, and the cultural constitution of development. In Lucient Winegar & Jaan Valsiner (Eds.), *Children's development within social contexts: Vol. 2, Research and methodology* (pp. 5-32). Hillsdale, NJ: Erlbaum.

Cole, Michael. (1996). *Cultural psychology: A once and future discipline*. Cambridge: Harvard University Press.

Cowley, Malcolm. (Ed.). (1958). *Writers at work: The Paris Review interviews*. New York, Viking Press.

del Rio, Pablo, & Alvarez, Amelia. (1995a). Directivity: The cultural and educational construction of morality and agency. Some questions arising from the legacy of Vygotsky. *Anthropology and Education Quarterly, 26*, 384-409.

del Rio, Pablo, & Alvarez, Amelia. (1995b). Tossing, praying, and reasoning: The changing architectures of mind and agency. In James Wertsch, Pablo del Rio, and Amelia Alvarez (Eds.), *Sociocultural studies of mind* (pp. 215-247). Cambridge: Cambridge University Press.

Dyson, Anne. (1997). *Writing superheroes: Contemporary childhood, popular culture, and classroom literacy*. New York: Teachers College Press.

Emig, Janet. (1971). *The composing processes of twelfth graders*. Urbana, IL: National Council of Teachers of English.

Engeström, Yrjo. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit.

Engeström, Yrjo, Engeström, Ritva, & Vahaaho, Tarja. (1999). When the center does not hold: The importance of knotworking. In Seth Chaiklin, Mariane Hedegaard, & Jaal Uffe (Eds.), *Activity theory and social practice: Cultural-historical approaches* (pp. 345-374). Aarhus, Denmark: Aarhus University Press.

Engeström, Yrjo, & Escalante, Virginia. (1995). Mundane tool or object of affection? The rise and fall of the Postal Buddy. In Bonnie Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction* (pp. 335-373). Cambridge, MA: MIT Press.

Flower, Linda, & Hayes, John. (1984). Images, plans, and prose: The representation of meaning in writing. *Written Communication, 1*, 120-160.

Geisler, Cheryl. (1994). *Academic literacy and the nature of expertise: Reading, writing, and knowing in academic philosophy*. Hillsdale, NJ: Lawrence Erlbaum.

Goffman, Erving. (1981). *Forms of talk*. Philadelphia: University of Pennsylvania Press.

Gonzalez Rey, Fernando. (1999). Personality, subject and human development: The subjective character of human activity. In Seth Chaiklin, Mariane Hedegaard, & Jaal Uffe. (Eds.), *Activity theory and social practice: Cultural-historical approaches* (pp. 253-275). Aarhus, Denmark: Aarhus University Press.

Goodwin, Charles, & Duranti, Alessandro. (1992). Rethinking context: An introduction. In Alessandro. Duranti & Charles Goodwin (Eds.), *Rethinking context: Language as an interactive phenomenon* (pp. 1-42). Cambridge: Cambridge University Press.

Haas, Christina, & Witte, Stephen. (2001). Writing as embodied practice: The case of engineering standards. *Journal of Business and Technical Communication, 15*, 413-457.

Hanks, William. (1996). *Language and communicative practices*. Boulder, CO: Westview

Herrington, Anne, & Curtis, Marcia. (2000). *Persons in practice: Four stories of writing and personal development in college*. Urbana, IL: National Council of Teachers of English.

Holland, Dorothy, Lachicotte, William, Skinner, Debra, & Cain, Carole. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.

Holland, Dorothy, & Cole, Michael. (1995). Between discourse and schema. *Anthropology & Education Quarterly, 26*, 475-489.

Hutchins, Edwin. (1995). *Cognition in the wild*. Cambridge: The MIT Press.

John-Steiner, Vera. (1997). *Notebooks of the mind: Explorations in thinking* (Rev. ed.). Oxford: Oxford University Press.

John-Steiner, Vera. (2000). *Creative Collaborations*. Oxford: Oxford University Press.

Kamberelis, George. (2001). Producing heteroglossic classroom (micro)cultures through hybrid discourse practice. *Linguistics and Education, 12*, 85-125.

Kamberelis, George, & Scott, Karla. (1992). Other people's voices: The coarticulation of texts and subjectivities. *Linguistics and Education, 4*, 359-403.

Kohli, Wendy. (1999). Writing the classed body: "Is it work yet?" In Marla Morris, Mary Aswell Doll, & William Pinar (Eds.), *How we work* (pp. 233-240). New York: Peter Lang.

Kress, Gunther. (1997). *Before writing: Rethinking the paths to literacy*. London: Routledge.

Lang, Alfred. (1997). Non-Cartesian artifacts in dwelling activities: Steps toward a semiotic ecology. In Michael Cole, Yrjo Engeström, & Olga Vazquez (Eds.), *Mind, culture, and*

activity: Seminal papers from the Laboratory of Comparative Human Cognition (pp. 185-202). Cambridge: Cambridge University Press. (Reprinted from *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition, 8*, 47-58, 1993)

Latour, Bruno. (1987). *Science in action: How to follow scientists and engineers through society*. Cambridge: Harvard University Press.

Latour, Bruno. (1993). *We have never been modern*. Cambridge: Harvard University Press.

Latour, Bruno. (1999). *Pandora's hope: Essays on the reality of science studies*. Cambridge: Harvard University Press.

LeFevre, Karen. (1987). *Invention as a social act*. Carbondale: University of Illinois Press.

Leont'ev, Aleksei. (1978). *Activity, consciousness, and personality* (Marie Hall, Trans.). Englewood Cliffs, NJ: Prentice-Hall. (Original published in 1975)

Leont'ev, Aleksei. (1981). *Problems of the development of the mind*. Moscow: Progress. (Original published in 1959)

Lotman, Yuri. (1990). *Universe of the mind: A semiotic theory of culture* (Ann Shukman, Trans.). Bloomington: Indiana University Press.

Luria, Alexander. (1982). *Language and cognition* (James Wertsch, Ed.). New York: John Wiley. (Original published in 1979)

McLuhan, Marshall. (1994). *Understanding media: The extensions of man*. Cambridge, MA: The MIT Press. (Original published in 1964)

Ochs, Elinor, Taylor, Carolyn, Rudolph, Dina, & Smith, Ruth. (1992). Storytelling as a theory-building activity. *Discourse Processes, 15*, 37-72.

Orlie, Melissa. (1997). *Living ethically, acting politically*. Ithaca: Cornell University Press.

Pickering, Andrew. (1995). *The mangle of practice: Time, agency, and science*. Chicago: University of Chicago Press.

Pinar, William. (1999). How I work. In Marla Morris, Mary Doll, & William Pinar (Eds.), *How we work* (pp. 197-204). New York: Peter Lang.

Plimpton, George. (Ed.). (1963). *Writers at work: The Paris Review interviews, second series*. New York: Viking Press.

Plimpton, George. (Ed.). (1976). *Writers at work: The Paris Review interviews, fourth series*. New York: Viking Press.

Prior, Paul. (1994). Girl talk tales, causal models, and the dissertation: Exploring the topical contours of context in sociology talk and text. *Language and Learning Across the Disciplines, 1*, 5-24. (aw.colostate.edu/llad/v1n1/prior.pdf)

Prior, Paul. (1997). Literate activity and disciplinarity: The heterogeneous (re)production of American Studies around a graduate seminar. *Mind, Culture, Activity, 4*, 275-295.

Prior, Paul. (1998). *Writing/disciplinarity: A sociohistoric account of literate activity in the academy*. Mahwah, N.J.: Erlbaum.

Prior, Paul. (2001). Voices in text, mind, and society: Sociohistoric accounts of discourse acquisition and use. *Journal of Second Language Writing, 10*, 55-81.

Prior, Paul, & Hengst, Julie. (2000). *Tertiary Artifacts 'R' Us: Play as a leading activity in the development of persons, practices, and institutions*. Paper presented at The III Conference for Sociocultural Research (New Conditions of Knowledge Production: Globalization and Social Practices), Campinas, Brazil.

Russell, David. (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication, 14*, 504-554.

Sauer, Beverly. (1998). Embodied knowledge: The textual representation of embodied sensory information in a dynamic and uncertain material environment. *Written Communication, 15*, 131-169.

Soloman, Philip, Kubzansky, Philip, Leiderman, P. Herbert, Mendelson, Jack, Trumbull, Richard, & Wexler, Donald. (Eds.). (1965). *Sensory deprivation: A symposium held at Harvard Medical School*. Cambridge: Harvard University Press.

Syverson, Margaret. (1999). *The wealth of reality : An ecology of composition*. Carbondale: Southern Illinois University Press.

Valsiner, Jaan. (1997). *Culture and the development of children's actions (2nd ed.)*. New York: Wiley.

Valsiner, Jaan. (1998). *The guided mind: A sociogenetic approach to personality*. Cambridge, MA: Harvard University Press.

Voloshinov, Valentin. (1973). *Marxisim and the philosophy of language*. (Ladislav Matejka & Irwin Titunik, Trans.). Cambridge: Harvard University Press. (Original published in 1929)

Voloshinov, Valentin. (1976). *Freudianism: A Marxist critique*. (Irwin Titunik, Trans.; Irwin Titunik & Neal Bruss, Eds.). New York: Academic Press. (Original published in 1927)

Vygtosky, Lev (1978). *Mind in society: The development of higher psychological processes.* (Michael Cole, Vera John-Steiner, Sylvia Scribner, & Ellen Souberman, Eds.). Cambridge, MA: Harvard University Press.

Vygotksy, Lev. (1987). *Thinking and Speech*. (Norris Minick, Ed. & Trans.). New York: Plenum. (Original published in 1934).

Wertsch, James. (1991). *Voices of the mind: A sociocultural approach to mediated action.* Cambridge: Harvard University Press.

Wertsch, James. (1995). The need for action in sociocultural research. In James Wertsch, Pablo del Rio, and Amelia Alvarez (Eds.), *Sociocultural studies of mind* (pp. 56-74). Cambridge: Cambridge University Press.

Wertsch, James. (1998*). Mind as action*. New York: Oxford University Press.

Notes

[1] In an earlier work, one of us (Prior, 1998) defined literate activity in the following terms:

…as an important corollary of mediation, writing is dispersed. Focal texts and transcriptional events are no more autonomous than the spray thrown up by white water in a river, and like that spray, literate acts today are far downstream from their sociohistoric origins. This notion of writing as situated, mediated, and dispersed is the basis for what I am calling literate activity. Literate activity, in this sense, is not located in acts of reading and writing, but as cultural forms of life saturated with textuality, that is strongly motivated and mediated by texts. (p.138)

[2] There have been a number of variations on this general protocol. We have begun in two cases with a videotaped tour of the writer's work space and in at least three cases have turned at some point during the interview to a computer to view a web document or CD project or to retrace an Internet search for information. This type of flexibility in the interviews seems valuable in terms of the data we are collecting.

[3] The four participants were chosen from among the 21 we have interviewed so far. They were chosen to represent a range of academic experience (from undergraduate to professor) and a range of levels of engagement (from fairly bounded classroom tasks to long-term extended projects) and because their cases illustrated well our general findings. They were not chosen as exceptional cases in any sense, except that the two undergraduates were both former students of Shipka and were, thus, more attuned to the rhetorical uses of alternative genres and media than typical undergraduates might be. However, none of the points we make in this paper hinge on that attunement or their specific products. Our participants so far have not included laboratory scientists or field workers in the sciences or social sciences, both significant groups we will be turning to in the next year. However, one of us (Prior) has also used a related drawing activity in writing-across-the-curriculum workshops for faculty and graduate students and seen similar representations and heard similar accounts of writing processes and contexts from over 200 academic writers, including laboratory scientists and field workers.

[4] Bakhtin did not explicitly distinguish between these two senses of the term and the uptake of chronotopes has generally been limited to the representational.

[5] With the explicit written permission of participants, we are using their real names. We did offer participants the option of pseudonyms as well.

[6] For transcription, routine backchannel comments (e.g., yeah, um-hm, right, okay) have been removed from the transcript. Ellipsis marks…indicate other excised text. [Square brackets] present editorial comments or clarifications as well as occasional significant backchannel remarks (in quotes). Uncertain transcriptions are surrounded by (parentheses).

[7] *Re-purposing* refers to the re-use and transformation of some text/semiotic object. Examples would include the use of popular songs for TV commercials or, more complexly, converting a novel into a film (or vice versa).

[8] See Luria (1982) for further discussion and examples of this distinction and its implications for CHAT.

[9] See Ochs, Taylor, Rudolph, and Smith (1992) for thick descriptions of such talk.

[10] In the social sciences (and perhaps in everyday argument as well), it is not unusual to see arguments made about what hypothetical persons ("someone," "anybody", "a person," sometimes a specific social category, a "student") do or would do in some situation (see Prior, 1994, for examples in sociology arguments).

[11] In an autobiographical narrative of his academic work, Pinar (1999), a curriculum theorist, noted that his work space at home included a floor-to-ceiling mahogany bookcase while outside his window there was bird feeder that gave him an interesting place to rest his gaze and think. The bookcase and bird feeder were specifically built for Pinar by his partner to facilitate his academic work.

[12] In an autobiographical account of academic work, Wendy Kohli (1999) describes a more radical version of bottom-on-the-seat time: asking her former husband to literally tie her to a chair for 45-minute stretches as she wrote her dissertation.

Intercultural Knowledge Building: The Literate Action of a Community Think Tank

Linda Flower

Department of English and Center for University Outreach
Carnegie Mellon University
Pittsburgh, PA 15213
lf54@andrew.cmu.edu
http://english.cmu.edu/people/faculty/homepages/flower/default.html

Abstract

Intercultural rhetoric is the study of literate practices that use cultural difference to build knowledge and support wise action. This paper documents the practice of a community think tank on urban workforce issues and examines the strategies used in this dialogue to 1) design an intercultural forum, 2) structure inquiry within diversity, and 3) build intercultural knowledge. It asks, can such literate action produce significant, transformative knowledge?

The study draws on conceptual tools of activity theory and social cognitive rhetoric to explore the conflicts built into this process and the mediating role of documentation. It argues that two important outcomes of intercultural inquiry are its ability 1) to construct a richly situated representation of workforce issues--as a social and cognitive activity, and 2) to build a guide for action that emerges not solely from the arguments of causal logic, but from culturally negotiated "working theories," attuned to multiple realities and possible outcomes.

Embracing Representational Conflict: A Problem for Knowledge Builders

One of the enduring difficulties of building new knowledge is the need to seek difference, to tolerate dissonance, and to embrace the generative possibilities of conflicting ideas and competing realities within the process of inquiry (Young, Becker, Pike, 1970). Ordinary people and professionals alike are drawn into inquiry and the need for knowledge building when they want to understand and solve complex problems. In research, business and government, knowledge building often becomes a relatively public process as people try to interpret data, restructure their schools, improve a company's quality control, or shape social policy. In such a process, wisdom tells them to invite diverse perspectives to their table. But as they inevitably discover, when real diversity enters the room, conflicting representations of reality sit down at the table.

 The conflict among these representations is a tangled web: the counter-productive aspects of conflict (e.g., misunderstanding, competition and anxiety) may co-exist with the generative potential of difference (e.g., with the possibility of alternative perspectives, rival hypotheses, competing conceptualizations, and an expanded vision of values and priorities). Studies of knowledge building document the advantages of embracing difference and taking the provisional stance of inquiry in widely different settings—in democratic classrooms (Trimbur, 1989), in corporations attempting to become "learning organizations" (Senge, 1990), in professional

design teams (Burnett, 1991), on the shop floors of high-performance workplaces (Gee, Hull, Lankshear, 1996), or in federal inquiries into industrial disasters (Sauer, in press). But this is no easy stance to take; people must overcome considerable barriers, starting with established social practices that rush to hush awkward dissonance. They must resist deep-running cognitive processes and learned interpretive schemas that assimilate and nullify difference. And they must invoke literate practices of inquiry—from a Socratic dialogue to the scientific method—that invite and shelter the particular kinds of divergent thinking they value. In short, the real challenge of knowledge building is to embrace, not just tolerate, conflict.

Intercultural rhetoric places itself at a crossroads of difference with a history of conflict. It asks, what happens to discourse and interpretation at the borders and boundaries of cultural difference—within those "contact zones" where differences of race, class, ethnicity, discipline and discourse meet? And because rhetoric is an art of both discovery and change, an intercultural rhetoric must combine inquiry with literate action. It asks, how might I communicate and construct knowledge across these differences?

This chapter is about the process of knowledge building in an intercultural forum. It explores the distinctive rhetoric of a community think tank on urban concerns that deliberately sought to embrace racial, cultural, class and discourse differences. Seating urban employees and community workers at the table with business managers, social agency staff, and policy makers, this forum asked them to go beyond *presenting* their perspectives to *collaboratively constructing* more workable policies and operational action plans.

The obvious question here is whether such a rhetorical situation can produce *significant, transformative knowledge*? Can it rewrite prior private and public representations, change minds, provoke action, or reshape social interactions? And if it could, what forms might this knowledge take?

Woven throughout this discussion is a parallel inquiry into activity theory. Or perhaps I should call it a test drive of this conceptual engine, for I would like to demonstrate the methodological power activity theory can bring to the problem of intercultural dialogue. And conversely, I will suggest that the portrait of "working theories," which we observe at the end of this study, may offer a new way activity theory can account for the bridge between individual and social action.

Following an introduction to the conceptual tools I will be using and to our community case study, this chapter has three sections. The first (Designing an Intercultural Forum) looks at the context for community discussion and the built-in conflicts one needs to anticipate in initiating

such a dialogue.[1] The second section (Structuring a Dialogue to Use Difference) examines the design of a "community problem-solving dialogue." It treats this particular literate practice as a working hypothesis—as an attempt to answer the question: How *do* you support knowledge building in the midst of such conflict? The final section, (Building New Knowledge) considers some alternative ways to evaluate the outcome of these dialogues and the knowledge they construct.

A Word about Method: Why Analyze Intercultural Knowledge Building as a Social/Cognitive Activity?

The problem here is how do you develop an explanatory account of a social/cognitive event? The activity we are trying to understand is essentially social (an historically shaped collaborative and literate practice). But it is also an effort to privilege individual cognition, personal representations, and productive differences. And to further complicate the story, it then tries to translate this individual knowing back into social change. The standard conceptual tools of both cognitive and cultural theory are better at dichotomizing these forces than they are at helping us get at the *interaction* of cognition, social processes, and worldly action that is at the heart of intercultural dialogue.

So in trying to follow the tracks of productive cultural difference, I start with a premise of American philosophical pragmatism that echoes William James: For a difference to be a difference, it must make a difference (James, 1967). In other words, the meaning of intercultural inquiry (however we define or theorize it) ultimately lies not in rational theorizing, but in the consequences of acting on our understanding of this notion (Dewey, 1988). We must therefore track its meaning in the literate, social, material practices in which knowledge building exists as an *activity*.

A notion of human activity *as a highly mediated social and cognitive process* has been emerging within the work of activity theory (Wertsch, 1991). Rooted in the 1920-30's Soviet philosophy, psychology, and politics of Vygotsky and Bakhtin, this notion is an effort to transcend the dualisms of the individual self and its social, material circumstances , of mind and behavior (Engeström & Miettinen, 1999). Like Dewey (1988), writing against rational dualisms in 1928, these thinkers felt the answer lay in activity, in human action. Or, as Yeats evokes this insight (in his 1928 poetic vision of embodied learning): "How can we know the dancer from the dance?" But the problem this posed for Vygotsky the researcher was finding a meaningful unit of analysis. In his search for an analytic object that was simultaneously a unit of mind and social activity, or of consciousness and behavior, he rejected units such as the "concept" or "language" in favor of his notion of "word meaning" to stress that a unit of thinking is also one of communication. He found his focus in the analysis of goal-oriented action (Minick, 1997, p 124).

Activity Analysis

In the last decade, this strand of activity *theory* (and it is are a diverse set) has transformed its theorizing into the robust practice of activity *analysis* for studying the nature of learning and

knowledge making (Bazerman, 1997; Engeström, 1993; Lave, 1993; Prior, 1998; Wertsch, 1991). These researchers entered their fields the bold argument that the unit of analysis in such inquiry must be an entire activity and its activity system. In Engeström's (1993) powerful model this includes not only the actors, the object of action, and the community which shares those objects, but also divisions of labor or power, the rules and conventions, and the material or symbolic tools that mediate the activity.

For our purposes here, activity analysis makes three strong claims that shift our analysis from a traditional focus on texts, contexts, or cognition alone, to a focus on the larger "situated activity" and the system in which it may operate (Chaiklin & Lave, 1993).

1) The process of knowledge building is situated in a cognitive, social, historical and material activity, where multiple, heterogeneous, contradictory elements, viewpoints, and "voices" are in play, each giving meaning and shape to the activity.

2) These points of conflict and contradiction within the activity are important as places where learning and change can occur.

3) Mediational tools (from concepts, to literate practices, to technology) shape activities, and these tools are in fact one way individual actions alter broader social structures.

For instance, many current workforce development programs in urban centers are motivated by Washington's welfare policy of "work first" (with the possibility of training and support later). The tools which measure program success focus on the number of job *placements*—not retention. This stands in contradiction to the employers' need to achieve workplace *success*, at a low investment in training and support, which in turn fails to mesh with the employees' need to manage the linked burden of workplace and worklife *problems* (from affordable childcare to the pervasive effects of unemployment). An activity perspective on workforce issues, then, might start with contradictions like these in social programs and community supports and the tools that measure success. In this paper, an activity perspective lets us bring the same analytical tools to intercultural dialogue itself as an activity, looking at the context and contradictions of collaborative problem posing, at the competing discourses that rise to take the floor, at the literate tools that mediate this dialogue, and at the outcomes of a social process designed to embrace conflict.

In Engeström's probing arguments, one of the central dilemmas troubling (and motivating) activity theory is how to bridge self and society, individualism and structuralism in more productive ways (1998; 1999a). Most work motivated by activity theory tends to focus on social, cultural, and historical dimensions of an activity as a social system. [2] However, I will argue, a fully realized activity analysis must also include the activity of individual meaning makers, people operating, in Wertsch's words, as "agents-acting-with-mediated-means" (1991, p. 12). And when the activity in question is *intercultural* knowledge building, Engeström's bridge will need to show how the highly diverse representations and acts of individual rhetors, on one side, might lead to new socially constructed knowledge and action on the other.

Negotiation Analysis

It is here that the methods of social cognitive rhetoric can often give us a finer grained analysis of meaning making, by tracking the construction of negotiated meanings <u>within</u> an activity. The theory of negotiated meaning making offered here comes out of my work with college students, urban youth and community members, observed in acts of writing and collaborative inquiry (Flower, 1994; Flower, Long, Higgins, 2000, Flower & Deems, 2002). Exploring these intercultural dialogues will show how, in this more public context, negotiation analysis can deepen our insight into situated knowledge making, and how it may also reveal important openings for agency within social systems. Negotiation analysis works on the following premises:

1) Acts of writing (and deliberation) give us access to a constructive process that is itself the site of energetic conflict between multiple "voices" or kinds of knowledge that would shape the representation of meaning (just as they shape activities). We know that when individual meaning makers are engaged in crafting a text or a conversation, these voices—these shaping forces—take many forms. They include not only the <u>live</u> voices of teachers, editors, and conversational partners, but the <u>internal</u> voices of personal intention, knowledge and emotion, and the <u>internalized</u> dictates of convention, language, and ideology.

2) When writers turn attention (at some level) to such conflicts, they enter into the construction of a *negotiated* meaning, the attempt to interpret and manage conflicting voices results in provisional resolutions and—at times—in restructured understanding. Tracking this negotiation and its conflicts can reveal which voices within a broad social and cultural activity have risen to the status of "live" options and come under negotiation. And it can often reveal the hidden logic that may be on the one hand derailing learning, degrading performance, and thwarting communication—and on the other producing new knowledge. (Cf. Flower, 1994, p36-84).

Activity analysis draws us to consider what Engeström (1993) calls "contradictions" in the activity system itself—within its rules and norms, within its mediating tools, and within the way effort and status are assigned. Adding a rhetorical analysis shifts our focus from the system *per se*—its structure and contradictions—to the actions of meaning-making individuals and groups within that activity dealing with the conflicts that matter to them (on both an intra- and an interpersonal level).

For instance, we see a local African American union leader thinking his way to a better vision of workplace mentoring for new "at-risk" employees. He is in a dialogue, listening to the mentoring procedure proposed by the human resource officer across the table. We see him trying to accommodate the "management solution" with his personal knowledge of the competitive politics of a racist work environment (and the internal voice that says, "You can't trust the system"). Meanwhile the voice of racial solidarity in his own head is calling for supportive action of co-workers -- even as his work ethic never fails to add, "Yes, but nobody's going to do it for you."

Negotiation analysis takes us this next step deeper into the dynamics of a knowledge-making activity by asking: How do diverse participants in an activity actually represent these conflicts to themselves and to others. What "voices" are privileged in their differing representations? And what happens when these people rise to individually and collaboratively *negotiated* meaning making in response to competing representations?

Goals of the Research

My own position in this inquiry is an interested one. As a co-developer of the series of community/university collaborations sketched below I participate in these activities as theorizer and educator, as meeting facilitator and scribe, as data collector, analyst, and public activist. Methodologically, this analysis does not pretend to the "objective" status of disinterested research offering generalizable assertions. It is motivated in part by a desire to document the Community Think Tank as a work in progress, and in part by a desire to build an observation-based theory of such knowledge building. And in doing so I hope to make a case to other scholars for linking rhetoric, intercultural collaboration, and community action.

However, I think it might be even more methodologically revealing to locate this essay within the activity it attempts to document. In one sense it is a chapter in an on-going discussion of community literacy (cf. Heath & McLaughlin, 1993; Goldblatt, 1994; Peck, Flower & Higgins, 1995, Flower, 1996; Higgins, 1996; Flower, 1998; Cushman, 1999; Deans, 2000; Flower, Long, Higgins, 2000; Flower & Heath, 2000 Long, 2000; Swan, 2002; Long, Peck, & Baskins, in press; Hull & Schultz, in press; Flower, in prep; Higgins, in prep). In another sense, writing this essay is a "chapter"—an event—in the history and social practice of community literacy itself, a step in the development of its literate practices, of its community networks, and its consequences. Writing this account draws on the intellectual tools of activity analysis in part because they can give structure and theoretical rigor to the analysis. More importantly, these tools help me focus on what seems to be the heart of the matter—on the diverse voices, inevitable contradictions, and possible tools that shape intercultural knowledge-building. Within the context then of doing community literacy, writing studies like this is a necessary part of praxis—it links action with reflection that is grounded in data and mediated by strong methodological tools. Such analysis is part of what Dewey would call "an experimental way of knowing" —documenting an activity not to "prove" a claim about it, but to understand it more fully as your working hypothesis, to probe its problems, to more fully envision its possibilities, and in doing so to inevitably reshape your working theory and next actions.

The Community Think Tank: A Case Study of Knowledge Building:

The Community Think Tank started as an initiative of the Carnegie Mellon Center for University Outreach. Operating as a series of structured, community problem-solving dialogues focused on a given urban problem, the Think Tank called together an intercultural body of problem solvers. It invited everyday people, grassroots leaders, and professionals from Pittsburgh's inner city community, from business, regional development, social service, and education to seek workable

options for dealing with some shared problems. The Think Tank's round tables deliberately reorganized normal patterns of communication and authority—for in these dialogues, the contribution of the inner city youth worker was as critical at the perspective of a CEO. And unlike many community/university projects, the participants (not the University) were positioned as the experts and knowledge makers. Our expertise lay in inquiry, in our ability to elicit and document the intercultural knowledge building of this diverse group. The Center for University Outreach also used the Think Tank to mount its public argument to business, foundations, social service agencies, community organizations—and the university itself—that intercultural inquiry was a significant, but significantly underused tool for addressing the really pressing problems affecting our economy and urban community. [3]

The Community Think Tank began in 1999 as a series of inquiries into the struggles of urban employees. But it is important to locate its approach in the earlier social and literate history of Pittsburgh's Community Literacy Center (CLC), a community/university collaboration that supported a distinctive mix of street-wise and research-based literate action (see Peck et. al., 1995). Motivated by the varied vigorous agendas of community engagement, black struggle, educational research, spiritual life projects, and program development, this collaboration redirected both partners. It led to a new public identity and education–based mission for the Community House and Community House Church, and it had shaped a new community-based research agenda within a federally supported academic research center, the National Center for the Study of Writing and Literacy at Berkeley and Carnegie Mellon.

For over a decade the Community Literacy Center had been holding public dialogues on topics such as "Risk and Respect" and "Raising the Curtain on Curfew" led by urban teens at the culmination of 12-week literacy projects. These dialogues and the teen-authored documents that supported them recognized the expert, inside knowledge teens had about gangs, police, urban schools, and jobs. The CLC projects supported that expertise with explicit instruction—helping urban teenagers develop the literate skills they needed to engage in focused problem analysis and civil, persuasive discourse. Out of this mix of education and social action the "community problem-solving dialogue" had emerged as a strategy for structured, intercultural dialogue.[4]

The Community Think Tank team [5] turned this strategy to a new purpose, bringing business, policy, and neighborhood "experts" together into a more sustained and interactive dialogue on timely urban problems. In Pittsburgh, a steel town trying to rethink itself into a high-tech development center, one of these problems was the ongoing struggle to prepare a new urban workforce. The wise officer of a foundation that supported the project's start-up had told us, "We already know the problem; we have lots of academic analyses. You say you care about change; then focus your energy there—on what to do." So the Think Tank identified itself with the task of constructing not only negotiated meanings but building and questioning options for action.

The project's first publication, called the Think Tank*Brief,* was a 4-page newsletter, focused on "Urban Employees in the New Workplace. It introduced the Think Tank process and philosophy, arguing for the need for intercultural problem solving. A side bar from the *Brief*, reproduced in Figure 1, named three features that define the Think Tank's knowledge-building strategy. They also suggest places where generative conflict is likely to occur.

The **CARNEGIE MELLON COMMUNITY THINK TANK** channels dialogue into a structured solution-oriented process

- *The Think Tank opens up a unique intercultural forum in which administrators, human resource developers, line managers, educators, researchers, community workers, trainers, and employees meet as collaborators.*

- *It structures talk into a problem-solving search for diverse perspectives, rival hypotheses, and collaborative solutions.*

- *It draws out normally untapped levels of community expertise to build more grounded, intercultural understandings of problems and to construct community-savvy options for action.*
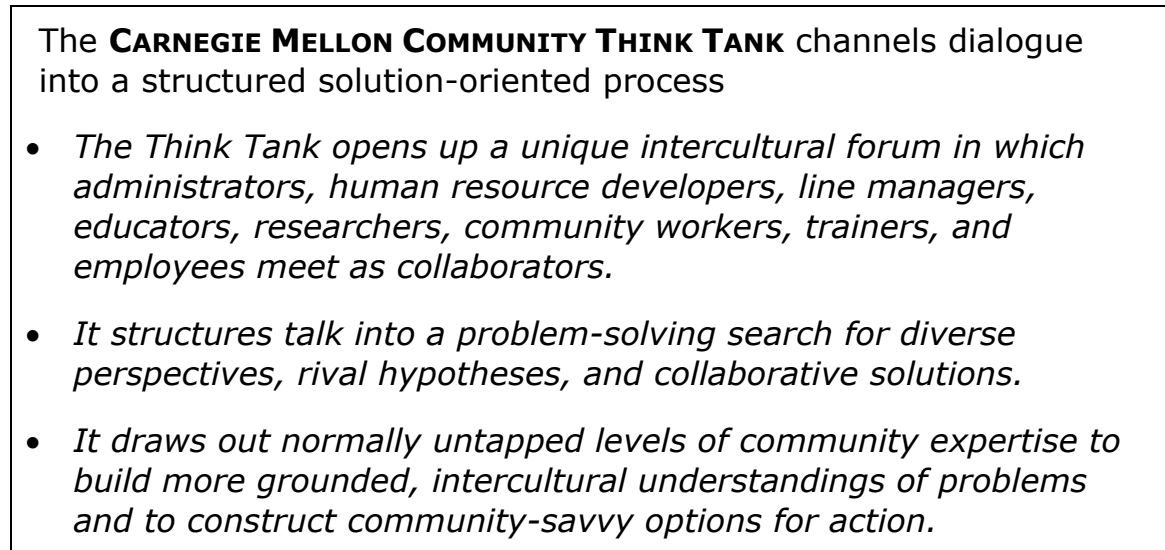
Figure 1. Overview from the Carnegie Mellon Community Think Tank Brief #1

I will use this brief position statement to organize the three sections of this chapter because, in naming the aspirations that define the Think Tank as a social cognitive activity, it also names three inevitably problematic and potentially transforming features of intercultural knowledge building.

1.   *Designing an intercultural forum*

The presence of competing discourses not only poses internal contradictions for this activity, but points to the limitations of merely inviting diversity to the table.

2.   *Structuring inquiry within diversity*

How then does one shape an inquiry that actively *uses* difference? The literate practices of the Think Tank are a test of one working hypothesis.

3.   *Building intercultural knowledge*

How do we judge the outcome of such dialogue—given its highly situated representation of human activity and contrast to a rationalized or abstract argument? Can it offer participants a *working theory* for situated, intercultural problem solving?

I. Designing An Intercultural Forum

"The Think Tank opens up a unique intercultural forum in which administrators, human resource developers, line managers, educators,

> researchers, community workers, trainers, and employees meet as collaborators." –Brief #1

The Think Tank we will examine, on "Negotiating the Culture of Work," extended over 18 months and by the end had involved over 50 people in structured dialogues. Invited in groups of 15-25 at a session, people met at the Community House for 3-hour sessions, where they worked in small groups around a table and as whole body. [6] People came to these end-of-the-work day sessions (and often stayed later) for various reasons: Many had a professional investment in workforce or social issues and a university Center had invited them. But it became clear that even more had deep personal commitments to the community and were drawn by the rare opening for dialogue across social and institutional differences. Many came because the Think Tank's co-director, Wayne Cobb, could call on strong personal relationships within the city's black community. In section II, we will examine the process, its participants, and practices in more detail. But first I want to pull back for a larger view and raise some of the inevitable internal contradictions inherent in trying to design an intercultural dialogue.

Posing the Problem

The "problem" motivating this Think Tank had various names depending on where you stood— for some it was named as the transition from welfare and school to work; for others with a regional perspective, it was a workforce without skills or "work readiness;" for managers it was performance problems on the job; for many it was the struggle for respect and a living wage. The concerns and ways of naming them were divergent but the problems were deeply interconnected. [7]

True dialogue needs a point of stasis, a way of opening a shared question so that people can deliberate together (and not just rehearse their standard stories). The Think Tank tried to provide this starting point with a Briefing Book which dramatized a number of key issues in a short case study called, "In Training," the story of Melissa, a composite of many welfare-to-work stories and research. Figure 2, an excerpt from the Briefing Book's 2-page problem scenario, poses a widely felt dilemma in the workplace: Who is finally responsible for Melissa's on-the -job training? And it poses for us one of the trade-offs you must make in designing dialogue. For in using a problem case to focus deliberation you inevitably narrow the process of problem posing as well.

THE "IN TRAINING" PROBLEM SCENARIO

The Decision Makers

Human Resource Managers and Trainers

The Admissions Office Manager (Mr. Snyder)

An Inexperienced Employee (Melissa)

Her Co-workers

Orientation day: (Hiring, Training)

Melissa, a young woman who has just completed a welfare-to-work program, is feeling pretty confident that her future is teeming with possibilities after landing the long-awaited "good job" at University Medical Corp. After a brief but intense orientation process, she's finishing up her computerized systems overview training today. She's feeling somewhat dazed with technological information overload, but is moving forward unfazed. Tomorrow it's off to the Admissions Office–the standard beginning placement position. Although entry-level wages are low, this is the point of entry to the coveted jobs in the executive staff pool, which offer benefits, training, and mobility.

Week One: (Communication and Work Support)

Upon Melissa's arrival to admissions, Mr. Snyder, her supervisor, was pleasantly surprised– taking careful note of her well-tailored suit and attractive appearance. His customary initial meeting stressed how his unit was evaluated based on efficiency and attention to details; Melissa appeared undaunted by his expectations. Days later Melissa gets a somewhat different, if perplexing, insider version over coffee break. Snyder, who had bitterly complained to Human Resources for sending him "all these welfare-to-work recruits," was overheard to actually thank H.R. for finally sending him someone who "looked alright."

The hospital's information technology is demanding: the new Admissions software is prone to freeze and/or deny access to the next user if an entry does not fit its template. The communications system within the hospital seems to assume that you already know "who to ask." Melissa has recovered from a small series of such breakdowns by asking whoever is nearby to bail her out, and so far this has covered up what she fears might be seen as a failure. Snyder had said to route questions through him, but he clearly seems too rushed and busy to bother with all these "how to" details.

Week Two—Monday at 5:00 p.m. (Community Support)

[As the case develops, Melissa's workplace problems interact with family difficulties . . .]

Figure 2. Excerpt from the Briefing Book: The Problem Scenario

Who Is at the Table?
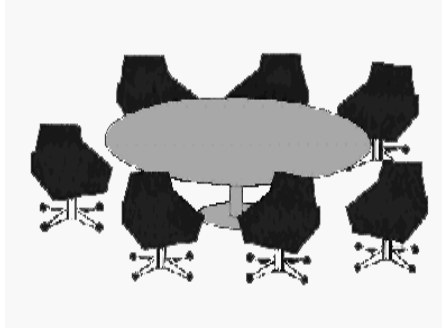
The Think Tank creates an unusually diverse group of "experts." In addition to bringing the usual suspects to the table—human resource managers from business, agency officers from regional development and social service, and teacher leaders from education—the Think Tank drew in an even larger proportion of grassroots urban problem solvers—youth leaders, program coordinators, advocates from community organizations, churches, non-profits. And perhaps, most importantly, it included people who had "been there," on welfare, on the street, or what Zempsky (1994) calls "churning" from one low-paid job to another. What united the group was an invitation to work as intercultural problem solvers, trying to find workable solutions to a set of workforce, workplace, and the worklife problems.

Competing Discourses

At this point in designing an intercultural dialogue, activity analysis prompts us to anticipate the competing voices and contradictions within this activity system. In a Community Think Tank the potential for conflict is build into the very structure of the discourse: It brings an open recognition of systemic racial, social and economic problems into the practical discussion of management and performance. It enfranchises competing problem representations. And it opens the door to diverse discourses with a history of mutual incomprehensibility.

For example, the elite discourses of policy, regional talk, social services and academic analysis speak with abstractions and terms of art. They organize their claims around disciplinary "commonplaces" and assumptions that give face credibility to a line of argument (Proir, 1998). Discourses are by nature exclusionary devices—they operate as identity cards that reveal who is "in" and who is "out" of the club (Gee, 1989). And elite discourses operate to maintain elite power in subtle ways, identifying the poor or marginalized as people without personal agency (e.g., as patients, clients, recipients) and at the same time as the cause of social problems (when the cause might have been as easily attributed to business decisions, working conditions etc.) (van Dijk, 1993).

The discourses in community organizations operate by different rules. [8] They frequently depend on narrative, personal testimony, and charismatic speaking (Cushman, 1999; Heath & McLaughlin, 1993; Peck, 1991) Because they speak from a marginalized position, urban teenagers, neighborhood advocates, and the poor often resort to a rhetoric of complaint and blame (Peck, et al., 1995)—a vigorous rehearsal of the wrongs by others in a context they (the speakers) do not control. Standing out of power, the discourse of complaint and blame takes little responsibility for positive change; it finds its strength in pressure, exposure, disruption and advocacy (Alinsky, 1989). Community planning groups and forums also place great importance on allowing many voices to be heard, covering walls with a jumble of ideas on newsprint. Such

forums can end in the catharsis of complaint (landlords meet to again bemoan the tenant problem with one another, feel better and go home with nothing changed) (Flower & Deems, 2002). Or the newsprint is bundled up, its meaning reduced to the decisions and actions of the community organizer. The real purpose of such forums was not to build knowledge, but to allow "networking," to generate emotional buy-in, or to demonstrate community support (Alinsky, 1989).

These competing discourses do not mix well. In addition to evident differences in status and power (which breed a mutual suspicion of motives), they operate by different rules, with different goals. In the *activity* of intercultural dialogue, we could say that these discourses operate as a multi-layered "system of signs" loaded with social and historical meaning well beyond the claims they make. Discourses work as powerful mediational tools—as thinking tools that shape what is thought and said, as literate practices that (let those who control the practice) govern which ideas get heard and what will be documented as meaningful.

One of the central conflicts in a community dialogue is which (whose) discourse is going to be calling the shots. That is, whose discourse will be used to build knowledge in this event? Consider the implications for what I have been calling a set of "worklife, workplace, workforce" dilemmas. A discourse that controls the dialogue will dictate not merely vocabulary, but framing concepts, ways of arguing, and what counts as persuasive evidence. It will suggest an appropriate attitude—are our eyes set on justice or riveted by "practicality" to the bottom line? Who gets to be an expert? In short, the competition between these discourses affects not only language and knowledge (as ideas), but the shape of a literate and social activity and the relations among its participants.

Competing Models of Deliberation

The source of this dilemma is not limited to the local history of social groups and alignments based on race, class, and social/economic status—as powerful as those forces are. The dilemma is also rooted in the history and practice(s) of public deliberation, that were as contested in Greek democracies as they are in ours (Jarratt, 1991). Here again, the critical question is, who is at the table and what discourse is sitting at the head? Jurgen Haberman's theory of the "public sphere" elaborates a widely held model of public dialogue based on Enlightenment rationality and

historically identified with the coffee houses, the salons, and the cafes of middle class society (Habermas, 1989, Hauser, 1999). This platform for deliberation about public questions is one that elicits rational argumentation, focused on generalizable issues, carried on by an educated and actively informed populace. It rises above partial perspectives and personal interest, thriving in the safety of common interest that allows for reasoned disagreement. But in the face of dominant, technologically supported ideologies, Habermas despairs: The unified national "public" that made up this public sphere has been co-opted by the mass media. Biased, superficial sound bites have eroded the possibility of rational public deliberation—if not the possibility of an informed, deliberative populace "competent to form its own judgments" (Habermas, 1989, p.90)

Habermas's ideal of rational argumentation by an informed elite stands behind the discourse expectations and invitation list for prestige "think tanks," academic symposia, and policy discussions (1984). However, others argue that the sheltering homogeneity of a "public" defined in this way typically excludes the concerns of women, the working class, and disenfranchised minorities; moreover, they assert, this isn't how democracy actually works (Fraser, 1990; Hauser, 1999). Gerard Hauser's alternative model of public dialogue reframes the discussion much in the spirit of activity theory. Instead of theorizing an ideal of public deliberation (based on philosophical rationalism), he asks how does the (social, cultural) process of public rhetoric in a flawed, contradictory democratic society actually seem to work?

His theory of vernacular rhetoric(s) argues that there is no disinterested, rational entity called "the public" to be engaged. There are instead people with diverse interests—and emotions and commitments—who are drawn together around an issue. Melissa, the manager who hires her, the co-workers who support and suffer her actions, and the legislator who mandates the work-to-welfare program are all drawn together into a public. In this case, it is a public that desperately needs to engage in deliberation. It is in these local vernacular publics that discourse does its work. The criterion for success is not consensus (in which the rationally "best" argument wins), but a "reasonable" decision within which a diverse (and probably still disagreeing) group of people can live. The goal of deliberation in this model is "interdependence with strangers" by understanding your own interests more broadly (Hauser, p. 53-54).

Two Welfare-to-Work Teams

The following vignette illustrates how a community problem-solving dialogue can be shot through with competing discourses and models of deliberation. Here, the organizers of an academic symposium decided to redefine their event as a Community Think Tank and transform the deliberation of a policy making elite into the dialogue of Habermas' local, "interested" public. However, as this case suggests, designing a knowledge-building intercultural dialogue requires more than changing the guest list and yielding the floor.

The Think Tank model I describe in this paper typically involves a small group of people collaborating at half a dozen round tables with a dialogue leader and recorder. But when the Heinz School of Public Policy and Management decided to structure a symposium on "making welfare-to-work work" as think tank, the event filled a ballroom with over 230 people. And this

event gives us another insight into the difficulties of designing dialogue. The small knots of people, sitting knee to knee in a circle, working on their selected section of the Melissa case, formed unlikely collaborative teams: e.g., I found myself, a rhetoric professor, working with a low-skilled TANF (welfare) recipient heading to her first job, an Executive Director of the County Assistance Office, a middle-aged low income woman on disability at sea in the system, a social service worker, and an academic policy analyst.

In the final hour of the symposium each "table" was asked to report. People were engaged and focused. They often used the provided flip chart and made an effort to avoid redundancy—that is, to add their unique key points, conclusions, and rival notions to a slowly accumulating set of options for "making welfare-to-work work" being recorded at the front. When it was her turn, the speaker from Table 12, however, launched into a stirring harangue, aimed at the Welfare office administrator across the ballroom, charging that whatever new regulations and budget limitations his office was supposedly working under, everyone knew "the State had money;" there was no reason people couldn't get the support they needed; "he," "they," "it" just needed to "do it." The speaker was clearly warming to her performance when the moderator intervened, firmly reminding the speaker of her responsibility to seek joint, workable solutions.

The discourse initiated by Table 12 (or at least by its reporter) was a familiar cross-hierarchy move in intercultural and community organizing forums. The assertively myopic "victims" in this story have no interest in acknowledging constraints that the other party (i.e., the local, state-mandated welfare office) may face, because they (as victims) do not see themselves as part of the solution (and indeed are rarely part of the decision making process). In response the representatives of authority move to a discourse of aggrieved defense, or a patient (sometimes condescending) explanation of the status quo (under which they may be struggling as well). The point is, neither party in this discourse spends its energy imagining genuine, workable options. This assertion of competing discourses is better adapted to serving political ends than building new knowledge.

It was experience with exchanges like this that had led a professor of public policy to assure me that "We have tried inviting the 'community' (i.e., leaders of local community-based organizations) into our academic symposia, but it never works. It turns into speech-making instead of discussion." Although each group told a truth the other needed to heed, neither way of telling produced transformative knowledge.

The use of diversity at Table 20 offered a sharp contrast to Table 12. Focused on the transportation problems that plague low-income workers, the group took the (novel) position that this was neither the State's responsibility nor the individual's personal problem alone. Working as knowledge builders at multiple levels, they proposed that the problem belonged to all parties including the administration, which chose to benefit by hiring TANF workers, the line manager, and the co-workers who depended on her contribution in the office. The group then began framing local actionable solutions, down to starting a car pool, while demanding a new level of corporate responsibility.

Outcomes of Diversity

As this vignette suggests, a community problem-solving dialogue is an activity rife with social and literate practices that can derail knowledge building. The problem cannot be reduced to the unscalable barriers of race, class, and education—they are not insurmountable. But nor can it be avoided by designing a forum around naïve plans to "just talk," that ignore what activity theory reminds us are the "continuous, self-reproducing, systemic, and longitudinal-historical aspects of human functioning" (Engeström, 1999a, p.22). These dialogues are inevitably a contact zone for multiple discourses, with their heterogeneous "voices" prompting participants with cues for what to say, how to say it, and how to interpret the words and intent of others (Kochman, 1981).

The inescapable conclusion, which intercultural forums ignore to their peril, is that the presence of diversity is not a guarantor of intercultural inquiry or problem solving. Being heard is not being a collaborator. And merely hearing the voices and positions of others can leave one's image of a problem unscathed, one's plan of action unchanged. The challenge for intercultural knowledge building is whether new knowledge has been constructed or whether prior knowledge has been transformed, by testing, qualifying, or conditionalizing previous ideas. And if so, whose knowledge? Does it exist only in the moment of dialogue, in a transcript, and the eye of the analyst? Or do the actors/decision makers in this activity see new options? [9]

II. Structuring A Dialogue to Use Difference

> "The Community Think Tank structures talk into a problem-solving search for diverse perspectives, rival hypotheses, _and_ collaborative solutions."—Brief #1

Creating a forum that gives a voice to difference and enfranchises marginalized groups has its own merit in a democratic society, but it does not guarantee that new or intercultural knowledge will be constructed. The Community Think Tank is best described as a theory-guided experiment in _using_ diversity to achieve that end—its literate practices work as a mediating tool that structures both the social and intellectual process of inquiry in some distinctive ways.

Dialogue As A Socially Organized Activity

It is more accurate to speak of constructing a dialogue than of holding one. The series of events that make up the Think Tank process (see Figure 3) begins by laying a foundation—using literature reviews, interviews and small group sessions to uncover competing representations of the problem. This leads to dialogues focused on decision making which in turn becomes the foundation both for documenting these findings and for supporting local action.
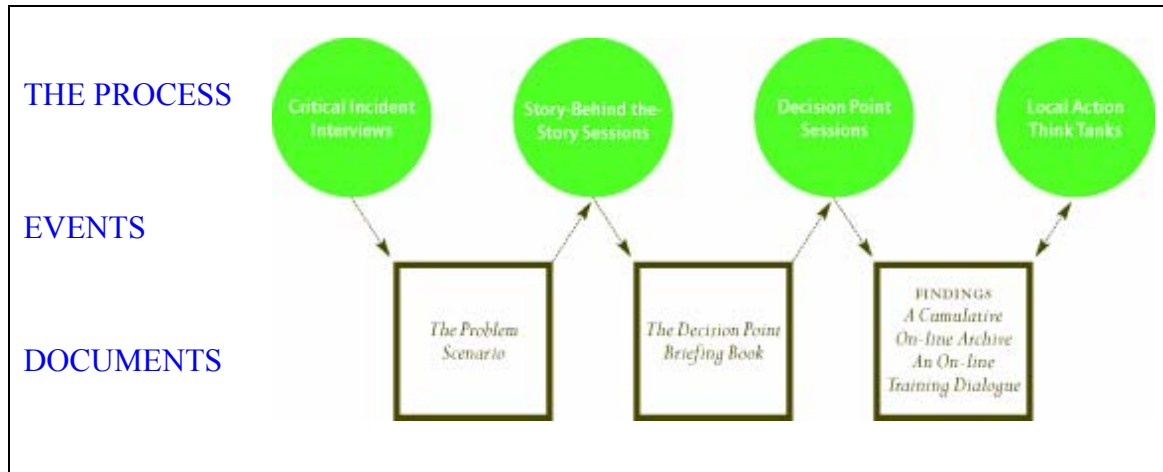
Figure 3. The Process of Developing a Community Think Tank

- *Critical incident interviews*. The Think Tank team identifies key problems by combining a standard literature review with "critical incident" data (Flanagan, 1954) from local managers, employees and their supporters. This analysis of the live issues is transformed into a locally grounded, data-based scenario and a set of decision points (such as we saw in the Melissa case in Figure 2) that will be used to focus the Think Tank deliberations.

- *Story-Behind-the-Story sessions*. In these additional discussions and interviews we ask a diverse body of people to interpret "what is happening?" in the scenario so we can document strong "rival readings" of its problematic events. This attempt to probe the meaning of an event often uncovers the hidden logic of an actor like Melissa or the manager (as different people see it) and reveals starkly contrasting interpretations of an event. This expanded representation of the problem is now used to construct the Briefing Book which all Think Tank participants will use as a springboard to their own deliberation.

- *Decision Point sessions*. It is now time to shift the focus to choices, decisions, and actions within workforce policy, management, education, human resources, or community support. Think Tank participants (responding to the Briefing Book and a dramatized scene) seek rival hypotheses and construct and test more diversely informed options. The results of these invitational "expert" sessions are documented in the Findings.

- *Local Action Think Tanks*. These forums are an extention of the Think Tank that support direct action by initiating this same inquiry process within individual workplaces, career centers, and community organizations. With the support of a trained local leader and the Think Tank's on-line tools, these dialogues can help a group turn talk into strategic, local action.

As Figure 3 suggests, the process of building a dialogue is an interplay of documents and events, in which each shapes and mediates the other. Constructing a document (and the various events that subsequently use it) involves seeking out and orchestrating a number of metaphorical "voices" in addition to those of live participants. For example, the Problem Scenario, Briefing Book and *Findings* (with their mix of narrative, argument, evidence, testimony, and practical

plans) are trying to integrate multiple kinds of data and alternative ways of representing the problem. They must capture the abstract voices of published reports, data and policies found in the literature, the rich specifics of critical incident interviews, the interpretations drawn from rival readings of problem cases, and the action plans of decision-making dialogues. These documents, and their mix of mini-genres, are a footprint of the socially organized events and the actors that produced them.

At the same time, these documents are also strategically designed to mediate the next event in the process; that is, they are structured to work as a fairly explicit scaffold for literate action, guiding interpretation, comparisons, discussion etc. For example, the use of written narrative, dialogue, and live dramatization is designed to spark engagement and draw out situated knowledge from participants. The Briefing Book, on the other hand, tries to focus attention on a set of shared problems. Anticipating the possibility of competing discourses (such as we saw from Table 12 earlier), the Briefing Book uses a visual format and prompts to draw the participants into proposing rival hypotheses and decision-making. Figure 4 shows how the page for Decision Point #4 combines an example of an option with blank spaces for the participant's ideas. The *Findings* (see Figure 6) are both an archive created at the end of the series and a tool designed to document, teach, and persuade a range of possible users and participants. The point here is that the intercultural dialogue we are examining is best understood not as an informational digest, a training document, or a conversational meeting of minds, but as an extended, highly mediated social and material process of building knowledge.[10]

Now jot down your ideas for options and outcomes

Decision Point #4. Melissa needs help with "how to" questions and has a choice to ask co-workers or a friend for help, or to save face, act and hope.

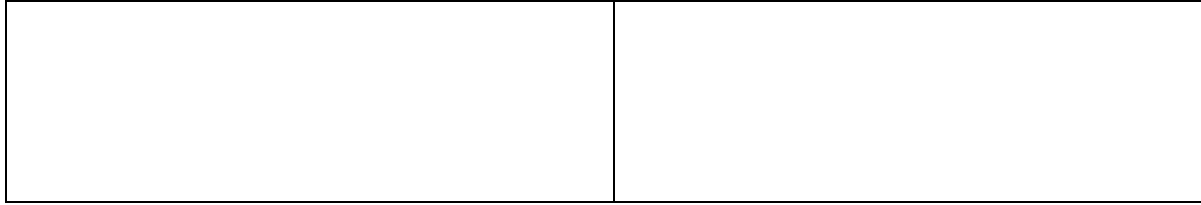| **Option:**	**Outcome**
Example: Melissa could sit down and talk with Snyder at the end of the day.	But Snyder has no back-up plan in place to help her. He is just setting her up for failure.

Figure 4. The Briefing Book as a Scaffold for Literate Action

Dialogue as an Intellectual Stance

It would be a mistake, however, to see the Think Tank as primarily a structured social event, because it also asks the participants, as individuals, to engage in a demanding kind of thinking. It stands in the tradition of philosophical pragmatism, which acknowledges that even our most favored accounts of the world are still, and only, our best current hypotheses. This recognition of uncertainty calls for what John Dewey (1988) named "an experimental way of knowing"—an unflagging, continued attention to the disconfirming as well as the confirming messages of experience and a openness to the infinite revisability of what we see as "truth."

As an intercultural inquiry, this dialogue is shaped even more directly by Cornel West's prophetic pragmatism, which calls us to identify the causes of injustice and social misery and organize morally activated collaborative action against them. Pragmatism is quintessentially a theory of action, yet the twin pillars of West's call to activism also depend on an individual intellectual stance—what he calls a" critical temper as a way of struggle and democratic faith as a way of life" (p.140, 1993).

> The critical temper promotes a full-fledged experimental disposition that highlights the provisional, tentative and revisable character of our visions, analyses and actions. Democratic faith consists of a Pascalian wager (hence underdetermined by the evidence) on the abilities and capacities of ordinary people to participate in decision-making procedures of institutions that fundamentally regulate their lives" (p.140).

But how might we ordinary people translate this temper and faith into an everyday literate practice? In this context, engaging in an intercultural dialogue demands what my colleagues and I have described as a "strong rival hypothesis stance" to the open question on the table (Flower, Long & Higgins, 2000). Entertaining rival hypotheses is at the center of many forms of rhetorical, philosophical and scientific inquiry—if only on the way to building one's own case. But the *strong* version of this stance takes one beyond merely considering available alternative understandings, to actively seeking them out, eliciting rivals that might remain silent, striving to comprehend them, and, in embracing the difficulty of talking across difference, expanding our understanding of a more multi-faceted reality.

The members of a Think Tank are asked to take this strong rivaling stance to inquiry by momentarily stepping outside familiar discourses (e.g., community advocacy, academic argument, social counseling, business management) and putting aside some of their standard discussion strategies (e.g., for getting the floor, making a point, winning arguments, or

smoothing over dissension). They are asked to enter the dialogue using a set of *strategies* designed to seek rival readings of the world, that is, to support and draw out the local knowledge of their partners, to explore options, and to use their differences (in effect to privilege them) to create a collaboratively expanded understanding.

At the beginning of this Decision Point session the facilitator gives a brief introduction to the rules of the game:

> I should start this dialogue out with our standard warning. You don't see community problem-solving dialogues like this one very often. The reason is, it isn't easy to hold this kind of discussion. It means that if you're Preacher, you can't preach. If you're teacher you don't get to teach. Social workers, you can't tell us what guidance you would offer, and managers, you don't get to tell us what is wrong with employees and youth of today.
>
> A community problem-solving dialogue has three rules:
>
> - One is, we are focused on a problem. This is not rap session, but an effort to imagine action—collaboratively
>
> - Secondly, we are here to seek out differences and work as planning partners to develop each other's ideas.
>
> - Finally, we use two strategies, called "Rivaling" and "Options and Outcomes," to structure our inquiry.

The first mandate—to focus on decision points and envision actions—helps the group put aside the rhetoric of complaint and blame when it begins to take the floor. And it prompts them to draw one another into a rhetoric of decision-making. The second feature is designed to replace silencing and polarizing discourses (the prestige talk of the academy and policy makers, the adversarial talk of advocacy) with a problem-solving discourse in which everyone is a learner and the expertise of ordinary people is central. Participants are shown how to take the role of a collaborative planning partner, charged to draw out the thoughts of other speakers before they launch into their own (Flower et al., 1994).

If the first two rules of the game call for an attitude of inquiry, it is the focus on named strategies that makes this attitude operational and lets participants act as self-conscious agents in a knowledge-building process. The "Options and Outcomes" strategy counters a common tendency in decision-making (to consider only one option and decide " yes or no") by asking participants to generate multiple "real" options. Then, because the solutions to complex problems often involve tradeoffs, or there is no obviously "good" option, the strategy asks participants to project and compare possible outcomes. At this point, concerns with values and the probability of an outcome often enter the discussion. The "Rivaling" strategy, challenges members to take a rival hypothesis stance to problems: to see them as open questions with no single answer; to enter this intercultural dialogue actively seeking rival hypotheses and interpretations, and most difficult of all, to seek to rival one's own first or favored ideas.

Although the table leader is the most explicit and consistent user of these strategies, the self-consciously strategic nature of this dialogue is reinforced by text and the agenda that culminates in tables sharing and comparing their own rival options. Participants are surrounded by cues to strategic thinking by handouts and prompts on small "table tents," and by the format of the Briefing Book organized around decision points, followed by rivals and empty double columns calling for Options and Outcomes. The notion of "rivaling" becomes a term of art people use with self-conscious humor.

Dialogue as a Process of Rewriting Representations

The Think Tank Decision Point session that we examine below is what we called an "expert session" inviting people from different organizations around the city, who deal with this problem in their own diverse ways. The episode we will analyze brings together at one table a university policy researcher, the local president of an African American union, the manger of a large human resources department, and the table leader from the Think Tank team (the one Anglo-American member of this group). They are working together on Decision Point # 4 (see Figure 6) at a table covered with Briefing Books they had received in the mail, a crib sheet on dialogue strategies, a tape recorder, laptop computer for recording key points, and plates of food. This is the first time most have met one another.

Figure 5 documents a sequence of dialogue moves from this session and lets us track how these moves led to shifts in the group's representation of what on-the-job training could mean. The left column gives a shorthand identification of the speaker and the strategy in play. The right contains brief excerpts that convey the gist of the speaker's comment. We will follow three threads in the dialogue which reveal distinctive patterns of knowledge building.

> The policy researcher (University), who has been looking over the Briefing Book, gets the inquiry going by reviewing the options and outcomes he sees open to Melissa at Decision Point # 4, as she tries to recover from errors and gain competence (see Figures 2 and 4 for excerpts from the Briefing Book). As he sees it, none of Melissa's options appear very desirable.
>
> There seem to me to be three options. One is to go ahead and ask for help and feel like he is going to think she is stupid and maybe not even help her at all. Get your co-worker to bail you out—and they might think you are stupid too. Or maybe just say nothing at all.

HR, the human resource manger then takes the floor confidently explaining the training procedure at her institution. At Episode 1, University breaks in seeking a rival perspective from Union.

At the Table:

- University (policy researcher)

- Union (president of African American union]

- Table leader (facilitator dialogue)

- HR (manager of large Human Resources department]

	SPEAKER & MOVE	COMMENT
1	University (Seeks Rivals) Seeks a different perspective after HR talks	(University asks Union) So in your environment, how much of the training are they going to get through their boss or training, and how much from their co-workers?
2	Union (Poses Rivals / Conditionalizes)	Depending…you will have some employees [saying] "It's not my responsibility to train." There is a component within the contract; you could put some [at a higher level job] to train, but a lot of times management tries to get away with having people do those things, without putting them in that higher level job to do that.
3	Table leader (Poses rivals)	Can we follow up and pursue the options of employee assistance?. . . (University's) idea is to have an employee assistance, a non-judgmental support group, and you're saying it shouldn't be just co-worker because there are all kinds of dynamics going on there.
4	University (Poses option)	Let me suggest an alternative. To me a creative and supportive work environment would encourage workers to help each other.
5	HR (Poses option) Redefines University's option into a professional program, focused on actions of HR and accountability	What I think is that one of the solutions to her problem would be what you are saying, an employee assistance program. We used to have a buddy program; for any one we hired we had selected people that were responsible for training the people once they got to the floor. . . They were to go to this one specific person for any problems, so if there was any repercussion, this one specific person was totally responsibility.
6	University (Seeks rivals)	You know I was going to follow up with something about mentors, but then I realized that you are talking about something different. To me a buddy will answer those, "How do I…?" or "What comes next?" kinds of questions.

	Rival interpretations of "buddy" (Poses option) Based on his workplace	A mentor will help you assess more strategic issues. What skills do I need to get from point A to Point B? Who should I be talking to to figure out where I am going to be five years from now? My employer has a mentor system, but those mentors were senior folks . . .. They weren't the kind of folks I could go to to say, " I don't know how to work this computer program."
7	Union (Poses Rival) Redefines the key problem	You know, I think key to this type of thing is, what is the culture like on the particular job? . . . I work in a different environment than that. . . Where I work, there have been employees that flat-out refuse…to train people. And that came out of a knowledge that really contractually, management didn't have a right to make them do that, and compounding that in some situations there were race, what appeared to be race discrimination issues because they had in some instances trained other individuals but then in other situations chose, "I'm not doin' that." And really there was no way to compel them to do that, but now there is an extra burden on this new person. (laughs) This is really somethin'. "They told me so and so was going to train me. They flat out refuse to do it and I'm right here."
8	Union Restructures his own thinking	You know, it is really occurring to me that a component—how to be a personal advocate for yourself—needs to somehow get built into the understanding of people coming new into the workforce, if they're doing nothing more than keeping a log of what's going on.
9	University and HR (Pose Rivals)	University: In my work environment . . .[poses collegial mentoring process] HR: (laughs) Not true for the majority . . .

	Clarify differences	There's a lot of competition out there and people resent helping another person because the other person is going to go get promoted.
1 0	HR (Reviews Options)	In my company when have mentors and buddies, and we do offer incentives to group leaders and they are given a monetary, you know, a little bit of money. It give them that extra dollar or two dollars to do this, the expectation is that whoever is assigned to you, you are going to help, and if that person fails, then you are going to have to answer for that.
1 1	Table Leader (Seeks Rivals) Asks HR to rival herself	What's the downside of that?
1 2	HR (Poses Rivals)	Downside is that you are telling these people that "we are paying you to tell these people the right thing to do, to train them properly," and just because you give them a dollar or two dollars to do that it doesn't mean that that is what they are going to do. If I don't want to train them, I'm not going to train them: "I don't like their attitude." "Melissa is assigned to me. I am supposed to be helping her. She has an attitude. I can't deal with the attitude. That's right. She does nothing that I tell her to do." (Mentor is thinking to herself.) "Now I am familiar with Human Resources so I am going to go there before you do, because you [the new employee] don't know how to go to Human Resources as yet. I'm getting my story in." You have people coming up and saying, "I don't like her…. She's ohhhh, that girlllll, I just don't like her…." They'll say, "I didn't train her because she didn't listen. I didn't train her because she's never there, she didn't come in on time." The girl may be one minute late getting on the floor and they'll say, "She's never there on time. "
1	University	That's interesting….In my ideal work environment the new employee would not be told what to do by their

3	(Poses Rivals) Qualifies (and critiques) HR from his "collegial" perspective	buddy. The new employee would ask a lot of questions: "How do I do this; how do I do that."

Figure 5. Dialogue Moves from a Decision Point Session

One thread of this dialogue traces a suggestive shift in HR's insistently professional representation of the problem. University proposes a "creative and supportive work environment" in which workers "help each other,"(Episode 4). When HR picks up this thread, she unhesitatingly translates University's idea ("what you are saying") into a standard "employee assistance program" and a "buddy program"—that is, into a professionally organized and administrated activity in which the worker is the client and mandated recipient. By Episode 10 this has become an economic relationship in which the "buddy" is both paid and accountable for the failure of the new employee. One could say that HR is contributing to the inquiry up to this point by speaking from a distinctive, if rather single-minded standpoint, even as Union poses alternative accounts of what happens in "his" organization.

But in Episode 11 the Table Leader asks HR—as the expert on the actual outcomes of this option—to rival herself: "What's the downside of that [mentor system]?" HR responds with a dramatic enactment of what happens to the "professional option" in context—where payment doesn't mean performance, where attitudes (of mentor and mentee) dictate practice. To capture this other reality, HR moves into dialogue, playing the parts of complaining mentors who know how to get their story heard first. In short, her rivaling move brings a bruising new dimension of social and economic reality into the deliberation—and qualifies her own easy rehearsal of options.

A second thread of the dialogue shows how another participant, Union, appropriated the rivaling strategy to significantly redefine the problem itself in terms of the "culture of the workplace" and to bring the hard-to-discuss presence of racism into the discussion. Recall how in Episode 5 University posed an option based on his image of a supportive, mentoring workplace. Union, whose thinking is exploratory but still privileged because he can speak from a "different environment," begins to direct attention to the "culture, like on a particular job." As he develops his idea, it becomes clear that the outcome of HR's mentoring programs cannot be separated from the pervasive effects of racism. Like HR, he pursues this idea by building a highly situated representation. With rueful laughter and the comment, "This is really somethin'," we see the new worker, standing there in perplexity: "They told me so and so was going to train me. They flat out refuse to do it and I'm right here." (Episode 7)

The volatile issue of racism is often difficult to handle in intercultural forums. Although the members of Union's labor union felt strongly about this issue, it entered their public deliberations only through indirection and innuendo. But in this situation the dynamics of a

community problem-solving dialogue encouraged the explicit, shared use of a rivaling strategy and privileged stories-behind-the story. They let Union transform what could have been an implicit accusation into an empirical observation of a significant and not improbable outcome of mentoring systems. Unlike an advocacy discourse, in which the dialogue-stopping accusation of racism trumps other concerns, Union's representation shows racism as a discussible action, interacting with other desired, unwanted, and unanticipated outcomes. It becomes a problem HR administrators must deal with, not a situation they defend against admitting.

A third thread of the dialogue shows how a rival that is initially interpreted as a training option (and is laughingly "voted down" as unrealistic) ends up producing instead a more qualified working understanding of what training could mean. When University sketched his norm of a supportive, mentoring workplace (in Episodes 5 and 10), his rival is met with genial laughter at the table: "Not true for the majority . . . There's a lot of competition out there. . . ." The inquiry then moves to "realistic" options suited to managing power motives through incentives and accountability. In a discussion structured as a debate or a rationalized search for the "best argument" and strongest reasons, the voices of experience would have normally trumped and dismissed University's apparently naïve model of employee development as irrelevant (and have potentially silenced University). What happens instead is perhaps an even more significant contribution to the inquiry. University re-enters the discussion (Episode 14) not to defend an option, but to rival one of the fundamental assumptions of the reigning HR "trainer" model, which places the agency and power is in the hands of the trainer who *tells*, rather than in the hands of an employee who *asks*. By posing his collegial, question-asking relationship as an ideal, University throws into sudden relief the hierarchical nature of the buddy system itself and the way it places the agency for learning in the hands of others.

 His comment doesn't defeat the HR option for training and support; it suggests a transformation of how it is done. University's rival does its work not by opposition or simple critique, but by leading the discussion toward building a qualified, revised vision of a solution, in which the agency of the worker is a critical factor. The option that takes shape in this brief dialogue has expanded to include some new criteria for success, i.e., employees who are empowered to ask (Episode 14) and to become personal advocates for themselves (Episode 9). Although these rival representations offer a radical challenge to some aspects of the HR model, they appear to work in this dialogue as overlapping rather than opposing representations that tend to restructure the option rather than destroy the opposition.

This dialogue is a complex event open to multiple close readings. My point in tracing these three threads is to illustrate how people appropriated the Think Tank's intellectual stance and used the rivaling strategy to challenge, expand, and redefine a problem representation. Rivals work here as cumulative knowledge-building tools. They enter as stories told from alternative professional, cultural and racial perspectives, as hypotheses about the key factors, and as predictions of likely outcomes and the complex mix of intended and unintended consequences any action will have to deal with. As people try to share the complex networks of their personal knowledge—through examples, narratives, experiences, reflections, quandaries, and highly situated observations— these networks differ but also overlap and transform one another. They reinforce a piece of the

picture here, contradict a piece there, and build in critical qualifications. And at times, they restructure a whole linked network of images and ideas around a different central idea, around, for instance, the agency of the mentee rather than that of the mentor and manager. Rivals help people to redefine and reprioritize, to qualify and conditionalize their own ideas and others'. This strategic form of dialogue, then, is using difference to help people construct a negotiated meaning—an expanded, reorganized network of information and attitudes around the Melissa question that attempts to acknowledge and accommodate rival representations and ways of knowing. [11]

Whose Knowledge Is Changing?

If this intercultural knowledge building is indeed a social <u>and</u> a cognitive process (a collaborative and an individual/internal act), we must recognize that the emerging knowledge sketched above is what is described as a social construction (Nystrand et. al., 1993). It emerged in the exchange or temporal space created by the conversation; it now exists in the resulting transcript and in the minds of documentors, analysts, and readers like yourself. It may have never existed in representations constructed by the participants or in the understanding they left with or retained the next morning. We must not blithely assume that the representation we (as analysts) *can* construct is what the actors heard, understood, or *did* construct with their own inferential links, not to mention what they recalled or acted on.

In an intercultural dialogue, the knowledge that matters most is what the actors within the activity construct—since it is <u>their</u> understanding that is realized in actions and outcomes. [12] (For instance in Episode 6, HR happily but inaccurately appropriates University's image of a creative work environment to her image of a professionally administered "employee assistance program." Although she appears to be building in good faith on "what you're saying," she seems instead to have imported a prior professional schema, a notion of support built around paid work, accountability and repercussions. In short, we must view any image of an emerging and transformed representation with some skepticism.

On the other had, there is also evidence in the excerpt that the participants are cooperating in building a progressively transformed option. University suddenly realizes how his mentor idea differs from and qualifies the buddy plan: "You know I was going to follow up with something about mentors, but then I realized that you were talking about something different" (Episode 7). Union, responds to these distinctions with a reflective reappraisal: "You know, I think the key to this type of thing is what is the culture like on the particular job" (Episode 8), and later, "You know, it is really occurring to me that a component, how to be a personal advocate for yourself needs to some how get built in . . ." (Episode 9). And at the prompt of the table leader, HR engages in a sustained rival of her own position ("The downside is that . . .") that elaborates a piece of the picture Union had raised back at Episode 3). These bits of evidence suggest that the participants are not only sharing perspectives but are collaboratively building, elaborating, qualifying and conditionalizing a collaboratively constructed representation. And that this

representation exists, at some level, as a transformation of their own knowledge and understanding.

III. Building New Knowledge

> "A Community Problem-Solving Dialogue draws out normally untapped levels of community expertise to build more grounded, intercultural understandings of problems and to construct community-savvy options for action."—Brief #1

Using Documentation to Mediate Inquiry and Represent Knowledge

Documentation is a critical part of a Think Tanks' knowledge-building activity. For the immediate participants, multicultural forums are contact zones using difference to create productive upset and transformed understanding. But people's memory for schema-violating information can be fragile. For participants, documentation not only reminds; it clarifies, consolidates, and invites reflection. In the larger picture, these participants are also stand-in knowledge builders for their professional and social communities. The texts that emerge from the Think Tank (from its interviews, story-behind-the-story and decision point sessions) let others (colleagues, Local Action sites, Internet readers) participate in a virtual intercultural dialogue.

Texts also shape that participation (Wertsch, 1991). Documentation is a tool that in fact mediates the entire process. It works as a set of artifacts and as a technology for thinking that structures what participants do, the representations they build, and the representation given to others. We saw how the Briefing Book (Figures 2 and 4) guided Decision Point participants to focus on a paradigm case and grapple with a starter set of diverse interpretations. The subsequent, published *Findings* (Figure 6) try in their own way to replicate the social and cognitive dynamic of a Think Tank session. Unlike a policy report, newsletter, or the minutes and newsprint that get bundled up at meeting's end, the *Findings* attempt to simulate the activity, inviting readers into an unresolved problem, complicated by multiple readings, leading to a decision point at which multiple players must test their options in an intercultural crucible. We can see this in Figure 6 excerpted from the section called Decision Point #4, focused on our training problem. (Note: Paragraph numbers are added to the text for convenient reference. The full document is available on http://www.cmu.edu/thinktank/)

Decision Point #4: Work Support

> The situation demands on-the-job-learning, but without systematic support by HR, management, or co-workers, the employee is left to negotiate a hazardous terrain.

> **Option #1: The company puts a short-term support or buddy system in place for new employees to turn to for advice.**

> ### Academic Contribution
>
> Federal policy analysts argue that there is a disconnection between family, school, community, business, and agencies; this disconnection can lead to failure for inexperienced workers in the system. For example, a young mother who is taking a job training course could ultimately fail to find work if her issues

[text deleted]. . . . .
. . . .

Option #2: Melissa decides to ask her co-workers for advice on an "as needed" basis and avoid bothering the busy manager . . . . .

[1]*An employee says:* Co-workers don't always know how to handle problems, and they may give bad advice just to look good in front of the "new girl." Sometimes advice is bad advice, and how is Melissa going to know that?

> [2]*The employee's Story Behind the Story:* One time I was working as a receptionist at a school and I had a problem with the computer. I asked at least four different people for help, and got different answers from each of them. And none of their solutions worked! Turns out, one of them was well known for stabbing people in the back, another was incompetent with technology, and another was preoccupied and just gave the wrong information.

[3]*A human resources manager says:* The co-workers will start to resent all of the interruptions from Melissa. They have their own jobs to do, and wasn't the training program supposed to get her ready to work? Why do they have to take up the slack for Melissa? Some of the co-workers may even start to complain to Mr. Snyder or to each other about Melissa's incompetence.

[4]*An educator says:* Co-workers coming in and fixing Melissa's problems is not an effective way for Melissa to learn how to truly fix problems. These co-workers aren't trained as educators and may just be going in and "fixing" without actually telling Melissa how to fix the problems herself, or how to avoid them in the first place.

> [5]**Option #3: The company could have a mentor who works full time on an individual basis with new welfare-to-work employees. The mentor could help with technical questions, but also with personal issues like childcare, transportation, and communication.**[6]

[7]*A human resources manager says:* That's what all human resources departments are for -- to help out employees. But I think it is inappropriate for the hr department to intervene in the personal lives of employees -- instead, we can refer the employees to family, church, or a CBO.

[8]*A welfare recipient says:* If Melissa had someone who was working on her behalf, a lot of problems would be avoided. Maybe Melissa doesn't know her rights, or even the bus schedule. This way, she wouldn't have to look silly by asking her boss; instead she'll look strong because she'll be solving her own problems.

> [9]*The welfare recipient's Story Behind the Story:* I had a job once where the supervisor would not let me go on a bathroom break except for lunch. Well, I never found out until after I left -- but it is illegal to stop me from using the bathroom! And that was the major reason I quit that job.

> (Paragraph numbers are added for convenience of reference.)

Figure 6. *The Findings*: Selected Options for Decision Point #4

What Sort of Knowledge Does Intercultural Knowledge Building Build?

What sort of knowledge can a think tank construct? The representation in the *Findings*, which tries to replicate the experience of the dialogue itself, clearly bears only passing resemblance to a structured argument with its body of explicit and logically linked claims and evidence. The distinguishing feature of the *Findings*, I will argue, is the way this representation of meaning can at times re-create the *dynamics* of a social/cultural/cognitive activity, in action. This distinction between a canonical argument and an activity may give us a more sensitive way to gauge the complexity and coherence of the knowledge found in Figure 6.

A typical policy argument on welfare to work or a management report on on-the-job training problems would be organized around a set of claims, supported by data, and licensed by warrants (Toulmin, 1969). It would strive to achieve warranted assent, i.e., a consensus in which the "best" argument wins. In this logic-dominated view of public discourse, winning will be based on the rational force of one's arguments and the rational necessity of the abstract principles on which those arguments lie (Hauser, 1999, p. 52-55).

By contrast, the *Findings*, like the dialogues themselves, are a mixture of analysis and narrative, arguments and stories, policy issues and speaking voices. These rival readings of the world do not resolve themselves into discrete opposing claims, but into partially contradictory, partially overlapping, sometimes co-existing networks of knowledge. They posses the character of an activity system which, as Engeström describes it, "is not a homogeneous entity. To the contrary, it is composed of a multitude of often disparate elements, voices, and viewpoints" (1993, p. 68). Within these elements we can see "historical layers" that shape not only the activity but also "the mental models of the subjects" themselves (p. 68).

Engeström's model of an activity gives us a set of terms for more precisely mapping these "disparate elements," into two trios of components: The first, most basic trio is the subject (or agent); the object (problem space and outcomes of activity); and the community which shares these outcomes. In Engeström's model, some of the fundamental contradictions in activity systems become even more apparent when we add a second trio of elements: tools, rules and the divisions of labor within the activity (the latter represented in my analysis as a form of power) (p. 67). Using this template, let us consider the representation of "training" found in the excerpt from the *Findings* in Figure 6.

Agents, Objects and Outcomes in a Community

The stories of the employee and HR manager (paragraphs 1-3) dramatize the presence of speaking employees, managers and welfare recipients who are all agents and the recipients of others' actions. They carry on in a world peopled by helpful, incompetent, and back-stabbing co-workers, authoritarian supervisors and caring church members, within a community that goes

beyond the walls of the office to include welfare-to-work programs, academic research, and federal policy.

The voice of academic research (in paragraph 6) expands the scope of activity to a set of outcomes that escalate from failed training and flawed performance, to the failure of workers to find or keep a job, to the failure of federal policy. But the story is more complex—and the solution must be as well—because these options also produce and then interact with the intermediate outcomes of unwilling and incapable mentoring, resentful coworkers, employees trying to save face, and HR staff who say it isn't their problem.

Power

Issues of hierarchy, status, and power (associated with a division of labor) are palpable in this representation of the decisions around "Work Support." The egregiously exploitative supervisor (paragraph 9), the complaining co-workers (paragraph 3), the trainer who "fixes" the problem without out educating Melissa (paragraph 4), all these vignettes dramatize the presence of social and racial hierarchies and the stigma of welfare. The conflicts they engender show up in Melissa's face-saving, but self-defeating failure to get help. Because race is such an incendiary subject, it is often avoided in policy and management discussions. But here, as in the comments of the Union leader in Figure 4, it is placed on the table as a powerful, intensely problematic (yet not all-explaining) force in a complex human activity.

Rules

The rules ("the explicit and implicit regulations, norms and conventions" (Engeström, 1993, p. 67)) that shape these decision are represented in the references to "welfare-to-work", which signals employees who are subject to a raft of new regulations motivated by a mandate for "work first," with education and assistance later. The federal analysts (paragraph 6) point out that unresolved problems of transportation and child care mean that employees are certain to fail in meeting these expectations. Meanwhile HR policy (paragraph 7) invokes another set of rules, which allows it to sidestep such problems by defining them as "personal." It proposes a policy of referring folks to a family, church, or community organizations, even as the academic report (and the consensus of the Think Tank) asserts the disconnection between these parties. Even this small section of the *Findings* shows an activity rife with contradiction and decision points at which the actors must deal with these conflicts.

Tools

As mentioned earlier, the *Findings* are themselves a tool—a mediating symbol system for modeling, documenting and persuading. Of interest here is that the *Findings* also represent how thinking tools, technologies, and literate practices, such as training programs, actually work, revealing inner contradictions much as we saw in the *Findings*' representation of rules and power. This excerpt offers two snapshots of just such a conceptual tool (and great mediator of behavior), "on-the-job training." Paragraphs 1-4 dramatize the on-your-own version. Here the learning process is initiated (and maintained) by the social skills of Melissa. It depends her ability to elicit and evaluate advice, while maintaining the good will and respect of those she

interrupts. Presented here as an activity, its internal conflicts and potentially disastrous outcomes are open to scrutiny.

An alternative representation of training is portrayed here as dedicated mentoring. This social tool for mediating the activity of employee and co-worker not only involves different practices and methods, but as the comments of the HR manager and welfare recipient suggest, such training carries strong symbolic significance. It replaces the "not our problem" representation of HR with a view that accepts "personal problems" as a problem of the larger workplace community as well. And paragraph 8 introduces a radical new priority that counters "work first' with "success first"—that is, this training would place value on making an insecure employee "look" and presumably feel strong. The *Findings* envision a workplace practice that articulates the place of motivation, compassion, and respect in low wage jobs.

This analysis suggests that the source of coherence in this knowledge building is not that of a thesis and its support or a conversational give and take. The hidden logic of this representation is the logic of a multi-voiced human activity which orchestrates the changing interplay of agents, objects of effort, and a community, with its rules, tools, and patterns of power.

Evaluating Knowledge Building

An intercultural dialogue can serve important social functions, but how do we evaluate the significance or quality of its knowledge building? The representation of the "Work Support" issue we saw in the *Findings* clearly differs from the kind of argument privileged in elite academic and public forums. By those criteria, we might value a Think Tank as a chance to hear and be heard with serious respect (a feature highly rated by participants) or as the experience of an energizing intercultural collaboration (missing from people's public/professional lives). But we might dismiss the representation it creates as a rich but rather chaotic potpourri of ideas; an example of orality rather than literacy (Ong, 1983); a representation that has failed to reach the status of an autonomous, logically explicit, internally coherent text (Olson, 1988) and is unable function as a best-argument producing, warranted assent (Toulmin. 1969), or achieve the rational principle of non-contradiction (Jarratt, 1991). Using these criteria reflects a long-standing, Western (Platonic, Aristotelian, scientific) tradition of argumentation that seeks universals or at least abstract generalizations, and strives to achieve consensus and eliminate alternatives through the force of its reasoning and evidence.

These are not, however, the only criteria for judging a knowledge-building activity. A counter tradition exists, with parallels in the thinking of 5th century Greek sophists, modern pragmatism, feminist theory, and contemporary rhetoric. These fellow travelers argue for traditions of public discourse that are not defined by argumentation based primarily on causal logic, but that depend on narrative representations and emotion-evoking value judgments (Belenky, et al., 1997; Taylor, 1985). They value inquiries that exchange a quest for certainty with an experimental stance and a tolerance for diverse representations of reality (Dewey, 1988; West, 1989). Because this counter-tradition is seeking the basis for wise judgment and prudent action (rather than "Truth,") it replaces global norms of rationality with local norms of reasonableness with which

culturally different groups (and beliefs) can agree (Haraway 1991; Hauser, 1999, Jarrett, 1991). It not only expands the list of what counts as "knowledge," it puts knowledge building in the hands of ordinary people.

If the sophistic tradition justified a wider array of knowledge-making moves, activity theory, in league with American pragmatism, raises the bar for what counts as *significant* knowledge. As we noted earlier, in this tradition different ways of representing knowledge are valued as parts of a toolkit for knowledge creation (Engeström, 1999b, p. 385). But the more important recognition is that new knowledge is itself a tool, a mediational means, which is evaluated, not by its abstract rational structure or truth to nature, but by its consequences for human activity. The value of knowledge is its transformational power. In our intercultural context, with its deep-rooted cultural conflicts and history of social injustice, it is not enough for transformational knowledge to merely offer an alternative representation (e.g., a critique or a theory that asserts that <u>it</u> is a radical transformation of previous ways of thinking). Transformational knowledge is a change in the way people, their tools, and their worlds interact—a change in everyday practice itself.

A challenging if rather daunting set of criteria for transformational knowledge building in everyday settings is emerging from Engeström's studies of courtrooms, medical clinics and work teams. The process he describes begins with "individual subjects questioning the accepted practice" (1999b, p.383) and ends when an "initial simple idea is transformed into a complex object, a new form of practice" (p. 382). People achieve consensus, not through the *force* of a general argument, but when the germ of an idea *ascends*, in an ironic turn of phrase, "from the abstract to the concrete," and emerges as a coherent, workable action (p. 382, 401). The outcome of knowledge building then is the "creation of artifacts, production of novel social patterns, and expansive transformation of activity contexts" (1999a, p.27). These transformations are "expansive" because they draw people with rival perspectives into communication that lets them reconceptualize the ways they are organized and interacting around a shared concern (1997, p. 373). Within this multi-vocal event, they produce "a re-orchestration of those voices, of the different viewpoints and approaches of the various participants" (1999a, p. 35).

The implications of these criteria become even clearer when Engeström applies them to a familiar activity—the theory-building activity of researchers. The acid test of theory is its creative productivity—its "practical validity and relevance in interventions that aim at the construction of new models of activity." But it is academic research with an added twist. These novel social artifacts and forms of practice are most significant when they are created "jointly with the local participants" (1999a, p.35). And when in doing so, they support the "possibility of human agency and transformation of social structures from below" (p.29).

Building Working Theories

If the criteria for activity-based knowledge building are demanding, they are also rather vague. What makes talk or text an effective mediational tool for the "transformation of social structures from below"? I will argue that one of the most significant outcomes of the dialogues we have observed is their capacity to build working theories of wise action, as a step toward action itself.

I use the term *working theory* to identify a representation or way of talking about a problem that has some special properties.

*As a theory***:**

- The knowledge created by this event and its documentation is a self-conscious hypothesis, a current best interpretation of the problem at hand, aware that it must be always provisional, awaiting the revisions of experience.

- It acknowledges its place within a network of rival readings, of alternative hypotheses that may range from complementary aspects of an activity, to contradictory elements, to deeply competing premises or values.

- It seeks out such rivals not to eliminate them but to build a more fully negotiated meaning, which attempts to accommodate a more complex reality, in which multiple options are not mutually exclusive.

- And as an observation-based theory, it remains open to renegotiation, to restructuring its understanding

As a working theory:

- The *Findings* are first and foremost the representation of an activity—of how the agents, objects, and outcomes in a community interact with its rules, tools, and patterns of work and power. It is a theory of how things work. It represents that reality by dramatizing its critical features. E.g., The contradiction between professionalized HR guidance and individual worker empowerment emerges in the conflicting goals and the tacit values of worker and assigned "buddy."

- A *working* theory is also a guide to participating in that activity in a new, more reflective "experimental" way. A problem-solving dialogue represents problems in terms of options for action. But the option of a "buddy system" is inevitably a decision to ignore other voices: Options need to come with trouble-shooting instructions. A working theory not only makes an idea operational, it reveals the conditions under which it might it might work out—or unravel. It previews possible outcomes and predictable problems. It creates a qualified claim that locates a idea or an option within the complexities and contraditions of a human activity. It prepares participants to act and adapt.

Conclusion

A community think tank is an attempt to articulate, in action, a working hypothesis about how to support intercultural inquiry. Analyzing this rhetorical event as a social cognitive activity suggests that, if knowledge building is our goal, we must meet the challenge of channeling competing discourses. Activity analysis lets us see how such a dialogue is not a conversational moment, but is a socially organized activity, spread over people, sites, texts, and time, that depends on multiple ways of representing its problem. Bringing the negotiations of actual meaning makers into the picture balances this account of selves and society. It shows how

entering in such a dialogue also depends on individual commitment to an intellectual stance. This stance becomes in essence a thinking tool that structures how partners interact and how they construct an understanding that complicates their own assertions, turns volatile issues into transformative comments, and builds a more qualified, conditionalized representation of the problem at hand.

Like the literate tools it describes, this activity analysis/chapter has been the means first, for examining and, one hopes, improving the practice of the dialogues themselves. Secondly, it has turned that experience into a sharable social artifact that might in its limited but concrete way change social practice. Finally, looking closely at these dialogues has also, I believe, contributed to the toolkit of activity theory. It suggests a way to evaluate knowledge-building by looking for the presence of working theories that can embody a complex human activity, scaffold an experimental stance, and support wise action within that activity.

List of Figures

References

Alinsky, S. D. (1989). *Rules for radicals: A practical primer for realistic radicals*. New York: Vintage Books.

Bakhtin, M. M. (1981). *The dialogic imagination: Four essays by M. M. Bakhtin*. Austin, TX: University of Texas Press.

Bazerman, C. (1997). Discursively structured activities. *Mind, culture, and activity. 4*(4), 296-308

Belenky, M. F., Bond, L. A., & Weinstock, J. S. (1997). *A tradition that has no name: Nurturing the development of people, families and communities*. New York: Basic Books.

Burnett, R. E. (1991). *Conflict in the collaborative planning of coauthors: How substantive conflict, representation of task, and dominance relate to high-quality documents*

(Doctoral dissertation, Carnegie Mellon University, 1991). Dissertation Abstracts International, 52/04A, p. 1236.

Chaiklin, S., & Lave, J. (Eds.). (1993). *Understanding practice: Perspectives on activity and context*. Cambridge, England: Cambridge University Press.

Cushman, E. (1999). *The struggle and the tools: Oral and literate strategies in an inner-city community*. Ithaca, NY: State University of New York Press.

Deans, T. (2000). *Writing partnerships: Service-learning in composition*. Urbana, IL: National Council of Teachers of English.

Dewey, J. (1988). Quest for certainty. In J. A. Boydston (Ed.), *John Dewey: The later works, 1925-1953* (Vol. 4, 1929). Carbondale, IL: Southern Illinois University Press.

Engeström, Y. (1993). Developmental studies of work as a testbench of activity theory: The case of primary care medical practice, pp. 64-103. In S. Chaiklin & J. Lave (Eds.), *Understanding Practice: Perspectives on activity and context*. Cambridge: Cambridge University Press.

Engeström, Y. (1997). Coordination, cooperation, and communication in the courts: Expansive transitions in legal work. In M. Cole, Y. Engeström, O. Vasquez (Eds.), *Mind, Culture, and Activity: Seminal Papers from the Laboratory of Comparative Human Cognition* (pp. 369-385). Cambridge: Cambridge University Press.

Engeström, Y. (1998). The tensions of judging: Handling cases of driving under the influence of alcohol in Finland and California. In Y. Engeström, & D. Middleton (Eds.), *Cognition and communication at work* (pp. 199-232). Cambridge, England: Cambridge University Press.

Engeström, Y. (1999a). Activity theory and individual and social transformation. In Y. Engeström, R. Miettinen, R.-L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 19-38). Cambridge, England: Cambridge University Press.

Engeström, Y. (1999b). Innovative learning in work teams: Analyzing cycles of knowledge creation in practice. In Y. Engeström, R. Miettinen, R-L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 375-404). Cambridge, England: Cambridge University Press.

Engeström, Y & R. Miettinen. (1999). Introduction. In Y. Engeström, R. Miettinen, R-L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 1-16). Cambridge, England: Cambridge University Press.

Flower, L. (1994). *The construction of negotiated meaning: A social cognitive theory of writing*. Carbondale, IL: Southern Illinois University Press.

Flower, L. (1996). Negotiating the meaning of difference. *Written Communication, 13*(1), 44-92.

Flower, L. (1997). Partners in inquiry: A logic for community outreach. In L. Adler-Kassner, R. Crooks & A. Watters (Eds.), *Writing the community: Concepts and models for service-learning in composition* (pp. 95-117). Washington, DC: American Association for Higher Education

Flower, L. (1998). *Problem-solving strategies for writing in college and community*. Ft. Worth, TX: Harcourt Brace College Publishers.

Flower, L. (Ed.). (Fall 2000). *Carnegie Mellon Community Think Tank Brief #1: Intercultural problem-solving for performance in work places and work lives*. Carnegie Mellon Community Think Tank, Pittsburgh, PA.

Flower, L. (in prep.). Talking across difference: Intercultural rhetoric and the search for situated knowledge.

Flower, L., & Deems, J. (2002). Conflict in community collaboration. In J. M. Atwill, & J. Lauer (Eds.), *New perspectives on rhetorical invention*. Knoxville, TN: University of Tennessee Press.

Flower, L., & Heath, S. B. (2000). Drawing on the local: Collaboration and community expertise. *Language and Learning Across the Disciplines, 4*(3), 43-55.

Flower, L., Long, E., & Higgins, L. (2000). *Learning to rival: A literate practice for intercultural inquiry*. Mahwah, NJ: Lawrence Erlbaum.

Flower, L., & Swan, S. (Eds.). (2001). *Findings of the Carnegie Mellon Community Think Tank: Negotiating the Culture of Work and Technology*. Pittsburgh, PA: Carnegie Mellon Center for University Outreach. (www.cmu.edu/thinktank).

Flower, L., Wallace, D. L., Norris, L., & Burnett, R. E. (1994). *Making thinking visible: Writing, collaborative planning, and classroom inquiry*. Urbana, IL: National Council of Teachers of English.

Fraser, N. (1990). Rethinking the public sphere: A contribution to the critique of actually existing democracy, *Social Text, 25/26*, 56-80.

Gee, J. P. (1989). Literacy, discourse, and linguistics: Introduction. *Journal of Education, 171*(1), 5-17.

Gee, J. P., Hull, G., & Lankshear, C. (1996). *The new work order: Behind the language of the new capitalism*. Boulder, CO: Westview Press, Inc.

Goldblatt. E. (1994). Van rides in the dark: Literacy as involvement in a college literacy practicum. *The Journal for Peace and Justice Studies, 6*(1), 77-94.

Habermas, J. (1984). *The theory of communicative action*. (Trans. T. McCarthy). Boston: Beacon Press.

Habermas, J. (1989). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. Cambridge, MA: MIT Press.

Haraway, D. (1991). *Simians, cyborgs, and women: The reinvention of nature*. New York: Routledge.

Hauser, Gerard. (1999). *Vernacular voices: The rhetoric of publics and public spheres*. Columbia, SC: University of South Carolina Press.

Heath, S. B., & McLaughlin, M. W. (Eds.). (1993). *Identity & inner-city youth: Beyond ethnicity and gender*. New York: Teachers College, Columbia University.

Higgins, L.& Chalich, T. (Eds.). (1996). *Getting to know you: A Dialogue for Community Health*. Pittsburgh, PA: The Community Literacy Center and the Rainbow Health Clinic.

Higgins, L. (in prep.). A rhetoric of inclusion.

Hull, G., & Schultz, K. (Eds.). (in press). *Schools out: Bridging out-of-school literacies with classroom practice*. New York: Teachers College Press

James, W. (1967). What pragmatism means. In J. McDermott (Ed.), *The writings of William James* (pp. 376-390). New York, Random House

Jarratt, S. C. (1991). *Rereading the Sophists: Classical rhetoric refigured*. Carbondale: Southern Illinois University Press.

Kochman, T. (1981). Black and white styles in conflict. Chicago: The University of Chicago Press.

Lave, J. (1993). The practice of learning. In S. Chaiklin & J. Lave (Eds.), *Understanding Practice: Perspectives on activity and context* (pp. 3-32). Cambridge: Cambridge University Press.

Long, E. (2000). The rhetoric of social action. In M. D. Goggin (Ed.), *Inventing a discipline, rhetoric and composition in action: Essays in honor of Richard E. Young* (pp. 289-318). Urbana, IL: National Council of Teachers of English.

Long, E., Peck, W., & Baskins, J. (2002). Struggle: A literate practice supporting life-project planning. In G. Hull & K. Schultz (Eds.), *School's out! Bridging out-of-school literacies with classroom practice*. (pp. 131-161). New York: Teachers College Press.

Minick, N. (1997). The early history of Vygotskian school: The relationship between mind and activity. In M. Cole, Y. Engeström, O. Vasquez (Eds.), *Mind, Culture, and Activity: Seminal Papers from the Laboratory of Comparative Human Cognition* (pp. 117-127). Cambridge: Cambridge University Press.

Nystrand, M., Greene, S., & Weimelt, J. (1993). Where did composition studies come from? An intellectual history. *Written Communication, 10*, 267-333.

Ong, W. (1982). *Orality and literacy*. New York: Methuen.

Olson, D. R. (1988). From utterance to text: The bias of language in speech and writing. In E. R. Kintgen, B. M. Kroll, & M. Rose (Eds.), *Perspectives on literacy* (pp. 175-189). Carbondale, IL: Southern Illinois University Press.

Peck, W.C., Flower, L., & Higgins, L. (1995). Community Literacy. *College Composition and Communication, 46*, 199-222.

Peck, W. C. (1991). *Community advocacy: Composing for action*. (Doctoral dissertation, Carnegie Mellon University, 1991). Dissertation Abstracts International, 53/02A, p. 431.

Prior, P. A. (1998). *Writing/disciplinarity: A sociohistoric account of literate activity in the academy*. Mahwah, NJ: Lawrence Erlbaum.

Sauer, B. (in press). *The rhetoric of risk: Mining experience in a hazardous environment*. Mahwah, NJ: Lawrence E. Erlbaum.

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.

Swan, S. (2002). Rhetoric, service and social justice. *Written Communication. 1*(19), 76-108.

Taylor, Charles. (1985) In Charles Taylor. *Human agency and language: Philosophical Papers*. Vol.1, Cambridge: Cambridge University Press

Toulmin, S. E. (1969). *The uses of argument*. Cambridge: Cambridge University Press.

Trimbur, J. (1989). Consensus and difference in collaborative learning. *College English, 51*(6), 602-616.

van Dijk, T. A. (1993). *Elite discourse and racism*. Newbury, CA: Sage Publications.

Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.

West, C. (1993). *Keeping faith: Philosophy and race in America*. New York: Routledge.

West, C. (1989). *The American evasion of philosophy: A genealogy of pragmatism*. Madison, WI: The University of Wisconsin Press.

Vygotsky, L. (1986). *Thought and language*. Cambridge, MA: The MIT Press.

Yeats, W. B. (1956). "Among School Children." In *The collected poems of W. B. Yeats* (pp. 212-214). New York: Macmillan.

Young, R. E., Becker, A. L. & Pike, K.L. (1970). *Rhetoric: Discovery and change*. New York: Harcourt, Brace & World.

Zemsky, R. (1994). *What employers want: Employer perspectives on youth, the youth labor market, and prospects for a National System of Youth Apprenticeships*. Philadelphia, PA: National Center on the Educational Quality of the Workforce University of Pennsylvania.

Notes

[1] "Dialogue developers" can operate in many places, as ordinary people initiating a needed dialogue in their community or work place, as faculty designing an outreach project with students, or as communication consultants working with businesses and non-profits.

[2] As Paul Prior (1998) suggests, tacit disciplinary assumptions often shape our judgment of what elements of an activity are important to analyze . Sociology or cultural theory, for instance, would put a priority on describing the system itself. This inquiry, guided by the goals of educational research and prophetic pragmatic rhetoric, asks, what can individual learners, writers, and everyday rhetors learn about how to thrive <u>within</u> an given activity or social system—and possibly to transform it.

[3] As a new director of the Center, I also wanted give public shape to our vision of outreach as a collaboration (not just a contribution of university expertise) that resulted in building new problem solving and technological capacities in the community and new intercultural capacities in the university students and faculty. So we started with a public forum called Drawing on the Local: Carnegie Mellon and Community Expertise. A group of academic and civic leaders affiliated with the university (Shirley Brice Heath who had just received an honorary degree, a State Supreme Court Justice, an Urban League president and a Vice Provost) entered a structured dialogue with 200 people from the community in which we asked, how effectively does this university acknowledge and draw on community expertise, and how could we do it better? The answers suggested plenty of room to grow. (Cf., Flower and Heath, 2000; Flower, 1997)

[4] An introduction to community problem solving dialogues (published as *Working Partners: An Urban Youth Report on Risk, Stress and Respect*) is available on the Community Think Tank site/Resources, (www.cmu.edu/thinktank) See also Flower, (in prep) for an analysis of a particular event.

[5] The group referred to here as the Think Tank Team included Carnegie Mellon's Center for University Outreach staff, Wayne Bradley Cobb (community education director), Susan Swan (research assistant), and Linda Flower (center director) , generously aided by Wayne Peck , director of Pittsburgh's Community House where most of the sessions were held. The process of facilitating and documenting this process was managed by the Center's Think Tank team with the help a community planning group and college students.

[6] The data for the *Findings* published from this Think Tank came from 6 sessions which typically involved 15-25 people (including a group of Community Fellows working as table leaders who often came to multiple sessions). A session with 200 participants described later in this paper suggested the potential of even larger group dialogues, but its data was not included.

[7] See the *Findings (eds L. Flower and S. Swan)* p 2-3 for a review of the economic and social issues affecting low wage workers.

[8] I am using the term "discourse" as a metaphor or shorthand, not for a linguistic entity that exists in an ideal form with actual "rules," but for a set of very historically shaped set of literate practices (cf. Prior, 1998). The longhand version would talk about discourse in much the way cognitive psychologists talk about schema theory—people often act as if such structures existed.

[9] I will return later to the possible outcomes of a Think Tank dialogue, but in this case it is instructive to note some of the dynamics of this student-initiated community/university project which we joined as consultants. Like most academic symposia, policy conferences, and public forums (and unlike a deliberative session charged with making decisions), its effects would be indirect and different for different participants. As many of the TANF recipients clearly communicated to us, the <u>experience</u> of being heard with such respect was the important and energizing outcome. (One job seeker in fact returned to organize a "local think tank" with her placement agency, persuading its director to draw staff, clients like herself, and the Carnegie Mellon Think Tank team into two additional dialogues.) The County Assistance director and researchers made it clear they were eager to see the information gathered by the graduate student recorders at each table—they clearly needed ideas, even if their powers were limited by the State. However, the event had been mounted at semester's end as a class project by the public policy graduate students, and with the grand event accomplished (the necessary outcome for the students), the plans for documentation slowly slipped into the abyss of summer vacation.

[10] For a detailed look at the steps a research team or the members of an outreach class would go through in organizing a Think Tank see www.cmu.edu/thinktank.

[11] It is important to note that, say, unlike a labor negotiation, the outcome of a Think Tank is not a contract or specific action, but a negotiated understanding of a dilemma and of multiple options for action. It is beyond the scope of this chapter or the Think Tank itself to track subsequent outcomes in participants' varied workplaces, but the subsequent action of the Union leader here is revealing. He concluded that his own workplace needed to mount an inquiry into what the membership actually saw as problems (was it indeed racism, wages, promotion?). This led him to mount a series of local action think tanks (based on critical incidents his inquiry turned up) on the organization's flawed promotion process and a discussion with a regional network of unions about building a new program for "mentoring our own" through the realities of the promotion process.

The outcomes of a "local action" think tank also appear to differ from typical labor/management discussions. In a second series of Think Tanks on "*Healthcare: The Dilemma or Teamwork, Time and Turnove*r," we are combining the more public "expert" dialogues with "local action" projects with senior care centers. Here we are seeing not only some impact on management actions, but perhaps even more importantly, some changes in ways the expertise of the nurses aides (the low paid, lowest-on-the-totem-pole staff) is attended to and in ways they feel their value is represented. These *Findings* are available on www.cmu.edu/thinktank.

[12] Readers of the *Findings* of a Think Tank may of course draw on this understanding as participants within another activity of their own, and then it is their understanding that would be relevant.

Participant and Institutional Identity: Self-representation Across Multiple Genres at a Catholic College

Katrina M. Powell

Department of English
Louisiana State University
Baton Rouge, Louisiana 70803
kmpowell@lsu.edu
http://www.artsci.lsu.edu/wgs/faculty/Powell.html

Abstract

This qualitative research project, informed by ethnographic and feminist research methodologies, focuses on how students negotiate various genres with which they come in contact. Through the close analysis of a small, religious-affiliated, liberal arts college, this study examines how students' constructs of "self" are reflected in school genres and how their backgrounds, specific academic disciplines, and institutional goals affect those constructs. In order to conduct this analysis, activity theory is used to examine possible competing goals within the activity system (the college itself) and, in turn, how those goals can affect student writing. Since participant identity is an issue of activity systems, I examine identity through self-representation, as it has been theorized in autobiography studies. Combining activity theory and theories of self-representation and performance, I create a framework to explore how genres can simultaneously liberate and constrain and how students negotiate the various tensions they may encounter within an activity system.

> I identified myself completely with [my professor]…. I readily imitated his writing, took up in succession his pet phrases, adopted his tastes, his judgments, even imitated his voice and tender inflections, and in my papers presented him with an exact image of himself. (1993, p. 80)
>> Louis Althusser, *The Future Lasts Forever*

> …individuals bring many motives to a collective interaction, and the division of labor in the system itself guarantees diversity. Dissensus, resistance, conflicts, and deep contradictions are constantly produced in activity systems. (1997, p. 511)
>> David Russell, Rethinking Genre in School and Society

> …genres must be fully mastered in order to be manipulated freely….The better our command of genres, the more freely we employ them, the more fully and clearly we reveal our own individuality in them. (1986, p. 80)
>> Mikhail Bakhtin, The Problem of Speech Genres

Students often identify with their professors. When they do, they may imitate their professors out of admiration or out of motivation to be "successful" in school. Some students merely imitate, yet some students "master" a discourse sufficiently enough to reveal their own contribution to that discourse, moving beyond a mere imitation.[1] But as David Russell suggests, there are any

number of motivations for participating in discourses (or activity systems) in particular ways. In this study, I offer a way to examine participant identity, through self-representation, that might reveal what motivations are at play when writers participate in activities within discourses. Recent studies such as Newkirk's *The Performance of Self in Student Writing* and Herrington and Curtis' *Persons in Process* attest the significance of personal identity when negotiating academic discourse. My work furthers their discussions by providing a framework, based on a combination of activity theory and autobiography theory, that can help us reveal the kinds of issues of identity writers encounter as they enter into academic discourse.

In this study, I look specifically to the resistance, contradictions, and conflicts in writing to reveal the ways that motivation and individual identity can shape the writing that participants do. I highlight three case studies, Amy, Patrick, and Layla, who, as they situated their selves within the larger system of their college, were also situating their selves within the spoken and written genres of the classroom. I examine the ways that these students (i.e., participants) appropriate particular self-representations (as they do genres [Russell, 1997]) and explore what they might reveal about participant negotiation of a system and the genres within that system.

As writers engage genres within complex systems, they are also in the process of situating their selves within those genres. Consequently, writers are also in the process of situating themselves within the activity systems that drive those genres. In this chapter, I examine how gaining "command of genres" allows for writers to shape their identities. More specifically, I ask in what ways do writers represent their selves as they situate themselves within an activity system? What might studying writers' self-representations of that process reveal to us in terms of genres and activity systems? And what might the implications be for our own teaching?

Russell uses activity theory to help us connect writing to wider social practices and to subsequently rethink such issues as agency, task-representation, and assessment (504). In his description of activity and genre systems, Russell explains how agency can be examined through participant identity and the significance of this examination to the overall conception of an activity system. In this project, I propose to learn about a writer's—that is, a participant's—identity by examining that writer's self-representation. By learning about a writer's identity as she represents herself in the various genres of the activity system, we can in turn determine ways the institution's identity drives, or is driven by, the writer's identity. Through a systematic analysis of self-representation, I suggest that the complexities of participant identity and consequently activity systems can be better understood. That is, my method of examining self-representation offers us a way to examine participant identity within activity systems.

Within activity theory research, genre has received special attention (Berkenkotter & Ravotas, 1997; Winsor, 1999; Bazerman, 1994; Russell, 1997). Genres mediate cultural and historical activities within systems and therefore the study of genre can reveal the ways in which writing within genres not only serves to stabilize an activity system, but also the ways in which writing might resist and consequently change that system. Furthermore, genre has been theorized as a tool. That is, genres are used by participants to "carr[y] out" the work of the system. (Berkenkotter, 2001, p.327). I will suggest that just as genre is used as a generative tool, so too is

self-representation, within and among genres, a tool. By examining self-representation as a sub-tool of genre, we can identify the ways that genre is both liberating and constraining and consequently how genres can constitute identities within activity systems.

Participant negotiation of genre and, therefore, of identity, are issues to be addressed to determine how an activity system can be stabilized and/or changed by the participants (who engage the genres). Similarly, the ways that activity systems can shape participant identities as they in engage in the system's genres is also an important issue. While some researchers (Prior, 1994; Berkenkotter and Ravatos, 1997) in composition studies have begun to examine this issue, I suggest a more systematic way of examining participant identity. Since participant identity is an issue of activity systems, I examine identity through self-representation, as it has been theorized in autobiography studies. Combining activity theory and theories of self-representation, I create a framework to explore how genre can simultaneously liberate and constrain and how writers negotiate the various tensions they may encounter within an activity system.

To examine self-representation across the genres of an activity system, I studied the wide range of genre systems at a small, private, Catholic-affiliated college, using the college as a whole as the unit of analysis. My study, informed by ethnographic and case study methodology, examines the activities of the college, which I call St. Augustine College, to better understand the ways that genres can constitute identities within activity systems. To address the broader questions I posed earlier about activity systems, I asked the following research questions specific to this research site:

- In what ways do students experience a "double bind" (Russell, 1997) or tension or contradiction where demands are placed on them by competing motives of the various activity systems they encounter? How then, do students negotiate these competing motives within the genres they encounter at their academic institution? In turn, are students' identities transformed, and if so, how?

- How is the activity system of St. Augustine College stabilized and/or changed based on the ways that students negotiate the various competing motives within this activity system (which is itself comprised of several systems)?

As I studied the students, teachers, and administrators at St. Augustine, I found that students negotiated and resisted both genres and activity systems in different ways. Their own motivations, interests, and backgrounds affected those negotiations and the ways they proceeded through them. These factors were part of students' senses of self before they entered college, and they intertwine with students' responses to instructors, particular courses, and the institution itself. Therefore, as I conducted systematic observations and interviews within this complex system, and analyzed the various genres that students encountered there, the following questions emerged:

- How does student self-representation vary within and among genres at St. Augustine College?

- What does this variance reveal in terms of the work completed at St. Augustine?

As I examined the multiple genres students encountered at St. Augustine College, I paid particular attention to the tensions and contradictions within their self-representations. Before describing the research site further, I will first explain my theoretical approach to data analysis.

Self-Representation As a Method of Analysis in Activity Theory

My analytical method combines activity theory, feminist autobiography theory, and performance theory in order to examine the participants' identities within a particular system. As I have suggested, theories of self-representation can be used to systematically examine participant identity. However, it may not be immediately clear how self-representation fits into activity theory. Within activity theory, the relationship between the subject and the object is mediated by a tool (See Figure 1). In other words, people use tools (or resources) to help them accomplish certain goals. The tools mediate an activity in that they define how persons construct their participation within a particular activity. In this way, a tool's meaning or function is only valid when put in context by a participant. Moreover, a tool is simultaneously enabling and limiting: It empowers the participant through its past use by other participants, but it also restricts participants in that the tool has already been defined in terms of its functionality and materiality. This does not mean, however, that either is mutually exclusive. The function of a tool exists on a continuum; the degree to which it is limiting/enabling depends on the context of the activity.

All activity systems encounter conflict and tension, usually where the limiting and enabling factors meet. This idea is similar to Bakhtin's notion that tension lies where the limiting and enabling factors meet in an utterance. Whenever conflict or tension arises within an activity system, genres serve as coping tools. Familiar genres provide predictable, or typified (Miller, 1994) ways to frame an action, thereby making action the social "glue for mending the tension" (Beach 1998, p. 4). Learning and constructing familiar genres also involves learning and constructing familiar self-representations. As stated earlier, self-representation is an important sub-issue of genre. In the same way that genre functions as a tool for mediating the goals of participants within an activity system, self-representation functions as a "sub-tool", that is, a tool operating within the tool of genre, for mediating the discourses of identity and the discourses of power (see Figure 1).

Tool/Genre

Self-Representation (sub-tool)

Discourses of Identity   Discourses of Power

Participants / Writers   Objects/Goals of the
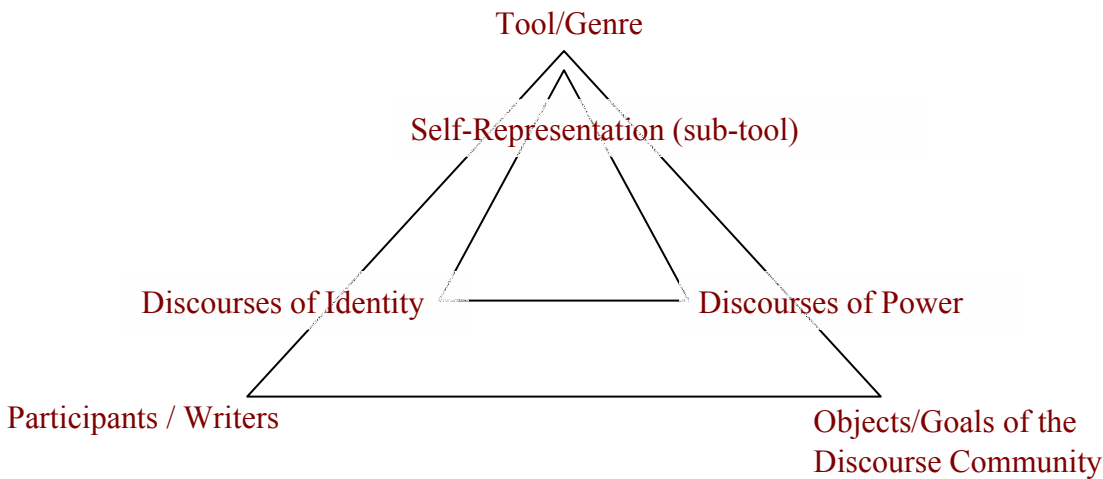   Discourse Community

Figure 1: Self-representation: A sub-tool (of genre) mediating the discourses of identity and the discourses of power

In this figure, I've superimposed my notion of self-representation onto a modification of Engeström's activity theory triangle (1988). The tools (or genres) mediate the actions of participants as they work toward particular goals. The inner triangle represents self-representation as a "sub-tool" within the tool of genre. My research site—the college itself and the individual courses offered—represent the discourses of power (within an activity system). The discourses of identity are represented by the ways students revealed their selves through their writings and interactions with teachers, administrators, the researcher, friends, and families. Writers negotiate genre (and consequently the discourses of power driving a genre) and the construction of their identity(s) through this sub-tool of self-representation. Therefore, my definition of self-representation is:

> The performance of the rhetorical construction of self where self is continually shifting based on generic expectation and where discourses of power come in contact with discourses of identity.

In this following section, I describe how recent theories of autobiography and specifically strategies of self-representation provide a way to analyze the various ways writers represent their selves within discourse.

Strategies of Self-Representation

In creating a framework for examining self-representation, I draw on feminist autobiography theory, and performance theory. Each of these theories are closely related and combined provide an analytical frame for examining self-representation. In feminist autobiography theory, self-representation is a primary issue. As autobiography theorists Sidonie Smith and Leigh Gilmore suggest, the conscious representation of self within a genre is directly tied to the writer's notion and awareness of that genre, the audience of that genre, and the way that the writer wishes to construct and represent her self within that genre. As writers attempt to enter into a particular

discourse, they gradually learn to "perform" the particular generic conventions of that discourse, imitating the conventions that are useful to them, and pushing the boundaries of those conventions that limit them. When a writer performs a genre such as autobiography, she imitates the discursive notions of that genre while simultaneously recognizing the limitations of that genre to fully represent her life.[2]

My examination of self-representation relies heavily on theories of autobiography and performance.[3] Similarly, some composition theorists have begun to examine self-representation as a performance. For instance, Thomas Newkirk's recent work has addressed self-presentation in personal or autobiographical writing.[4] Newkirk draws on Goffman's social notion of self-presentation, not autobiography, to examine the construction of self in personal writing. Newkirk says that in writing assignments where the personal is asked for, teachers have implicit assumptions of the kind of self a student performs in that assignment. He sees "being 'personal' as not some natural 'free' representation of self, but as a complex cultural performance" (1997, p. xii).[5] Autobiography theorists have also theorized self-representation, focusing specifically on the postmodern subject. Within the various forms that autobiography takes, theorists have found that the subject is dynamic and changing over time, historically situated, and positioned within multiple discourses (Foucault, 1982; Hutcheon, 1989; Butler, 1990). Based on this definition of the subject, feminist theorists of autobiography have examined the various "dimensions" of self-representation, including politics, materiality, discourses, and technologies (Gilmore, 1994), suggesting several methodologies for studying self-representation. These approaches for studying self-representation include three dominant strategies employed by autobiography writers: reproducing discourse, resisting discourse, and negotiating discourse. These categories, therefore, represent the ways writers engage in genre and self-representation. In analyzing participant identity, then, I used these categories to organize the various genres produced within the system. As I describe examples of writing from my research site, I will elaborate each of the categories.

Both autobiography theorists and Newkirk have focused on personal writing. My definition of self-representation, however, extends those of autobiography theorists and Newkirk to allow for the examination of self-representation across multiple genres, to see the ways in which discourses of identities come in contact with discourses of power. I propose, then, that theories of self-representation can be used to examine *all writing*, not just that which is explicitly personal. Self-representation is not a mere imitation of culturally accepted codes, but rather is a performance that can serve to critique hegemonic discourse. Further, viewing genre and consequently self-representation as performance provides the subject with agency. Participants are not only acted upon; they are also actively engaging in discourse and negotiating it in various ways. Using theories of self-representation, we can see the ways in which culture, language, and discourse have been critiqued or resisted by writers. I consequently suggest that participant identity within activity systems can be examined through self-representation in order to learn what control writers have over their own self-constructions. In addition, this examination can help writers negotiate the multiple and complex constructions of their selves as they attempt to enter into a particular discourse within an activity system.

St. Augustine College As an Activity System

This chapter is based on ethnographic and case study analysis to study how participant identity affects institutional identity (and vice versa) through the analysis of activity systems. It draws on material from a yearlong study of students, teachers, and administrators, all participants within a larger activity system. (Powell, 2000) [6] The activity system I investigated, St. Augustine College, provides a unique institutional and educational space in which to explore the issues of self-representation and genre. For instance, the course catalogue states that St. Augustine College, despite recent changes in the college's curriculum, "remains true to its mission as a Catholic liberal arts college, a mission in which excellence in teaching and learning is central, in which the intrinsic value of each individual is affirmed, and in which students are encouraged to develop their God-given gifts, not only for their own sakes, but to serve others and the community." The administrator/teacher who wrote the latest edition of the course catalogue, himself a priest, was committed to representing the college's identity as one that held values of openness and intellect, together with values of spirituality and faith. These values, however, can be interpreted differently by students, faculty, and staff, which makes St. Augustine an interesting place for "ethical, moral, philosophical, and religious" discussion. While the institution is dedicated to its history and identity in Catholicism, it is equally committed to diversity and intellectual exchange. In addition to these goals, service and connection to the community are emphasized, a feature attractive to many students and their parents. As a research site, therefore, St. Augustine can be explored in terms of how student writing connects to "broader social systems" (Russell, 1997, p. 504). Specifically, this study's interest lies in how the institutional identity is represented through writing that students do and their individual representations of identity. As I observed classes, interviewed students and teachers, and analyzed the multiple genres of the system, I realized that students encounter "dialectical contradictions" as various factors pulled them in "different directions" (Russell, 1997, p. 52). As expectations of school, friends, and family (representing the goals of various activity systems) collided, students faced tensions as they attempted to negotiate competing goals. Student identity, then, across the multiple genres they encountered, revealed a complex web of relationships which students negotiated in equally complex ways.

Located in a mid-western, mid-sized city, St. Augustine is physically situated in the middle of one of the city's middle-class neighborhoods. Most students are white and middle-class with academic scholarships, and approximately 25 % of the students graduated from private high schools in the area, and there is little ethnic, racial, or religious diversity.[7]

Because of its size (1,843 undergraduates in 1997), it was easier for me to gain a sense of the college as a whole.[8] I was therefore more readily able to draw conclusions about how individual writing reveals the work conducted in this setting and how that work challenges and fulfills institutional goals. This site, with its small size and narrowly defined institutional goals (as a Catholic-affiliated college), is conducive to an exploration of the kinds of questions I raised about self-representation, genre, and activity systems.

Established in 1950, St. Augustine was originally a men's college with a faculty consisting primarily of priests. In 1968, St. Augustine merged with a Catholic women's college and in the same year, the college's governing board became legally independent of the city's Roman Catholic Archdiocese. According to one professor who wrote the college's history, while St. Augustine's "origins in Catholicism have always played a vital role in the college's identity, its public image today is broad and inclusive." In 1950, only two students were non-Catholics, but today, the student body represents many different religions (although the student body remains 60 % Catholic). Similarly, the college is committed to a diverse faculty. So while the institution is dedicated to its history and identity in Catholicism, it is equally committed to diversity and intellectual exchange.

Reproduction, Resistance, and Knowledgeable Resistance: Three Case Studies

When I began studying participants' self-representation, I expected to find that less experienced writers would reproduce dominant discourses, then gradually move toward resisting dominant discourse, then toward negotiating that tension as they became more experienced writers and college students. What I found, however, was that students were in constant negotiation of the discourses of power and the discourses of identity. My examination revealed that students' identities were inextricably linked to their engagement with particular classes, teachers, and the institution itself. In addition, students engaged in genres differently, not because of lack of knowledge, but because of any number of personal factors. The following sections highlight the major strategies of self-representation and the various ways that students represented themselves within the genres they were asked to engage in at school and how those representations exhibit the constant exchange between participant and institutional identity.

In the following sections, I highlight three case studies. One case study, Amy, is a first-year student in a first-year seminar class called "Popular Culture." The other two case studies are of students who were taking an introductory philosophy course. Patrick was a fifth-year senior in the course, and Layla was a sophomore. Amy, Patrick, and Layla are in some ways representative of the students I interviewed and observed for this project. But each exhibited particular negotiations of school that clearly illustrate the notions of reproduction, resistance, and knowledgeable resistance. In addition, I highlight these particular case studies because of their very different approaches to college, to classes, and to their writing in general. Because I was analyzing St. Augustine as a system, I include these students, at various stages in their college careers, and in various courses, to provide a sense of the college as a whole, rather than focus on one class or one student. Through these three case studies, across courses and student experience, I will show how different students respond to various aspects of the system, as revealed through their self-representations. Although I've placed each case study into one of the three different strategies of self-representation I'm highlighting, it is important to note that none of these categories is static or mutually exclusive. Each student discussed here, and most of the students I studied, revealed each strategy in varying degrees. I place these three students in these categories

to highlight the various differences, then to problematize the categories as we question the notion of self-representation.

Reproduction: Matching the Teacher's Expectations

Amy, a first-year student, revealed that she was an interested student, willing to participate in her courses and in relationships with other students, teachers, and me. She said she wanted to get "good grades;" she liked school for the most part; and she worked "pretty hard" in all her classes. She was very much like Sperling and Freeman's "good girl," working toward success in school and doing what was expected of her in terms of her classes, school, church, and family. She believed that her professors were good people and she wanted to be part of the community, to do what was necessary to be part of that broader community of school. Part of Amy's active commitment to school came from her familial background. Amy described her parents as loving and supportive. As a family they attended Catholic mass, and she discussed how her parents encouraged her application to St. Augustine so she could continue to be part of a Catholic community. "We always knew to do what we were told," Amy said. "Not in a bad way, like we'll get punished or anything. But like we just knew, do things right." Amy's participation in school reflected this philosophy, to do what her professors asked of her—she assumed doing so would bring her success in school.

The English course Amy attended and that I observed was taught by Dr. Linda Hassan, who introduced students to issues of popular culture by discussing movies, advertisements, music, sports, technology, and television. For the most part, students were very engaged in serious class discussions while Dr. Hassan also maintained a light-hearted atmosphere in the classroom. Part of the goal of this class, a first-year seminar, was to introduce students to a seminar atmosphere where they are active participants in their own learning. Therefore, most of the course involved group discussion where students were expected to generate questions and comments about the readings and the overall topics of popular culture.

Class discussion as a genre. Dr. Hassan asked students to develop discussion questions online (they had an online class folder) and in small groups to help her generate discussion and "to get them to learn how to take responsibility for the class." Amy actively participated in the class discussion and was concerned that the conversation in the class "went well." If other students did not respond to Dr. Hassan's questions, Amy would look around the room, pause, then proceed to answer the questions to get the discussion "moving along." She even claimed, "I don't want to be the one talking all the time but I don't want it to be dead in there either." Amy would often start the class in its discussion. In the following example, for instance, Amy is the first to respond to Dr. Hassan's question about rap lyrics. The students had read an essay on rap music, discussed it in small groups, and were to report their findings to the class.

> Ok. Um, we found that it was interesting about who they're [rap musicians]
> selling to, like why it's suburban white males and we think that it was
> because it's just like we're eavesdropping on the black community because
> we don't like know a whole lot of what's goin' on. Like a roller coaster, like a

> controlled veer. Like, if you just buy a CD then nothin's gonna happen to you. As opposed to like, you wouldn't just like go to the ghetto just to see what's goin' on. And also like, well I was offended…just because I thought it was kind of harsh in one of the things in here. But, [looks at Dr. Hassan] do you want me to read it? Ok, it's pretty harsh…well you'll hear it. [Reads from the textbook] It says, "I'm thinking to myself why did I bang her. Now I'm in the closet lookin' for the hanger." Ok, like…I think it, well...I mean, I don't know if this is right, but I was thinking that when it said "looking for the hanger" that like, abortion. But I don't know. And, I don't…that was just kind of gross when I thought about it.

Her oral discourse is informal; she doesn't edit out the "you know" and "like." These are the same speech patterns she used with her friends, and she said that she was trying to talk like a "real" person. "Dr. Hassan wants us to be, you know, comfortable with each other," she said. At the beginning of this passage, Amy represents herself as engaged in the text. Dr. Hassan has often stated in class that she wants students to read the texts closely and seriously. Amy's reference to the roller coaster repeats the metaphor used by the authors, indicating her familiarity with the text. Then she restates the metaphor using her own words. In terms of the genre of the class discussion, Amy is following a convention she has not only seen Dr. Hassan employ herself, but also that she told students directly that she wants them to use. Therefore, Amy refers directly to the text, then analyzes it in her own words. Consequently, she is representing a self that is engaged in the text.

Toward the middle of her discussion, after she's read from the text, Amy represents her self as offended by the lyrics because they were "harsh." Following the text itself, she states that she realizes the lyrics are referring to abortion. It is at this point in her discussion that she's not quite sure what to do with her analysis. She says the word "gross," but it is not clear whether she means that the type of abortion is gross (via a hanger), the abortion itself, the abortion forced on a woman by a man, or the representation of sex as a "bang." Amy is aware that in this genre the dominant discourse of the class discussion is to be engaged with the text as a learner. Dr. Hassan often tells the class, "I want you to learn about…." However, in terms of the content of the discussion—that is of abortion, sex, possibly violence—Amy is unsure what the dominant discourse of the class might be. She therefore repeats several times, "I don't know" as a way to indicate her uncertainty. She wants to be engaged with the text, analyze it as she understands Dr. Hassan wants her to; however, she's not sure how to do it and still be within the dominant discourse of the class. Amy, while on the one hand wants to represent herself to the teacher as an engaged learner, is also very aware of how the other students in the class and perceive her. Her hesitation in further analysis is also influenced by her lack of knowledge about her entire audience: her teacher and her peers.

The journal and a shift in audience. Later in the semester, Dr. Hassan asked students to reflect in their class journals on the topics of sports and music and what they've learned by reading articles on these topics. In Amy's journal, where she knows that Dr. Hassan is her only reader, she says:

> I have learned a lot about our culture through the two categories of sports and music. I learned that there are many ways our American "pop culture" is

> divided. One thing that really bothered me was the fact that blacks are the majority in the NFL and NBA but, there are so few black coaches. I never even thought about this before, but it just seems so wrong to me.

As Amy does in the class discussion, she represents her self here also as a learner, someone engaged in the class and the readings. She also restates the question almost verbatim: "about our culture through the two categories of sports and music." This repetition reveals that Amy has a particular expectation of the genre of the journal. She told me that she restates the question "because that's what I learned in high school, so that [Dr. Hassan] knows which question I'm answering." In addition, she says that part of what she learned about the inequalities in sports "bothered" her. In this way, Amy is agreeing with the dominant discourse of the class. After a long discussion on the topic, Dr. Hassan summed it up by saying, "That seems quite unfair to me." Amy, who is committed to representing herself as an engaged student, and who sees that being an engaged student means "learning" what Dr. Hassan has to say, therefore says in her journal that she was also bothered by what she learned. She represented herself as aware of the issue and that she should be bothered by it and willing to accept the conclusions that Dr. Hassan draws about the reading and the class discussion. In this way, Amy reproduced the dominant discourse of the class. She wanted Dr. Hassan to know that she aligns herself with the dominant discourse of the class; that is, that racial discrimination is wrong. Later in the same reflection, she wrote,

> I also thought the music articles forced me to consider the affects [sic] of music. What are the differences between "black" and "white" music? I don't think I can listen to rap music the same way anymore. I wouldn't want to know I was helping promote a song [that] young black girls were listening to it [sic], and it was degrading females. I think sports and music are large windows into our society. They reflect that we may say everyone is equal, but it is clearly not felt by everyone.

Again, Amy repeated what the instructor said in class. Dr. Hassan said several times that the topics they discuss, like sports and music, are "windows" into the culture at large. Amy was engaged with the discussion in class, and in this genre of in-class writing

Reproducing discourse through a struggle with genre. In another genre, Amy represented an engaged self, and that is also an attempt to represent a critical self. As we might expect, Amy uses more formal discourse in her research paper, an analysis of a popular culture icon. Students were to choose an icon and speculate, in terms of popular culture, why that figure has reached iconic status. According to Amy, Oprah is so popular because "she relates to the audience and makes them part of her world by being open about her own life." When Amy received Dr. Hassan's response to her first draft on Oprah, there were several places where Dr. Hassan suggested that she make changes. For instance, when Dr. Hassan asked for more authority for this statement, "It can't be disputed that 'The Oprah Winfrey Show' appeals primarily to females and I think she has tapped into what women want to see on television," Amy revised her draft by adding, "It is proven that women and men communicate in different ways." In addition, when

Dr. Hassan asked for an example for the statement, "Audience members feel like they really know her through her actions and how she says things," Amy added, "For example, if you watch the show you know her voices, the playful Oprah as opposed to the angry Oprah, and the viewers know the difference." In Dr. Hassan's marginal comments, she is trying to get Amy to be more critical and analytical about the icon she's chosen, to analyze the culture at large and more particularly Oprah's popularity.

In as much as Amy understood the genre of the research paper, she attempted to fulfill the generic expectations. She was willing to revise, but is unsure, in terms of genre, in what way she should represent her own authority: that is, the research she's conducted (or not). Through her revision, she represented herself as willing to revise, willing to engage in the comments that Dr. Hassan gave her paper. However, because Amy was still learning the genre, still learning what it means to think critically, she was not quite sure how to do it and therefore inserts a generality that's neither appropriate nor conclusive. She did, however, attempt to do what she thinks Dr. Hassan wanted her to do. When she tried to do only what the teacher wants, she uncritically reproduced the dominant discourse. Dr. Hassan's goal was to have her more critically analyze. Amy's goal is to do what the teacher wants, but is unable to discern that producing her own critical analysis is her teacher's goal.

As Amy sought to construct an identity that was engaged with school, she struggled with how that identity didn't seem to always "match" what Dr. Hassan (or some of her other teachers) wanted. Amy's family was working class—her father ran a boat repair shop and her mother "helped with the books." According to Julie Lindquist, the "discourse of inquiry" can often be resisted by working class students because of the complexities of social and economic value placed on such "speculative rhetoric" (1999, p.228). Amy herself did not want to resist her teachers or their assignments. Her unified identity as a good student seemed to clash with the rhetorical task of "critically analyzing" within the genre of the research paper.

Amy's self-representation in the genres for this course and in the genres in her other classes were relatively consistent. That is, she reproduced the genres the way she interpreted her teachers wanted her to. If she didn't know how to or received a poor grade, she then discussed the genre with the teacher, again representing herself in the student/teacher conference that she was an engaged student. Amy was in the process of learning generic convention, only able to reproduce the dominant discourse of the class, and therefore not making significant changes to Dr. Hassan's course, objectives, or overall pedagogy. By examining Amy's self-representation in relation to her identity and the discourse of power in a classroom where critical analysis is valued, we can see the ways that participants within a system can experience conflicts within that system.

Resistance: Participating without results

Amy's engagement with the popular culture class, its genres, and the instructor, were marked by relatively few instances of resistance. She subtly resisted some of the content of the course, but generally, Amy was in the process of reproducing the dominant discourse of the course without much critical analysis of its content or procedure. During my time at St. Augustine College,

however, I met several students who outwardly resisted various components of the system, whether it was St. Augustine's politics, religious practices, or the ways that courses were taught. Many of these students were critical thinkers and were intellectually invested in making certain changes in their courses or in the college itself. Before I describe this kind of "knowledgeable resistance," however, my next case study highlights the kind of resistance that proved unproductive within this particular activity system.

Patrick was a fifth-year senior in a philosophy course (taken mostly by sophomores and juniors). Unlike Amy, Patrick was generally distrustful of his professors. His perception of most of his professors was that they wanted to "churn out autotrons" for the corporate world. Most of the students at St. Augustine were white and middle class, and Patrick physically appeared to fit that mold. However, he told me that his father is white and that his mother is Guatemalan and that he's spent much time in South America, both with family and for an exchange program. In his advanced religion classes he'd been reading *Tao The Ching* by Lao Tzu and several of his papers discussed the "tenuousness" of truth. When I asked Patrick for his writing in all his classes, he was quick to point out that he had written lots of poetry I could use as well. In our discussion of his writing, he was proud of the way he could question the truth of the "text." He had an active commitment toward his identity as a resister and questioner, and he distrusted anyone who believed in "absolutes."

The focus of the philosophy course I observed, taught by Dr. Margaret Ferris, was ethics and was different than Dr. Hassan's popular culture course in several ways. First, as an introduction to philosophy, Dr. Ferris spent much of the course lecturing to students about the philosophies of Aristotle, Kant, Locke, and Aquinas; therefore, the class was structured as a more traditional lecture, as opposed to seminar discussion. The purpose of this course was to "examine in detail various philosophers on the question of what constitutes 'good,' virtuous, or moral action in order to understand some fundamental alternatives" and for students to "articulate his or her own moral theory, and to justify that choice." Dr. Ferris's class was writing intensive: she required 5 one-page response papers, 2 five-page formal papers, and 2 essay exams. The final exam included a take-home portion where the students were required to articulate and justify their own moral theory.

When Dr. Ferris and I discussed her course, she explained that she is very committed to students' understanding of philosophy, and she takes her job quite seriously as a philosophy professor who should prepare students to "think about issues of ethics in a critical way, in a way that is logical. I want them to learn the material, but I also want them to be able to articulate what they agree or disagree with." She was very clear about how her course fits into the overall goals of the college. She expected students to conduct the work of learning philosophy, which would in turn conduct the work of the college.

Patrick's participation in Dr. Ferris's class was interesting. He often slept in class, he turned assignments in late, and when he asked questions in class they were obviously not the kinds of questions Dr. Ferris valued for the class discussion. Seemingly, Patrick was not interested in the material or the course. But when I interviewed him, I found out that Patrick's resistance to the

class was purposeful and critically aware. He had very clear ideas about why he thought the class was "bogus." He thought Dr. Ferris's lectures were disorganized and the papers she asked the class to write were not "challenging." Patrick constructed himself as a smart, intellectual thinker who could do the work Dr. Ferris assigned, but he felt that what she asked was a waste of time. When we talked about the material covered in the class, he seemed to me to understand the material and to have some knowledge of it. However, because in class he represented a self that was not engaged in the material, his refusal to turn in assignments and his questions in class seemed "irrelevant" to Dr. Ferris.

Fulfilling the assignment. Most of Dr. Ferris's writing assignments consisted of short papers that asked students to define a particular philosopher's theory, state whether they were persuaded by it, and to provide examples explaining how. In his paper on Thomas Aquinas' "natural law," Patrick's opening line stated, "I don't think this law makes any sense. I believe that the conditioning that we have talked about in class occurs in everyone." The generic expectation of this paper was to define Aquinas' notion of natural law, which Patrick does not do, even though in the assignment sheet and in class Dr. Ferris has explained how she wants the paper structured. Patrick not only does not define natural law, but he rather suggests that the concept is unworthy of addressing at all. In addition, he doesn't refer directly to the text, even though Dr. Ferris required it and has mentioned on his previous assignments that he needs to do so to make a persuasive argument for his points. Given this refusal to engage in the genre as required, and his general lackadaisical approach to the class, Patrick's resistance was unproductive. Perhaps he was critically aware, but any changes could not be achieved because of his self-representation. Patrick's refusal to fulfill the generic expectation of his response paper was mirrored by his refusal to fulfill the generic expectation of the final exam.

Critiquing the questions. In his final exam, Patrick was consistently resistant to engaging in the genre as Dr. Ferris expected and told the class they must complete. She was explicit about the rhetorical aspects of the genre, clearly providing her expectations in her assignment sheets. For the exam, she asked students to determine the "best moral theory" based on the semester's readings: "Describe/explain what you consider to be the truest moral theory and defend/justify why it is the truest or best." She expected students to refer to the readings for the semester and to use them in explaining their theories. Patrick's exam, however, mostly consisted of his feelings that writing poetry was the only moral alternative for society. In the exam he said, "According to me, there is no truest moral theory." In this response, Patrick suggests that the exam question itself is not worth answering. He said, "Everyone is different…It is impossible in that all of the 'theories' will remain just that, simply theories." Patrick saw and constructed himself as a critic of the very idea of discussing all the different theories because imposing any one theory is impossible. While he saw that it was "impossible to dictate what people will see as good or bad," and this might be a valid argument, it was, nonetheless, not the kind of argument Dr. Ferris asked for in the exam. The exam asked, as many exam questions do, students to suspend their belief and address the philosophies for what they were and to argue why one or another might be better, even if they did not necessarily believe them, in order to demonstrate skills in argument and knowledge of the text. Patrick refused to do so because he did not see the point: "I suppose that

moral theories have too many holes in them for my taste." Again, a valid critique, but Dr. Ferris asked students to defend a moral theory despite those holes.

While Patrick's take-home final could be perceived as clever, funny, and a scathing critique of education in general, his self-representation during the semester led Dr. Ferris to perceive his exam as a "blow-off." She assumed he was not prepared to answer the question because there was little evidence in the exam that he understood the theories they'd studied that semester. Dr. Ferris could not evaluate his exam in terms of its innovative critique. His self-representation all semester consisted of resistance to the course and the assignments. Consequently, Dr. Ferris could not read his self-representation in his exam as anything other than further resistance. When Patrick wrote his final, Dr. Ferris could not perceive it but as another example of his resistance to the course which had thus far been unproductive. His critique was dismissed not only because he refused to engage in the generic conventions of the exam, but also because he constructed a self not engaged with the material at hand.

Asking questions. For most of the semester, the only interaction between Dr. Ferris and the students consisted of questions about their papers before they turned them in. While she mostly lectured, she encouraged questions from the class as a way to get her lectures started. She expected questions to be relevant and reflect thoughtful engagement with a text already read. In terms of genre, Dr. Ferris expected that discussion questions asked by students would be directed at her, but that they would be questions that probed the philosophies further or clarified particular aspects of the texts. Whenever students didn't meet that generic expectation, Dr. Ferris usually responded in a way that made it clear that a particular question was inappropriate. For instance, Patrick asked questions that seemingly disrupted discussion. During her lecture on Aquinas, Patrick asked, "But what I want to know is, what does he think about war?" Perhaps in a seminar class discussion, this question might arouse the kind of debate expected in a seminar. But in this class, Dr. Ferris expected that students would ask questions directly referring to the readings, in order to clarify the particular theories. This question was not part of the discussion at hand, and to Dr. Ferris, Patrick's tendency to ask irrelevant questions indicated that he had not read the material.

While Amy was interested in learning appropriate self-representation so that she could engage the genres productively, Patrick already understood that there was a construction of self that occurs in the classroom. However, his form of resistance to that kind of construct was non-productive. He was not able to reconcile his identity as a smart, rebellious student with the discourses of power that asked him to contribute to conducting the work of the classroom. To Patrick, this kind of performance was inauthentic, unethical, and "beneath" him. His resistance was a conscious refusal to perform but was nonetheless unproductive in enacting changes within the system even though he may have had legitimate critiques of the system.

Patrick's success was marked by his non-willingness to represent an "accepted" self, not necessarily by his knowledge of the material. However, the instructor had no way of knowing this: He hadn't shared any of his knowledge with her. His refusal to do so resulted in not succeeding in the class, not making the grades he wants, and not making any significant

contribution to the system. Patrick, however, was consciously aware of his refusal. He understood the idea of representing an accepted self and chose not to do so. His resistance stemmed from his overall perceptions that St. Augustine's agenda was to produce monolithic thinking, an interesting perspective given the wide range of religion courses he took there. In any case, Patrick's identity as one who questions, clashed with his perceived identity of the classroom, so much so that neither he nor the institution gained much in the way of change or learning. Despite Patrick's consciousness of the constructed nature of self-representation, he may be fully aware of the consequences of his resistance to constructing an accepted self. This study suggests that as teachers we might offer options to students like Patrick who resist by introducing them to the multiple issues involved in identity and academic discourse.

Patrick already knows about the performance of self, the constructed nature of discourse. However, for students like Amy, who want to know how to do it, once she knows about self-representation as a performance, then she can decide for herself how she wants to participate and/or resist the system in critically aware ways. Evidence of this knowledge is supported by my next case study, Layla, who was able to perform an accepted self yet was able to knowledgeably resist.

Knowledgeable resistance: Negotiating for change

While Patrick was unable to enact resistance to change the system, another student in Dr. Ferris's class, Layla, resisted in such a way as to negotiate her position within the genres of the class and within the course's pedagogy as well. Layla was a sophomore whose family lived in the same town as the college. Unlike many local students who lived at home, Layla lived in the dorm. "I want to be part of school. Besides," she said, "it's more fun and social here, and believe it or not, I can get more studying done here." Layla was an active member of the college community. She was president of her sorority, was on the dean's list, and participated in several volunteer activities sponsored by the college. Both Layla's parents were college professors. Her brother was a philosophy major, also at St. Augustine, and her family encouraged critical inquiry and debate. Layla actively constructed herself as an active participant; however, she was not interested in being a "good girl" in the classroom. She saw the classroom as an intellectual space, one that she could enter with an understanding of the assigned readings. Her negotiation within the classroom represented what I call "knowledgeable resistance," a productive way of negotiating discourse that provides for both learning and change.

Questioning as a philosopher. In class, Layla typically asked questions that revealed her engagement with the material. For instance, in a discussion about Aristotle's concept of habituation, Layla interrupted Dr. Ferris's lecture and asked, "Isn't habituation just the action though, I mean, it's not just making someone…." Dr. Ferris interrupted her by saying, "Ok, good, and then that's the other thing…" and then continued with a further definition of habituation that accounted for Layla's question. Dr. Ferris was not adverse to this particular type of question/interruption, and she used the question to further clarify the definition she was

already discussing. Layla's question indicated that she had read the material and already, before the question was asked, had a particular understanding of the definition.

In another instance, Dr. Ferris asked Layla directly what she thought about another students' comparison of Aquinas and Aristotle:

> Dr. Ferris: Layla, do you agree with that?
>
> Layla: Well, no. I mean, I agree that a society has to have a standard and that you have to follow the laws or it's not really a society at all. But, when it comes down to comparing Aquinas and Aristotle, it seems really difficult because Aristotle doesn't even believe in a concept of God and his whole philosophy is based on this life and this world. And so you almost you have to either bring Aristotle's philosophy up—well what if there was a god, or bring Aquinas down—you only obey the law. Not because of God but because of the society. So it's kind of like a compromise of things. In the end I said that the individual, if it's some sort of life and death situation you can't expect the individual to forfeit their own natural right which they were given before they were given the laws of society. Simply because it seems that those natural laws came prior to those choosing to live in society.
>
> Dr. Ferris: So Aristotle's more realistic?
>
> Layla: Um, in a certain sense. I mean, you do have to follow the law and you do have to have a standard. But whenever you do make a society you do make those compromises.

In this passage, Layla showed Dr. Ferris that not only has she read both Aristotle and Aquinas, but also that she understood them well enough to compare them and to make a delineated argument which clarifies her conclusions. When Dr. Ferris posed a question to her, Layla did not hesitate in her answers. She was not afraid to tell the class or Dr. Ferris what she disagreed with, indicating a familiarity and comfort with the discourse of the text and the class discussion.

In the genre of class discussion, therefore, Layla was able to construct a self that reflects thoughtful engagement with the texts. Patrick, however, did not ask questions that met generic expectations. When I interviewed Layla, I asked her why she thought she was doing well in Dr. Ferris's class: "What is it that you know about writing a paper or participating in this class that maybe other students don't know?" I asked. Layla replied, "She wants us to think like a philosopher. She wants us to write logical arguments that show that we know what the philosophers are saying." Layla felt she understood what Dr. Ferris expected in their papers, and therefore she represented herself as a philosopher. For instance, in her final exam, Layla said, "Aristotle's theory may seem to require too much knowledge for complete happiness to constantly, if ever, be achieved. Rather, it is not the complete effect of happiness that makes Aristotle's moral theory more convincing; it is the idea that we should know for ourselves what the right action is and not depend on an authority to tell us." As was expected in the class

discussion, Layla presented an intellectual self, one who had clearly read and grappled with the material.

As mentioned earlier, most of Dr. Ferris's class consisted of lecture. Except for a few questions, most of the class was filled with Dr. Ferris's voice. In the middle of the semester, however, Layla began to interject further questions and thoughts as Dr. Ferris lectured. Consider the following:

Dr. Ferris:	Let's say I give you an apple and we say we'll be partners and that we'll split this. Then the next day I see a deer and then we manage to capture this deer and then you are thinking if we split the deer then she eats for a week I eat for a week. But then you think but if I keep the deer all to myself then I can eat for two weeks.
Layla:	Wouldn't Locke say it might better if you cure the deer for two weeks?
Dr. Ferris:	Sure, I've got a great curing technique so we could do that or you could just get rid of me…
Layla:	But wouldn't that be detrimental to society?
Dr. Ferris:	Ok, but it's maximizing your resources…but you're right, you're right. That's very ill-conducive to the society and perhaps society, the population, would just dwindle if there were no cooperation…
Layla:	Right
Dr. Ferris:	Ok, so Locke is going to say that you must maximize your resources….

This type of interchange between student and teacher was atypical for the class during most of the semester. However, Layla's resistance to the dominant discourse, that is, the convention of the lecture, led Dr. Ferris to reconsider the amount of time she lectured versus the amount of time students could be involved in discussing the material. Layla resisted being bound by clarification questions only. She pushed the genre of the lecture class to include the questions that helped her further understand the philosophical theories.

<u>Performing as a philosopher</u>. The questions Layla asked in the genre of class discussion were consistent with the kinds of arguments she made in her formal essays. But while Layla wrote "like a philosopher," she did not imitate Dr. Ferris. She instead integrated her discourses of identity with the discourses of power (of the philosophy classroom) in ways that were original (from Dr. Ferris's perspective) and that demonstrated Layla was engaged with the material and thinking through philosophical issues with serious speculation.

Layla resisted the class lecture genre, but in a way that was useful to the overall course. She resisted the lecture through questions, the kind of questions that Dr. Ferris valued. As a result,

Dr. Ferris changed the format of the class to include more time for the kind of interchange she and Layla had: "I think I might make more time in class for something like that. I can see [Layla] internalizing the material, grappling with it the way I want [students] to do, and I think the debates we have could serve the rest of the students." This kind of change in the classroom, therefore, resulted in a change in the system as the teacher reflected on her pedagogy. This kind of change, then, can help students become more of the critical thinkers that she hopes for. Layla's knowledgeable resistance led to changes in teaching practices, which could lead to changes in the objectives for the class, which could then lead to changes in the curriculum. As a result, Layla's knowledgeable resistance enacted the institution's identity as a school that encourages intellectual thought, not the regurgitation of information.

Layla's resistance is quite different from Patrick's. While Patrick's resistance is seemingly unproductive, at least from Dr. Ferris's point of view, Layla's resistance worked within the system, it was a reciprocal negotiation (Russell, 1997, p. 506). Knowledgeable resistance is in this way is dialogic; Layla was able to interact productively with the multiple voices around her. Her performance of self not only achieved her own goal to be a successful student, but also led Dr. Ferris to re-think certain methods of teaching philosophy. Any of these changes also represent changes within the larger activity system of St. Augustine College. Whenever a teacher, a representative of the institution, changes part of the class, and in turn changes part of the system, then the institutional identity is also shifted. In terms of the self-representation triangle, super-imposed on the activity theory triangle, Layla's knowledgeable resistance occurred at the site where discourses of power are recognized (even if not clearly understood) and discourses of identity are negotiated in relation to those of power. Patrick recognized that discourses of power exist, but his perception of those discourses not only was different from Dr. Ferris's, he also refused to negotiate a self within the discourses of power. Amy, typical of a first-year student, is still in the process of figuring out that discourses of power exist and further how to place her self within those discourses.

Constituting Selves: Conceiving of and Teaching Self-Representation

While the popular culture seminar and the introductory ethics course are very different with different objectives, both professors at St. Augustine had specific goals: to complete not only the work of the courses themselves, but of the college as well. When students represented a self that was appropriate or accepted in a particular classroom environment, then the work of the course could be conducted productively. If a student resisted knowledgeably, then negotiation could take place that would have a productive effect on the class and ultimately the overarching activity system of the college. When students were able to successfully negotiate discourses of identity with discourses of power, and recognize that doing so was a way to negotiate school, then they were able to learn to enact some change.

Amy, Patrick, and Layla's various experiences within the system of St. Augustine College suggest that students' specific interactions with teachers, as representatives of the institutional

values of St. Augustine, presented to students the discoursal values that would be expected of them in their writing. Not only are students' identities intricately woven into their negotiations of academic discourse, but also their responses to specific teachers and discourses, and ultimately institutions, are tangled among the ways they choose to represent their selves.

All of the students in Dr. Hassan's class negotiated the various genres of the course in different ways. Amy's sense of her identity and the ways she wished to be perceived by the rest of the class and by Dr. Hassan were crucial to the way she engaged with the genres of the course. Similarly, whether any of the students in this course had friends in class, felt an affinity toward St. Augustine, or felt loyal to Dr. Hassan, had a profound affect on the way their self-representations varied among the genres they were asked to perform in class. We see a student like Amy attempting to be a good student, but reproducing the dominant discourse of the class. In this way, she is not "performing" self-representation; that is, she's merely presenting a self that she thinks will be successful in this class. Layla, however, is able to perform a self that can then knowledgeably resist the various genres: she can engage them, reproduce them even, and yet also resist them because of her ability to represent an accepted self.

This research represents part of the historical moment at St. Augustine College in which I interacted with several participants of the various activity systems of the college. The moment represents a period of change within the college as it responds to a 21st century workforce and tries to technologically prepare its students. As I read through the history of St. Augustine College, I was surprised and impressed by its social consciousness, especially in the 1950s and 60s. St. Augustine admitted African American students when it was illegal to do so. Students and faculty protested the Vietnam War. Many students spend much time volunteering at half-way houses, nursing homes, and women's shelters through the community service programs at the college. The culture at St. Augustine has changed. Its faculty is more diverse, women are part of the student body, and a diversity initiative has gone into effect to ensure that people of all lifestyles feel welcome at the college while they pursue their educations.

As I have compared students, teachers, administrators, and classes, I have demonstrated the complex ways that an activity system's participants produce the work of that system. In addition, my research shows that participants' involvement in an activity system necessarily includes the introduction of other, equally as complex, activity systems. When these complex systems come into contact with one another, unpredictable changes can occur. Activity systems are diverse: Teachers, students, and administrators have various expectations and assumptions of the school, the community, and the classroom. This indicates, then, the relatively unpredictable nature of activity systems. Thus, I have emphasized the relative (in)stability of activity systems and how this relative stability (similar to the relatively stable nature of genre systems [Bazerman, 1994]) complexly affects the participants of that system and vice versa: They are constantly in flux.

This certain measure of uncertainty in activity systems only means that learning the conventions of multiple discourse communities within an activity system is all the more complex. That is, as people choose to participate in activity systems, they are also expected to know the conventions as they are situated within the culture, the historical moment, and the social values intrinsic to

that system. Added to that are the participants' own cultures, histories, and social values: The two cannot be separated.

Historical Selves/Cultural Identities/Academic Identities: Ethical Self-Representation

One question that Thomas Newkirk asks in his recent book, *The Performance of Self in Student Writing*, is "what kind of selves do we invite in our assignments and what kind of selves to we dismiss?" (1999, p. iv). Newkirk asks us to consider that the ways we construct our assignments in fact send messages to students about the kind of selves we may value in their writing. Similarly, Lester Faigley is concerned about the kinds of judgments we can potentially make about students' selves: "Students will be judged by the teachers' unstated assumptions about subjectivity and that every act of writing they perform occurs within complex relations of power" (1992, p. 128). Faigley suggests that hierarchical power relations are always at play when we read students' writing and that writing teachers need to be aware of the assumptions they make. Both Faigley and Newkirk address the ethical dimensions involved in asking students to write autobiographical assignments and the potential for teachers to make judgments about the selves students present when they respond to our assignments.

Newkirk and Faigley's concerns focus on the autobiographical writing that some teachers assign in classes, i.e., literacy narratives, education autobiography, family stories, personal essays, etc. However, both scholars allude to the implications of their concerns for all writing done in composition classrooms, whether autobiographical or not, and the ways our assignments for that writing are constructed. The issue of self-representation, therefore, is important no matter what assignments we give students. Students are still open to our implicit assumptions in terms of the values we place on the self.

The variables that go into analyzing a particular student or teacher within a particular activity system are numerous. They include, among others, family, school, teachers, high school friends, St. Augustine friends, gender, religion, location, commitment and reasons for it, age, residency, and particular classroom. This list does not exhaust the variables that affect a student's interaction with an assignment. As Brandt suggests, students and teachers' personal backgrounds and historical, school contexts are complexly wound into the selves they represent. In this way, their historical, literacy narratives are essential in understanding the ways they come in contact with school and with writing.

My study urges us to reconsider our assumptions about types of students and types of genres as students attempt to produce the genres of the activity system of school. I suggest that students' identities influence their rhetorical choices. When their identities come in contact (through activity systems) with other institutional/administrative/teacherly identities, this also influences their rhetorical choices. In this way, individual identities are an essential part of an activity system, thereby making personal identity essential to institutional identity. There is no institution without the individuals within it. In the same way, there is no academic writing without the individuals who write it. As Herrington and Curtis suggest based on their study of student

writing, "all writing inescapably *does* contain filters of subjectivity" (2000, p.2). Academic discourse is only written by individuals who have complex (and varying) relationships with that discourse.

Herrington and Curtis' longitudinal study reinforces my own results done over a much shorter time period (one semester). However, teachers usually only encounter a student for one semester, having to assess and respond to representation(s) of self within the short 15-week semester. With Herrington and Curtis' work as sound evidence, we can now assume that students' personal selves are intricately involved with their writerly/academic selves. The students I discuss in my study were not dealing with homosexuality, child abuse, or immigrant life (as far as I know). However, their concepts and constructions of self were equally filled with negotiation and struggle, at varying levels. My point is that it is not only the students who are dealing with major life decisions or traumas who are in constant negotiation of school. Our practices and responses to student self-representation should consider all students, not just those who reveal personal facts about themselves. Some of us may not have the time or inclination to be the "trusted faculty member" that Herrington and Curtis describe. This does not mean, however, that we cannot be aware of the self involved in constructing academic writing.

When we as teachers say someone is a "good" writer, what we are really saying is that that person writes in a discourse acceptable to us. When we say someone is a "bad" writer, what we really mean is that that person has not yet learned the discourse conventions acceptable to us at a particular moment, in a particular class, and at a particular institution. As academics, I think we know this implicitly. However, when we say something like "good" or "bad" writer to students, who are new to academia, we can potentially be distressing their identities: We are saying something so personal, rather than rhetorical, that can profoundly affect a writer's desire, will, and work ethic. *We* know our academic choices are intricately bound to our personal experiences. But are we getting that across to our *students*? Herrington and Curtis are also aware of the disparaging ways that some teachers view student writing. They "write against" these attitudes, particularly when examining student writing when written from experience. I would further suggest that even if we agree with Herrington and Curtis and try to read student writing sincerely, whether personal *or* academic, that assumptions about constructions of self are at work. Herrington and Curtis' deep analysis of their students' writing represents the kind of engagement we should always have with our students in terms of examining closely the ways they're engaging discourse. Herrington and Curtis also suggest that we not only make the rules of writing explicit, but that we also explain the why (p. 387). I would add to the notion of making generic conventions explicit (p. 390), that we also let students in on what we know about self-representation. I suggest that we teach self-representation explicitly.

My study suggests that our notions of genre and the self should be shared with students explicitly. By sharing these values and constructions, students' agencies can be enacted in ways they choose. While many writing theorists have recently focused on the ways teachers construct assignments and the ways teachers make certain assumptions, I suggest that students be at the forefront by teaching self-representation explicitly. That is, we may be able to empower students by discussing self-representation explicitly. When writers understand that self- representation is a

construct, a performance, then they can choose whether or not to perform and in what ways. And further, their performances, consistent with postmodern conceptions of self, are ethical and authentic. The goal here is to ask students to try on "voices" as Bakhtin suggests, and to see that this kind of self-representation is not inauthentic or unethical. Patrick saw himself as aware of rhetorical constructs and therefore viewed participating in them as inauthentic. Often, how writers "see" themselves and the way writers represent themselves are not the same.

If we agree with Bakhtin that trying on voices is authentic and a way to learn and construct knowledge, then how do we "teach" this to students? We ask students to complete certain tasks, produce certain kinds of work that are conducive to the overall work of the system. If students are in that system, that is, attending classes for the purposes of obtaining degrees, we can assume that they desire to complete a kind of work—to graduate. Therefore, when asked to represent a certain disciplinary self, we need to express to students the systemic validity in doing so. However, this does not mean that students need to be "autotrons" who spit back what their teachers tell them. I think many teachers desperately hope that students will engage in the material more complexly than that. That is why the notion of rhetorical performance is so important. As Pollock suggests, performing writing is a way to critically engage in the genre and the discourse community driving that genre. Amy, for instance, might have benefited from an explicit discussion of the genre of the critical essay and the disciplinary self expected within it. By explicit I do not mean the explication of textual features; rather, I mean the conscious, reflective discussion of the ways a critical self is composed within certain kinds of genres.

Pedagogical Implications: Teaching Genre and Self-Representation

Pedagogically, then, how do we "teach" genre or self-representation in such a way that students can critically engage in them? What selves do we invite and value in the assignments we give? What are the tangible tools we can give students to negotiate classrooms, and ultimately institutions, rhetorically? How do we convince students that engaging in an issue, despite their disinterest or apathy, is authentic and ethical in terms of their construction of self?

Students are aware of the discourses of power and therefore engaged in complex assessments of an accepted self in the classroom. Not all students "correctly" assess the accepted self. For those students trying to figure out how to successfully negotiate school, the explicit discussion of genre, discourse community, and self-representation become ways of teaching students the implications of self-representation in their writing and classroom discourse. These are the rhetorical tools we can give students to help them successfully negotiate school. In whatever way we conceive of and teach genre, we must also consider the way we are in turn "teaching" self-representation. And as I suggest, addressing the performative and rhetorical nature of self-representation are ways of doing so. If we can address the generic conventions of discourse communities, I would suggest adding self-representation as an item for discussion and exploration.[9]

Defining and Conceiving of Self-Representation in Composition Studies

If we are indeed convinced that self-representation is a teachable issue of genre, then, it can be taught as a rhetorical construct, without making any one person feel as though his or her personal values are being challenged within a certain topic or classroom discipline. When we make our assumptions and expectations known, as much as we ourselves are aware of them, then students can choose to respond on a more equal playing field (well, as much as the teacher/student relationship can be equal). Though Dr. Hassan and Dr. Ferris did not explicitly address self-representation in their classes, their approaches to teaching writing provided students with disciplinary expectations that allowed students to respond in appropriate ways. A more explicit discussion of self-representation, as it applies to and interacts with generic and disciplinary expectation, would help ensure mere imitation does not take place. In addition, explicit discussion of self-representation also encourages "knowledgeable resistance" as a productive interaction can occur within a classroom and contribute to the meaning making we seek from students.

Finally, many composition teachers choose to advocate Susan Jarratt's notion of "productive conflict" (1991, p. 118) by explicitly encouraging students to discuss the kinds of issues that could potentially lead to emotional responses. These issues include multiculturalism, race, gender, class, and more recently, spirituality. Even if these topics are not explicitly addressed in the construction of our courses and assignments, invariably, moments of tension arise in our classrooms because of the different "identities" present in our classrooms, including our own. Our challenge as teachers is to help students represent themselves rhetorically, across genres, by giving them the tools they need to negotiate their classes and their institutions. As responsible readers, then, not only of students' texts but also of students themselves, we need to consider the rhetorical and performative dimensions of genre and self, and be sure to pass on those considerations to our students.

Coda

During the summer after I'd completed my research, Dr. Ferris and I met one last time to discuss particular aspects of my research. At this meeting she gave me her written response to the written portions of my research. We talked about her response and how her perspective as a philosopher influenced her own notion of the self. We discussed the semester as a whole, reflecting on the research process itself, and the many meetings we had where we discussed student writing, her teaching, my teaching, and teaching in general.

Toward the end of our meeting, Dr. Ferris mentioned one of the students who had been interesting to us both, but who had declined being interviewed for my study: "You know Ben? Well, when I read his final exam, I realized that I had been mis-reading him all semester. I mean, all semester, you and I were talking about self-representation and students negotiating school. And all that time I was reading his papers and assuming he just wasn't trying in my class. Then I read his exam. In this assignment, he wrote about his struggles with the texts we were reading. I

mean, I asked the exam question in such a way and he responded in such a way that he could address the texts differently than in the regular papers. I wouldn't have noticed that difference, I don't think, if you and I had not been talking about all this stuff all semester. I'm much more aware now of how students are attempting to construct the selves they think I want."

Dr. Ferris indicates that she looked at the writing in Ben's exam much differently than she would have had we not been discussing issues of self-representation all semester. Our frequent meetings to discuss student writing afforded both Dr. Ferris and me the opportunity to reflect on the ways that she responded to students and their writing, and the ways that talking about it together informed both our assumptions about how students negotiate self(s) at school. Dr. Ferris's reflection on the semester and her teaching suggests that addressing issues of self-representation explicitly can illuminate some of the difficulties students have with the writing we assign them.

References

Althusser, L. (1993). *The future lasts forever*: *A memoir*. (O. Corpet and Y. M. Boutang, Eds.; R. Veasey, Trans.). New York: The New Press.

Bakhtin, M. M. (1986). The problem with speech genres. *Speech genres and other late essays*. (pp. 60-102). (C. Emerson and M. Holquist. Eds.; V.W. McGee, Trans.) Austin: University of Texas Press.

Bazerman, C. (1994). Systems of genres and the enactment of social intentions. In A. Freedman and P. Medway (Eds.), *Genre and the new rhetoric* (pp.79-104). Portsmouth, NH: Boynton/Cook-Heinemann.

Beach, R. (1998). The application of activity theory to writing: Studying writing at the level of activity. Paper presented at Thomas R. Watson Conference on Rhetoric and Composition. Louisville, KY.

Berkenkotter, C. (2001). Genre Systems at Work: DSM-IV and Rhetorical Recontextualization in Psychotherapy Paperwork. *Written Communication,* 18.3, 326-349.

Berkenkotter, C. and Ravotas, D. (1997). Genre as tool in the transmission of practice over time and across professional boundaries. *Mind Culture and Activit,y* 4, 256-274.

Butler, J. (1990). Bodily inscriptions, performative subversions. *Gender trouble: Feminism and the subversion of identity*. New York: Routledge.

Engeström, Y. (1987). *Learning by expanding: An activity theoretical approach to developmental research*. Helsinki: Orienta-Konsultit Oy.

Faigley, L. (1992). *Fragments of rationality: Postmodernity and the subject of composition*. Pittsburgh: Pittsburgh University Press.

Foucault, M. (1982). The subject and power. *Critical Inquiry,* 8.4, 777-795.

Gilmore, L. (1994). *Autobiographics: A feminist theory of women's self-representation*. Ithaca: Cornell University Press.

Jarratt, S. C. (1991). Feminism and composition: The case for conflict. In Harking, P. andSchilb, J. (Eds.), *Contending with words: Composition and rhetoric in a postmodern age*. (pp. 105-124). New York: Modern Language Association.

Herrington, A. J. and Curtis, M. (2000). *Persons in process: Four stories of writing and personal development in college*. Urbana, IL: National Council of Teachers of English.

Huffer, L. (1998). *Maternal pasts, feminist futures: Nostalgia, ethics, and the question of difference*. Stanford: Stanford University Press.

Hutcheon. L. (1989). *The politics of postmodernism*. London: Routledge.

Ivanic, R. (1998). *Writing and identity: The discoursal construction of identity in academic writing*. Amsterdam: John Benjamins Publishing Company.

Lindquist, J. (1999). Class ethos and the politics of inquiry: What the barroom can teach us about the classroom. *College Composition and Communication*, 51.2, 225-247.

Miller, C. R. (1994). Genre as social action. *Quarterly Journal of Speech,* 70, 151-167.Newkirk, T. (1997). *The performance of self in student writing*. Portsmouth, NH: Heinemann.

Phelan, P. and Lane, J., eds. (1998). *The ends of performance*. New York: New York University Press.

Powell, K.M. (2000). *Discourse negotiation: Self-representation across multiple genres*. Unpublished dissertation.

Prior, P. (1994). Response, revision, disciplinarity: A microhistory of a dissertation prospectus in sociology. *Written Communication,* 11, 483-533.

Russell, D. (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication,* 14, 504-554.

Satin, L., and Jerome, J., eds. (1999). Introduction. *Women and Performance: A Journal of Feminist Theory,* 10:1-2, 9-19.

Smith, S. (1993). Subjectivity, identity, and the body: Women's autobiographical practices in the twentieth century. Bloomington: Indiana University Press.

Sperling, M. and Freedman, S. W. (1987). A good girl writes like a good girl: Written response to student writing. Written Communication, 4.4, 343-369.

Winsor, D. (1999). Genre and activity systems: The role of documentation in maintaining and changing engineering activity systems. Written Communication, 16, 200-224.

Notes

[1] The author wishes to thank Carol Berkenkotter, Pamela Takayoshi, Beth Boehm, Sarah Liggett, Charles Bazerman, and David Russell for their thoughtful and careful suggestions for this essay. A very special thanks to Debra Journet for supporting me throughout this project.

[2] Butler explains her theory of performativity through gender. When a subject does not conform to the traditional notion of a gendered construction, then that subject is displaced by society. Butler suggests that all gender is a performance. Using cross-dressing as her example, she says that dressing in drag, while criticized for its degradation of that which it imitates, as a performance actually serves to critique "the expressive model of gender and the notions of a true gender identity" (137). By performing gender, a cross dresser calls to our attention that gender is merely a construction, not biologically inherent. By doing so, a cross dresser critiques culturally accepted codes of gender and resists any notion of a "natural" gender. Butler's performative theories, while providing a social critique about gender, are useful in examining the performance of self-representation in autobiography, particularly as an issue of genre. Butler's performance theory has recently been critiqued because, according to Lynne Huffer, "It refuses to acknowledge the social bond underlying any deployment of language" (27). While I recognize these limitations, I still find Butler's performative theory crucial in analyzing the constructed nature of gender (and genre).

[3] See for instance *The Ends of Performance*, edited by Peggy Phelan and Jill Lane, and Satin and Jerome's introduction in *Women and Performance: A Journal of Feminist Theory*.

[4] Other composition theorists such as Conway and Yancey have also explored notion of self-representation. My exploration, however, moves beyond theirs through the notion of performance.

[5] Newkirk actually uses Goffman's term "self-presentation." I prefer the term self-representation because, according to Ivanic, Goffman's notion of self-presentation has been critiqued for its "normative view of the effect of social forces" and for "reducing self-presentation to a set of guiles and deceptions under the control of the individual" (22).

[6] My dissertation project more fully summarizes the data collection and research methodology.

[7] However, St. Augustine College's recent initiative, according to its president, is diversity. In a recent faculty retreat, the faculty and administrators discussed ways to increase diversity on campus and to meet the needs of its changing student population.

[8] I am aware, however, of the relative impossibility of ever gaining a true sense of the college, not only because of the impracticability, but also because of my own position as a researcher and therefore as an outsider to that system.

[9] I must, however, be very clear that I am not advocating teaching formulaic structures of genre (see Aviva Freedman and Peter Medway's *Genre and the New Rhetoric* and *Learning and Teaching Genre*). My suggestion advocates a social and historical awareness of genres and the discourses driving them, and consequently the constructions of self valued within them.

Creating a Writer's Identity on the Boundaries of Two Communities of Practice

Jean Ketter and Judy Hunter*

Department of Education
Grinnell College
Grinnell, IA 50112-1690
ketter@grinnell.edu

*Director of the Writing Lab
Grinnell College
Grinnell, IA 50112-1690
hunterj@grinnell.edu

Abstract

In this case study, we explore the way one student, who aspired to become a professional writer, learned through her writing activity in two communities: academia and public relations. We use activity theory to conceptualize the student's learning as an activity that balances between individual agency in meaning making and the social, historical and cultural forces that shape how individuals make meaning. Perceiving the two settings as communities of practice that provided opportunities for pursuing shared enterprises and engaging in collective learning, we show how the student's simultaneous participation in these contrasting communities challenged and refined her understanding of what it means to be an effective writer . We discuss how the work she engaged in on the boundaries of two writing communities enhanced her developing identity as a professional writer as she became aware of and tested the limitations of writing in these two communities. Our study shows the benefit of providing opportunities for teachers and students to explore how contrasting communities of practice define successful writing activity and how writing activity operates in the cultural and political sphere of each community.

Introduction

In this case study, we explore the way one student, who aspires to become a professional writer, learns through her writing activity in two communities: academia and public relations. During the second semester of her senior year, our focus student, Erin Peterson, writes during an internship with the college's public relations office (one for which she receives academic credit) and writes for other classes in which she is enrolled. Thus, she negotiates how to write both as a worker in the world of public relations and as a student in the academy. We contend that Erin's simultaneous participation in both of these communities refines her understanding of what it means to be an effective writer. In fact, we argue that, for Erin, this work she does on the boundaries of two writing communities is transforming, and her developing identity as a professional writer is enhanced as she becomes aware of and tests the limitations of writing in these two communities.

Much current research in composition focuses on how writers, genres, and social settings influence the activity of writing. For example, in their work *Worlds Apart: Acting and Writing in Academic and Workplace Settings*, Dias, Freedman, Medway & Paré (1999) examine writing

activity in both workplaces and academia, describing how writing in the workplace is a means to an end, while writing in school tends to "assume a distinct identity and seeming autonomy" so that writing comes to be an end in itself (p. 235). Finding the writing activity in these two communities to be "worlds apart," these researchers warn against "facile versions" of what Joliffe (1994) refers to as the "myth of transcendence," the assumption that, while sites of writing may differ, the people who travel between them easily "transport or translate what they have learned as writers from one domain to the other" (Dias et al., 1999, p. 223).

We seek to investigate the claim made by Dias et al. (1999) that "writing practices in the university do not translate into effective writing within the work setting" (p. 5). We do so through one case study because we seek to examine in depth, in this one case, the way the subject perceives herself to be learning in the two settings. We portray this learning neither as occurring strictly in two "worlds apart" nor as enacting a simple version of the "myth of transcendence." Rather, we show the complicated negotiation and transition Erin undergoes as she struggles to create coherence between two different writing communities, and how she uses writing to negotiate her identity as a future professional writer.

In our study, we use activity theory to conceptualize Erin's learning as an activity that balances between individual agency in meaning making and the social, historical and cultural contexts that influence how a single writer makes meaning. Activity theory allows us to examine Erin's writing activity as always a social activity, "for even the writer alone in a study is formed by and (potentially) forming the actions of others through the tool of writing" (Russell, 1995, p. 55). We focus on Erin's writing activity as one of many processes of learning and identity transformation that occur through her participation in the social and cultural practices of the two specific communities. In doing so, we adopt Wenger's notion in *Communities of Practice: Learning, Meaning and Identity* (1998) that identity is "a way of being in the world and not equivalent to a self image" (p. 151). It is work in progress shaped by individual and collective efforts to create coherence, "to thread together successive forms of participation in the definition of self" (p. 153). That is, we see the writing activity Erin engages in as a part of an individual and collective process through which she negotiates her developing identity, her way of being a professional writer.

Methodology and Data Gathering

We employ qualitative methods for our analysis in this study using open coding of textual data as described by Strauss and Corbin (1990), and we draw on a wide range of data mainly collected over one semester. Our focus student, Erin, a second semester senior at the time of this study, had a long acquaintance with Judy, who had functioned as Erin's Writing Lab tutor periodically throughout her four years at Grinnell College. During the semester under study, Judy was also Erin's faculty advisor for her internship in the college public relations office. As a requirement for this course, Erin met with Judy at least once a week and kept an internship journal describing her learning throughout the semester. In addition, she submitted to interviews by both Judy and Jean and made available to us many examples of her writing: a writing history we asked her to

create, the drafts and final papers she wrote for her academic classes[1], the articles and features she produced for her public relations internship[2], and the journal she kept during her spring break trip to San Francisco as a participant and chronicler of an alternative break trip. In addition, she sent and answered many e-mails during the course of the research and afterward. We supplement this primary data with interviews with her teachers and internship supervisors as well as with other important figures in the two locations in which she wrote.

We focus on Erin because she offers us an "insider's" view of the process of her development as a writer. That is, in this study we see how a student's attitudes and reasoning affect her analysis of how her beliefs about writing and her writing self are shaped by two communities. We reason that we can gain the most direct evidence through three methods: posing questions that ask Erin to document her thinking as she engages in the process of writing over time and in varied settings; looking at the products of those writing activities; and considering her evaluation of how the process affects her development as a writer.

We use her words when possible and portray her thoughts in her voice as much as possible. Of course, Erin's statements about what she believes and why she acts as she does are filtered through the social and political context of her communities, but the large amount of data we gather suggests that what emerges are enduring and salient themes and patterns. We do not claim to present an unmitigated or "genuine" portrait because we are aware that our own decisions about what evidence to use and how to interpret that evidence are also shaped by social and political forces. In general, we resist adding yet another layer of interpretation to Erin's perceptions; thus, we try to avoid making judgments or evaluative comments about her views. Although w[3]e do supplement our primary data with interviews with her teachers and internship supervisor, we use that data only to enhance our understanding of or to contextualize Erin's perceptions and beliefs. We want to examine how a self-reflective student who aspires to be a professional writer experiences the writing activities designed by the communities in which she writes. We hope to use what we learn about how that student believes she learns to write to inform our own practice as teachers of writing.

Two Communities of Practice

Throughout this study we posit the existence of two communities of practice in which Erin moves: academia, specifically, the culture of our highly selective, small liberal arts college; and public relations, specifically the public relations office at this college undergoing a change in its relation to the rest of the institution. According to Wenger (1998), communities of practice, "created over time by the sustained pursuit of a shared enterprise," provide "collective learning" (p. 45); their aim is ultimately to provide a "process by which we can experience the world and our engagement with it as meaningful" (p. 51). By this definition, Erin experiences both academia and the public relations office as communities of practice.

At the time of our study, Erin had been a member of the college's academic community for three and a half years, and had had occasional professional relationships with the community of public relations throughout the same period. Both Erin and others such as Dias et al. perceive of the two

communities of practice as existing separately and independently. But Erin, through her participation in both, brings the two into relation through her struggle to negotiate her career choice and her values in moving from liberal arts education into public relations. In her internship final paper entitled "Intern(al) Conflict: Internships and the Liberal Arts Education," Erin describes her sense that the college does not fully endorse her internship because it conflicts with its liberal arts mission:

> In a liberal arts education, an internship and the applied knowledge that it implies is a deeply troubling concept. An internship is the first step on a slippery slope, funneling students to specific careers earlier and earlier. It is the first step in Grinnell's inevitable decline to the status of a two-year vocational school complete with peppy TV commercials touting its top-of-line-dental hygienist and bartending programs.

By participating in the two communities, she experiences what Wenger calls "the demands of multimembership" [4] (1998, p. 159). In one journal entry written about halfway through her internship, Erin describes how she finds herself caught between the academic and administrative side of the college during an encounter with a former professor. Note how she uses the pronoun "we" to refer to herself as a public relations worker:

> I am getting into some odd politics here. For instance, yesterday I was walking through the science building and I ran into one of my profs. We got into a conversation regarding my internship here, and she got this really annoyed look on her face and started going on and on about what a horrible job PR does, and how we don't get our facts right and we write like third graders, except with a worse vocabulary. And I know she thought that she wasn't insulting me, at least she didn't act as though I was supposed to take it as a personal attack. It was almost as though I was a confidante – as though I was supposed to say "Yeah, no kidding, they're all a bunch of morons over there at PR, I cannot BELIEVE they're getting paid for the drivel they write." She put me in such an awkward position, I didn't know what to say. So I did the PR thing and evaded the issue. I think I responded by saying something like "I agree that there are a lot of tensions between faculty and administration." And it was a cop-out, probably. It made me sad, though, because she really got up on this high horse about how administration is supposed to be a support for professors, how it's OUR job to find out all the information and make sure all the copy is accurate and read their minds. It was condescending.

Erin' s internship journal shows her perception that to be inside, and write in, one community of practice is necessarily to be outside of the other, that the two communities of practice have boundaries that "define them as much as their core" (Wenger, 1998, p. 254). Such a description would not conflict with the view of Dias et al. (1999) that different learning processes occur in each setting: that writing is embedded in the workplace but is taught as a distinct skill in academe.

But we find Erin's learning processes to be more complicated than what Dias et al. describe as participation in two "worlds apart." As Erin's encounter with her professor suggests, Erin

operates in both communities simultaneously, but she is an expert in neither. Thus, Erin's work in the two communities of practice is essentially work on the boundary of each community and between the communities. Working as both an intern in public relations and a student in academe, Erin can let the two worlds talk to each other, at least in her head. Erin sees that, although the two worlds are separate and different, each community exerts similar influence on the writing acceptable in it (the types of audiences addressed, words chosen, and themes explored differ in the two communities, but in both cases the communities limit the choices that community members can make). That is, through her participation on the borders of the two communities of practice, she learns that the tools she chooses to use in public relations and those she uses in academia "carry with them stored knowledge, ways of acting, generic information that prescribes or makes convenient certain ways of writing and precludes others" (Dias et al., 1999, p. 223). By juxtaposing the two communities of practice, Erin is able to see how the tools available in each community can compromise her ability to write honestly and effectively. Through such insights, her struggle to develop as a writer in both communities helps her understand the social and political nature of writing activity and leads her to develop new strategies for achieving her personal and professional writing goals. In this learning she exemplifies Wenger's (1998) claim that these boundary locations are exactly where new knowledge is produced and where, as Wenger argues, "new interplays of experience and competence" occur; in other words, they are "the likely locus of the production of radically new knowledge" (p. 254). Although Erin does perceive that the two communities of practice have conflicting goals and practices, her effort to negotiate the divide between the "worlds apart" is productive for Erin as she is challenged and transformed by the experience.

Erin's Relationship with the Community of Academia

The academic community in which Erin wrote for three and a half years was that of a highly selective liberal arts college. At Grinnell, students are expected to master the skills of argumentation, to research and report on that research, and to analyze texts in support of arguments. Students seldom write "creative" or opinion pieces except as exercises or journal entries, which are typically not evaluated in the same way as are more academic pieces. Students also write frequently and copiously at this college; in fact, in 2000 a college-wide Writing Inventory (http://www.grinnell.edu/academic/writinglab/guidelines/inventory/) shows that students are expected to write at least three, and more often five papers in each class. Some of these papers can be lengthy, up to 30 pages. Students are seldom given opportunities to rewrite or to write in stages although some professors do encourage students to revise poorly written work or to build on previous papers for a final paper in the class. The assignments themselves are usually perceived by both student and teacher as a display of what students have learned in the course and as evidence that they understand and can apply the theories in the discipline to new material. In 2001, a faculty committee on writing developed a general list of criteria for writing at the college (http://www.grinnell.edu/academic/writinglab/guidelines/criteria/). This list also reveals the academic community's emphasis on argumentation and use of evidence as the highest learning priorities for students.

Throughout her college career, Erin was ambivalent about her writing activity in the academic community. In a series of interviews we conducted with her at the beginning of our study, we asked her to describe her academic writing during the three years she had been at Grinnell. She sees most assignments as formulaic exercises that denied her the opportunity to make meaning. She describes herself as having "regressed" in her writing ability during college. She says that in high school she felt like a good writer, one willing to take risks and look at the world in unique, nonobvious ways. However, in her academic courses at Grinnell she came to think that her professors did not want her to take risks with her writing. Although she routinely earned A's and B's in her courses, she felt alienated from what Elbow calls the "rubber-gloved quality to the voice and register of most academic discourse – not just author evacuated but showing a kind of reluctance to touch one's meanings with one's naked fingers" (1991, p. 145). In an interview, Erin notes, "I'm just writing a paper exactly the same way as everyone else." In an essay Erin writes comparing two papers, one she'd written for her first year tutorial course and one written for a senior year history course, Erin reiterates her belief that her writing is less readable than it had been when she entered college. However, she does recognize that her writing is more complex and that she is able to " note the complexities and ambiguities within an argument and face them head on. …. I think it ultimately makes my papers stronger because I can look at issues and not simply gloss over issues that I don't understand or don't want to deal with."

Erin's view of academic writing as constraining and formulaic is consistent with the view held by many researchers on composition. Much research on writing and the teaching of writing criticizes the teaching of writing that occurs in colleges and universities as inadequate preparation for real-world writing (Dias et al., 1999; Russell, 1999; Elbow, 1991; Geisler, 1994; Hillocks, 1995).). As Geisler (1994) notes in *Academic Literacy and the Nature of Expertise*, the sort of expository writing expected as a response to most academic writing assignments positions students as novices (p. 81). Geisler argues that attaining academic literacy has been viewed as a developmental process in which students slowly move toward expertise by being "apprenticed" as students of a discipline through the literacy activity demanded in their coursework. Underlying that view, she claims, is the assumption that "academic expertise is so cognitively complex that we can reasonably expect only some students to master it" (p. 89). Therefore, academic writing assignments often provide supports or scaffolding to move students toward more complex thinking in that discipline and to help students practice the modes of inquiry, the evaluation of evidence, and the theorizing about that evidence that represent the literacy practices of experts. Geisler claims that these approaches to teaching writing construct students as incapable of creating or revising theory and thus deny them access to meaning-making and hence, real learning.

In Erin's discussion of her experience writing in other genres, she highlights the lack of voice and agency she believes is afforded her in the writing activity for the academic community. She finds academic writing limiting because it does not win her the praise and recognition she desires and because it seems to serve no purpose except to earn her the good grades she wants. In Erin's journals and other communications she expresses her desire to have her writing accomplish something, what we will call agency. Her desire for such agency is revealed in the beginning of

her internship journal, when Erin contrasts her view of the writing she does in academia with her new feeling of being "productive" in her workplace writing tasks:

> I feel like I'm actually doing something. Sometimes in classes, I just do thousands and thousands of pages of reading, and I don't necessarily feel like I'm getting smarter or doing anything productive. Here, I have a story. I can hold it in my hands and say, "Look, someone did this remarkable thing, and I wrote about it and made them happy. Everyone who picks up this magazine and reads this story will get a glimpse of this person, and get a new understanding of this thing that they did. Because of me."

Erin continually expresses her desire to be productive and to write to an appreciative audience. In a piece we asked Erin to write about her Writing History, Erin explains that she discovered in middle school that she "could get recognition through [her] writing." In a note on one of the drafts of that essay, Erin writes:

> For a generally shy kid, this [writing] is the best way to be recognized. You can shape the things you are going to present without anyone seeing that you spent five hours on it, when everyone else spent five minutes.

Throughout high school, Erin won awards and received praise for her writing. Erin describes one teacher's comment, "You're a writer," that was written on a paper her senior year of high school, as "the most powerful compliment" she'd ever received from a teacher.

However, as her Writing History reveals, when Erin arrived at college, her perception of herself as "a brilliant writer" was shaken. After receiving what Erin considered to be low grades (B's) on her first writing assignments, Erin decided that "academics, where my final grade was based on one or two papers, posed too much of a risk. Twenty thousand dollars [the price of yearly tuition at this college] seemed a steep price to pay for failing grades." Thus, she resolved to "value clarity over creativity, objectivity and distance over warmth and personality" in her writing, and to "suck up to [her] professors…to fit in and ultimately excel, even if it meant [she] would have to lose the voice [she] had worked for years trying to perfect, enlarge, and embody." In an interview with Jean, she reiterates her complaint that academic writing allows her no voice: "Voice is really important to me so when I'm writing for a professor, or something, I'm not using my voice. I don't care…about it as much." In this complaint, Erin expresses her difficulty with investing in writing when she sees a professor as the only audience. Dias et al. (1999) delineate why they believe conceptualizing audience is difficult for college writers:

> University students typically write solo to audiences of one, who quite likely know more than the writer about the subject who, nevertheless, by convention are committed to reading the entire text (whatever its length) within specified time frames and who value the writing insofar as it reveals and enacts the students' learning. (p. 12)

In her internship final paper, Erin describes the effect of writing in a rigid form for an audience that is unlikely to learn anything from the reading: "We [students in academe] follow tried-and-

true formulas, using distant, institutional voices. We may speak authoritatively, but we do not always speak honestly."

Because such writing did not satisfy Erin's desire for self-expression and agency, she found "other outlets, " other genres that she believed allowed her to speak more honestly. According to her Writing History, she "wrote for the school paper, and for the admissions office. I wrote for the cross-country yearbook, and I wrote poetry about breakfast cereal on my plan. I wrote for anything that would give me an audience." Thus, when she had the opportunity to work as an intern for the public relations office, Erin is ecstatic; on the first day, she writes in her journal:

> Ahh...fame, fortune, and glory are imminent. I can already tell. Okay, maybe not, but this is going to be a lot better than I anticipated. I wasn't sure quite what to expect, but this is infinitely better than the stuff that I did for the local newspaper during previous summers....

In the same entry, she explains the satisfaction she feels from using writing to give students recognition they do not always get in academia:

> Also I like the fact that, for the most part, my job is to make people happy. I am doing a fairly minor press release about a couple students who are doing a science presentation for the campus, and they were giddy that they were going to be in the [local newspaper], and even more giddy that they would get to read the copy before it went to the papers. But they've spent the entire semester putting together their research, and this might be the only public nod they get....You don't get a lot of that in the academic world.

Because Erin desires to receive recognition and "make people happy" in her writing, it is easy to see why she feels a lack of agency in academic writing activity. As Dias et al. (1999) argue, writing at school is a part of what the authors call "facilitated performance" where students are guided through a "carefully shaped context" and a "carefully orchestrated process of collaborative performance" between the instructor and student (p. 203). These authors explain their view that "the object of the activity in the school context is clearly and explicitly for students to learn (with learning to write as a route to, or specialized instance of learning)" (p. 203). Perhaps because the learning goal is implicit rather than explicit in most of her academic classes, Erin views her participation in academic writing activity as helping her learn to write better only in a limited way. That is, she concedes that academic writing has enhanced her analytical abilities, making her arguments stronger, and she recognizes that certain writing experiences in certain courses were transformative for her. However, she does not believe she has done much writing to learn or learning to write in her college experience. For Erin, academic writing is primarily about producing writing that will display her knowledge to earn a good grade and win her the approval of her professors. In contrast, particularly at the beginning of her internship, she believes that the workplace offers her a place where she can be productive and make a difference through her writing activity. Although Dias et al. argue that the workplace operates "as a COP [community of practice] whose activities are focused on material or discursive outcomes, and in which participants are often unaware of the learning that occurs" (p. 189), Erin's unique workplace experience, in which improving her writing is the major goal of

the internship, makes her acutely aware of how she is learning about writing through her internship.

Erin's Relationship with the Community of Public Relations

Erin's relationship to the world of public relations also involves a complicated negotiation to create coherence through her writing in this community of practice. Enmeshed in conflicts over values in this activity system, she learns that her desire for agency and voice is limited in public relations writing activity, too. For example, early in her internship, she describes in her journal her first hint of unusual tension in the workplace, as the office where she works faces a performance evaluation:

> I thought everyone was sort of snappy today because I had a bad personality or they hated me because I don't do enough. This may be true, but they are also being audited. I am not sure what that means, exactly, but it's certainly not conducive to pure joy in the office. So I sneak around and don't ask a lot of questions. It's a lot like midsems at Grinnell … everyone is out of sorts because there's a lot to do, and people start noticing and commenting on all the bad habits that people have. I would sum it up by saying that everyone is saying "fuck" a lot more. (That is probably an inappropriate thing to say. It's true, though.).

As this entry reveals, Erin senses the tension in the office, although the people she works with try not to involve her in the uneasiness associated with this evaluation. Lacking specific knowledge of the conflicts, she compares the tension in the office to tensions in the situation with which she is more familiar: academia ("It's a lot like midsems").

She also becomes increasingly aware of other conflicts in the workplace. In her journal she begins to note the difference between her somewhat privileged status as a student and the relatively powerless status of the workers in the public relations office:

> Sometimes I wonder if they are annoyed with the fact that I am a student here. That is a weird thing to say, but I realized, after their big and scary evaluation, that unlike students, they don't have an unending budget. I am getting a small picture of what it is like to be here as a non-student, and I realize how much Grinnell coddles us (students). For instance, all I had to do to get $500 to run a marathon with all my friends was write TWO PARAGRAPHS. Whereas they have been asking for a color printer – really, a necessity for them – for two years. And their computer systems here aren't even all aligned, so getting a story from one computer to another is a tedious process of exchanging disks and formatting and swearing. I had no idea there was such a contrast between the way they deal with funds for students and the way they deal with funds for the administration.

As she struggles to understand these power relationships that will affect her as a future writer for public relations, she sees that even in this community of practice, her freedom to write for her own purposes will be constrained.

Another conflict also impinges on her writing activity in the community of practice of public relations. At Grinnell during the summer immediately following this semester, the head of the public relations office (Erin's mentor) left her position, an acting director was appointed, and three weeks later an interim director was appointed, a person previously employed by the development office and not experienced in public relations. So for the first time in recent history, the public relations office, instead of serving the development office as one of many clients, reported directly to a member of that office.

As research on public relations in college settings suggests, public relations workers at academic institutions often face tension between the desire to write a good story and the need to appeal to contributors. In an interview shortly after she had resigned her position in the college public relations office, Erin's mentor asserts that "most of the people in my profession prefer not to work for development." She says that "tensions between development offices and public relations offices are very common….Our goals aren't the same. You know, whereas I'm a writer looking to what's in it for the reader, the development officers tend to think about what's in it for themselves or for the college." She cites as examples of the tension the cases of the editors of the Stanford Magazine and the editor of the Pennsylvania Gazette, both of whom left their positions after winning the prestigious Sibley award, which recognizes excellence in alumni magazines. In both cases, the leavings were prompted by tension with the development offices, which wanted the magazine to be aimed more specifically at raising money for the institution. The Chronicle of Higher Education describes the problem in this way: "Alumni-magazine editors say these untimely departures show the extent to which fund raisers are pressuring them to publish news that casts only a positive light on the institutions" (Nicklin, 1996, A23). Erin's mentor says, "I've had conflicts in the past with the development office … because if you have a choice doing a story about someone who's interesting and someone who given money to the college, [the development office believes] you should do the story about the person who's given money to the college…. I disagree with that."

Erin was aware throughout her internship of these conflicts among motives and actions in the writing activity she did for public relations. Erin learns how professional writers must understand the social and political expectations of the system in which they operate and must translate them into generic choices. For example, she describes in an e-mail communication how, in writing an article about an important college donor, she would have to balance the interests of various players in the organization:

> It would have to be okayed not only by my editor and the [person] I'm writing about, but also people like … [Grinnell College's director of development] and
>
> … [the interim director of public relations, a former employee of the development office]. So I have to make something that
>
>   A. Provides a flattering enough image of the [person] so that the big cheese will give approval.

B. Doesn't make … [her mentor] gag with its syrupy disgustingness.
(She's an editor. It would be gross if she let the really wretched stuff go by.
And [she], like any editor, has her idiosyncrasies about the way she liked
things written. I tried to abide by those things.)

C. The development folks think is properly chipper, and appropriately
coddles their moneybags superstars.

D. People *might* read.

E. Doesn't make me toss myself into a mud puddle for shame.

As this discussion suggests, when Erin decides how to write different sorts of pieces in public
relations, she understands that genres, as Russell (1997) explains, "are not merely texts that share
some formal features: they are shared expectations among some group(s) of people … ways of
recognizing and predicting how certain tools, in certain typified—typical, reoccurring—
conditions, may be used to help participants act together purposefully" (p. 513). And as the
above quote from her journal reveals, Erin is growing in her understanding that it is not solely
writing for the academy that imposes "cultural imperatives of the group or system" (Dias et al.,
1999, p. 21). As in all communities of practice, writers in public relations or other work cultures
"may experience its genres as straitjackets" (Dias et al., 1999, p. 21).

Erin's Writing Activity in Academia

Experiencing the contradictions between and within the activity systems of public relations and
academia, Erin brings the two into a relationship through her writing activity, learning in both
how to use the genres, with their constraints and possibilities, to negotiate her identity as a
writer. In academia, Erin's writing follows a process of negotiation in what Dias calls the
"subtle interplay of various, often conflicting motives" (p. 115). In Erin's case, these motives
include her professors' goal to encourage and guide students as they learn to think and write
well in their disciplines, and Erin's goals to earn good grades, to please her professors, and to be
personally fulfilled through writing. In "Role Playing: Direct Address and Status in Jacobs'
Incidents in the Life of a Slave Girl," the paper Erin writes for her women's history class, she
works through 10 drafts, making organizational and vocabulary choices that reveal her
responsiveness to these different and sometimes conflicting motives.

"Role Playing" focuses on Harriet Jacobs' book *Incidents in the Life of a Slave Girl*, originally
published in 1861, in which a black woman, a former slave, seeks to educate her contemporary
white audience about the horrors of slavery. As a part of their discussion of this text, the class
has considered how Harriet Jacobs "constructs herself on the page" in *Incidents in the Life of a
Slave Girl*. The assignment Erin chooses offers explicit language directing what content the
writer should focus on and provides clear direction:

…. [T]ake a position on how and why Jacobs depicts herself and her
"status"…. [W]rite an analysis of Jacobs' memoir, which treats it as a
construction while taking very seriously the message embedded in the

> construction….and focus on the choices Jacobs-the-author made in depicting
> her power and her powerlessness.

Through this detailed assignment, the professor provides her students with developmental schema to support them as student writers, just as Geisler (1994) argues many professors do. It is interesting that Erin does not find this detailed and directive assignment to be constraining or formulaic. She tells us in an interview that she welcomes the help the professor gives her in organizing the paper and providing a focus for her analysis: "If she had just said, 'Write a paper,' I would have had a really hard time." The assignment points students toward the issues appropriate to the genre of historical analysis: issues of status and power, the construction of messages, and the recognition of historical context. Erin uses the scaffolding provided in the assignment and approaches the assignment strategically. The following excerpt from the first paragraph of her final and 10th draft of "Role Playing" reveals how Erin mirrors the language of the assignment, as indicated by our underlining:

> As a southern black woman attempting to motivate her audience of northern white women to abolish slavery, she faces the difficult task of aligning herself with the reader without alienating herself from them. To do this, she must carefully negotiate her <u>status</u>; that is, the way she <u>positions</u> herself in relation to her audience of white women. Jacobs constructs her <u>status</u> both as a slave who is speaking to her superiors and as a woman who is speaking to her equals. These two <u>statuses</u> allow her to examine slavery on two levels: as a slave, she evokes pity in the reader, and as a woman, she evokes empathy. Through her direct addresses, we can see how she <u>constructs</u> herself both as a helpless victim of an oppressive institution and as a powerful voice for all women.

Other evidence of Erin's understanding of the generic expectation embedded in this community of practice is revealed in her consideration of the term "direct address." Erin labels the term in her fifth draft as "Too Englishy" and deletes it. When we ask her later what she meant by "Too Englishy," she responds in an e-mail:

> I think I meant I did the same sort of analysis that I would do if I were writing an english [sic] paper … its evidence was based on narrative technique, which seemed to me to the too slippery to base my historical argument on. (Does that make sense at all?)

Erin eventually decides to reintroduce the concept of direct address into the final draft of her paper, but she reaches this decision only after she considers the generic differences between writing in history and English. Erin's explanation that an analysis of narrative technique may not provide convincing evidence in an historical argument (and by implication for a history professor) reveals her sensitivity to such perceived generic differences.

Erin's attention to both the assignment and the quality of her argument is also revealed in her careful analysis of how Jacobs constructs herself as someone whom the reader will pity and with whom the reader will identify. Erin refines her wording through several drafts to better reflect the complex relationship constructed between Jacobs and her reader. For example, Erin

decides that she needs to refine her word choice to better express her theory by substituting "empathy" for sympathy in this sentence "….she evokes pity in her reader and as a woman, she evokes empathy." Here she demonstrates the kind of care she takes both to fulfill the professor's assignment and to reflect the complexity of Jacobs' writing.

Erin's paper earns her an A and positive comments from her professor. The professor's comments at the end of the paper describe Erin's work as "a very persuasive and interesting piece of interpretation." And the professor adds: "Let's put it this way; it's 10:30 on Friday night, yours is my <u>last</u> paper….and I had no trouble keeping my focus while reading it. That's high praise indeed!" However, when we later interviewed this professor, she described Erin's paper as "lacking the spark of creativity" she looks for in students' work. As Erin's Writing History tells us, Erin believed that reaching for such creativity, which she equated with pushing against the constraints she felt in her academic writing, would not be worth the risk of a poor grade. Perhaps that cautious balancing of motives explains her careful fulfillment of the assignment.

However, Erin tells us in an interview a year later that she worked especially hard on this paper because it met a personal need for her. Although for other papers she often played with language and made editorial corrections, she had rarely made the kind of "major structural changes" that she made for this one. In this interview, Erin attributes her hard work to her feelings for this class: "Other classes were distanced or removed; women's history is about me… Now I can consider myself a feminist and not be embarrassed about it….The class changed my entire outlook—it was the best class I've ever taken." Perhaps because she found the class engaging, she found her writing activity for this class personally transforming. When she got the paper back and reread it, she found herself proud and surprised by what she discovered in her paper: "I thought 'wow! I never thought of this before! It's smart! It's true!'"

In another paper Erin writes for her Russian literature class during the semester, she stretches the genre of literary analysis and takes more creative risks than she had in her women's history paper. As Dias et al. (1999) argue, genres often constrain and limit, but they also can be potential spaces for identity transformation and learning:

> …we need to argue also for the potentialities of genres for creating spaces for forming and realizing new versions of self as one discovers new motives and transforms the self in response to the new communicative needs and opportunities. (p. 21)

In her Russian literature paper, Erin does appear to use the "opportunity space" (a phrase Dias et al. [1999, p. 21] attribute to Bazerman) available to her to experiment by blending the genres of journalistic writing and literary analysis. In this paper, "Dmitr'i's Song: Intertexuality between the Brothers Karamozov and Hanson's 'Weird,'" Erin plays creatively with resources of the genre of literary analysis. In this piece, her discourse is more confident and self-assertive than that of a novice and the genre is less formal and "author evacuated" (Elbow, 1991) than typical student literary analysis. In this paper, Erin compares the themes of alienation and powerlessness in Dostoevsky's novel and in Hanson's popular song. Erin realizes that her choice of topic is risky because most paper assignments at this college do not encourage students to refer to or

include artifacts of popular culture as evidence for argument. When she receives the paper and comments back from her professor, Erin tells us in a note, "I got this in the mail from Prof. Mohan and didn't bother looking at it…I'm too embarrassed." Her embarrassment results partly from her uncharacteristic haste in writing the paper and partly from her awareness that the topic was risky.

Despite her embarrassment, Erin might have done well to reflect closely on the professor's comments and the grade. She receives a B/B+ on the paper, and the professor's comments are very positive. At the end of the paper, he praises the originality of her work: "Your work is original in its conception and it's ably executed. I found it consistently engaging."

Although the paper is a somewhat successful performance for the academy, both the topic and the structure of this paper notably differ from Erin's other academic papers. To begin the paper, Erin creates an instructive conversation between a fellow senior and herself. Instead of envisioning her reader as a captive audience of one professor, who will read the paper only as evidence that she has learned what is expected in the course, she constructs the reader as someone whose attention she hopes to gain and keep in her paper. The conversation that introduces the thesis of the paper echoes the dialogue and informal language typical of a public relations piece:

> "You're reading Dostoevsky?" sneers a fellow senior, a science major. "Good God, why?" he asks in a condescending voice. "Not only is he dead, but he writes in another language. Yech. How irrelevant."
>
> My friend says this mostly in jest, but the sentiment is not uncommon—if a topic is not immediately relevant to day-to-day- life, it is inherently irrelevant.
>
> "Irrelevant? Not a chance," I say. "Dostoevsky writes about things that are universal to all humans. He is just as relevant today as he was over 100 years ago."
>
> "Oh really?" he says. He sees a challenge.
>
> "Yep. You can see the same things being discussed today in everything from talk shows to pop music." I pull out a CD from my backpack. It is Hanson, the top-selling teeny bop group in the nation. I flip it open and pull out the lyrics.
>
> The challenge has begun.

In the margin next to this conversation, the professor writes, "Good 'hook,' as in show biz," indicating that he reads the text with an understanding of her journalistic approach to both topic and structure of the piece.

Erin does produce an uneven level of discourse in the piece. In several places in her essay, the professor warns her to avoid "reportorial" wording because it does not communicate the complexity of the connections she wants to make. The professor also comments on her inappropriate use of jargon or slang in the text. Erin may be "lapsing" into journalistic discourse because she has chosen a topic for her paper that, through its popular culture subject, invites less

formal, academic prose. Since she is immersed in the communities of practice of public relations and academia, it is understandable that Erin might try out language she has found freeing in her writing for public relations in her academic writing, but she nonetheless follows the rules of the genre of literary analysis as she simultaneously resists them. Because Erin pays attention to imagery and creates credible parallels between the imagery and structures of the two texts, she fulfills the generic expectations of literary analysis. But, perhaps because of Erin's stretching of the genre and self-confident discourse, Erin's professor reads this essay as more than a demonstration that she has read and understood Dostoevsky. He responds to her as a fellow reader, one willing to learn from her. After she has given this explanation for her conception of interdiscursivity "—that artists are constantly in dialogue with one another, interacting with texts that came before them—can also suggest an unwitting collaboration," the professor writes in the margins: "I'm currently working on a paper dealing with intertexuality. May I use your nice formulation here? With attribution, of course." As this comment suggests, Erin, through this paper, becomes more than the novice that academic discourse demands of her; she acts not just to reproduce knowledge but to create it as well.

The above examples show how Erin, through her generic choices in her writing activity, negotiates among competing motives in academia to achieve personal and community goals. She seeks to get good grades and to please her professors, but she also develops more understanding of herself (as a feminist, as a popular culture enthusiast, and as an aspiring writer) as she creates knowledge about her topics. While the genre constrains her in some ways, it also enables her to learn through writing, one of the goals of academic writing. As this examination of her process reveals, she is indeed learning to negotiate "the interplay between various and often conflicting motives" (Dias et al., p. 115) in her developing identity as a writer.

Erin's Writing Activity in Public Relations

In public relations, Erin's writing activity follows a process of negotiation among conflicting motives comparable to the process she follows in academia. In the genre choices Erin makes for the feature article "Alternate Reality" in the *Grinnell Magazine*, she reveals her negotiation among the motives of journalist, fundraiser, and student. In this article she describes an Alternative Break trip, one of several excursions organized each college break by the college's Community Service Office to provide students the opportunity to engage in socially beneficial projects. Showing students engaged in such projects fulfills two goals for this college: first, the journalistic goal of telling a good story that engages and instructs the reader, and second, the development goal of encouraging alumni readers to donate money by demonstrating that the college encourages its students to practice social responsibility. This theme has long been part of the college's identity and is gaining new emphasis as the college collectively seeks to define its values during a time of turmoil in the college's leadership. [5]

Through her negotiations, Erin comes to understand that her audience in the genre of public relations differs from that for her academic papers. In an interview, Erin tells us that at first when she writes for public relations she envisions an academic audience, "some professor" reading it;

however she then realizes that "the only people who are gonna be reading it are like people who are kind of flipping through it … just sitting … down to dinner, so, like you want to capture their attention…." As she chooses which details to use and which to omit, as she selects her emphasis and shapes her material, she keeps in mind the audience she imagines for this genre: a person flipping through the magazine as she or he sits down to dinner, a reader whose interest she has to grab.

In Erin's account, she seeks to grab the attention of this reader through a succinct, attention-getting opening:

> Saturday, March 21, 1998: 11:30 p.m.
>
> I am sitting in a country western gay bar in the middle of San Francisco with a Catholic priest and a sloe gin fizz. I knew alternative spring break would be different from anything I'd ever experienced. I had no idea how much….

She also gains the sympathy of her audience through the persona she establishes as a neophyte do-gooder; this persona also presumably fulfills personal goals by allowing her to express her discomfort at her outsider status. In the article, she sets herself up, accurately enough, as a nervous newcomer to this world of socially responsible action, much as she might imagine the reader to be. Using the voice of a confessional journalist, she describes her apprehensions succinctly, concretely, and humorously:

> We huddle on the platform, awaiting our train. The 12 of us are virtual strangers to one another, so we make small talk or feign interest in our fingernails. I grind snow into the platform with the heel of my shoe, avoiding eye contact.
>
> I am nervous. I am an athlete, a meat-eater, and a senior. I am positive my fellow travelers will all be hippie, vegan first years who hate me for my Nikes and my penchant for McDonald's burgers.
>
> Not only that, but I haven't volunteered an hour in my life. For four years I have been attending a school that touts its reputation for social action and responsibility, but the only responsible thing I've done on a regular basis is recycle my Dr. Pepper cans.

Thus she sets up a persona not as a proselytizer whose confidence might put off potential readers and donors, but as a self-deprecating tentative member of the expedition.

Erin also attends to the expectations of a public relations genre when she omits from the article controversial information that might distract from its focus on college students doing good. For example, the private journal that she uses as raw material for the article records her ambivalence about the priest who guides the students through some of their activities. Before she meets him, she knows from the stories of others who had met him previously that he was "confrontational and tough, that he liked men better than women, that he would get us drunk and not get us home till after 3 am." She describes his role in her private journal:

> River ministers on the streets. He is "pastor" to homeless gay male
> prostitutes; he practices "harm reduction," a common phrase bandied about
> the homeless shelter, soup kitchens, and needle exchanges, which means he
> does whatever he can to make sure that when these boys (and they were
> boys – often 14 or 15) engaged in unsafe activities, he made them as safe as
> possible. We made the rounds with him, handing out peanut butter and jelly
> sandwiches, condoms, lube, and needles.

She records in this private genre some observations that raise controversial questions: Is harm reduction the most useful strategy for dealing with prostitution? Should aid focus on giving these young men alternatives to prostitution, rather than reducing harm in that pursuit, by dispensing condoms and lube for example? Erin, recognizing that the genre of the college alumni magazine is unsuited to such difficult questions, decides to omit some details that raise these questions.

When she writes about him in the genre of the magazine article, she focuses on the dedication and caring he devotes to his ministry. She reveals sympathy for his mission, conveying the harsh details but cushioning them in a straightforward understanding of the world he inhabits and the good he accomplishes:

> Sporting a backwards baseball cap, a pullover sweater, and baggy shorts with
> a chain-link key chain, he does not look the part of a priest. His speech,
> peppered with obscenities and crude references, reflects the world where he
> lives.

> Tonight, as he does every night, he sauntered down the streets of his
> neighborhood, handing out sandwiches, clean needles, and condoms to any of
> the boys he saw. He knows them all by name.

> He has long since stopped trying to save the world, or even his small piece of
> it in the heart of the Tenderloin. By giving out needles, food, and protection,
> he hopes only to keep this part of the world from total destruction. Once a
> gay male prostitute himself, River knows exactly how difficult it is to escape
> street life. (Peterson, 1998, p. 20)

Here Erin makes genre choices, leaving out her personal reaction, the priest's attitude toward women, and the lube with its unmistakable suggestion of homosexual activity. Instead, she conveys a picture of him that focuses on the good he tries to do while also recognizing carefully his humanity and his limits.

Erin also adapts to the audience of her genre when she describes her relationship with other group members, again leaving out details that would conflict with the picture of students doing good. Erin's private journal records her frustration with occasional irresponsible behavior by her fellow students. For example, she describes her group's abuse of the hospitality of the church that had hosted them, describing her group as "a self-centered lot" and noting "good lord, did we stink up the place." Similarly, some of her private journal entries record in lurid detail adventures that are clearly illegal for a group in which most students were not of legal age to drink; for example, she describes a foray that ends with a student "puking in a plastic paper bag" and then

"kneeling down and bracing himself on the curb, throwing up." She emphasizes that, when she glimpsed this image, she mistook this student for "a homeless drunk."

In her finished article, Erin shapes her account of the drinking so as to convey it without overemphasizing it. In this version, she makes only a short and vague reference to drinking: "Right now, we are passing around a Ruby Red Squirt, but it is not the only liquid we will consume tonight" (Peterson, 1998, p. 21). But she does not emphasize the effects of the carousing as she does in her private journal. Instead of focusing on her frustration with the activities of her fellow students, she focuses on the goals and accomplishments of the trip. For example, she gives a strong sense of the group as a cohesive unit when she describes their common feelings when they are traveling home on the train:

> Scene on train: We are on the train home. I am perched on the armrest of my seat, talking to Marisa and James. We are reliving the past two weeks, recalling the surprising details, funny quotes, and fascinating people. "Remember when River tried to buy Bryan a pack of cigarettes -- and he doesn't even smoke?" laughed Ariane.
>
> "Or when the college kid we met from Washington asked us about potatoes when we told him we were from Iowa?" I added, rolling my eyes.
>
> "Or when Shannon asked if it was a sin to shower in a church on Sunday?" said Marisa.
>
> Notebook in hand, I begin writing down these sound bites. Soon, others are joining us, adding their own memories, looking over my shoulder. Twenty minutes later, all 12 of us are huddled around the notebook, adding to and editing the list. Each brief anecdote is punctuated by laughter or knowing nods. Other passengers look on, both interested and jealous of our tightly knit group. (Peterson, 1998, p. 21)

Her clear goal here is to convey to the audience of potential alumni donors a picture of an accomplished, cohesive, fulfilled group.

At the same time that she adheres to the demands of the genre, Erin works to convey an accurate version of events. In an early draft of the article, her editor suggests that the end of the article focus on the effects of this trip on the possibility of future volunteering: "future vol? Inspired you to do more?" Despite these leading questions, Erin resists that line of development. Her private journal entry provides a clue as to why, when she describes in this private genre her preference for order and goal-oriented activity, qualities she finds missing in the trip:

> If nothing else, this trip has helped me discover that what I enjoy doing is not simply a product of habit. I thought that being with a group that has such different personalities from mine would help me realize different parts of my personality, maybe help me discover something I enjoyed that I wouldn't have realized otherwise. Not that I thought this 2 weeks wasn't valuable, not that I won't volunteer in the future, but I realize what I love about sports groups. I love the discipline, the routine, the dedication. I love the profound

> respect we have for meeting deadlines and goals, our tendency toward structure.

Erin resists her editor's urging to finish the story with a claim of inspiration and future dedicated volunteering. Instead, she chooses to end with a neutral image of the students returning home on the train:

> One by one, our overhead lights click off for the night. We will not wake up until our conductor announces first call for breakfast, two hours from Ottumwa.
>
> We are 15 hours from Grinnell, but we are already home. (Peterson, 1998, p. 21)

Erin's choices in this article reveal how she seeks both to comply with the genre expectations of the alumni magazine article and to convey her honest response to the trip. Generally, she attempts to provide what alumni readers might wish to hear and the public relations office might wish to convey: college students doing good in the world. However, she also tries to be accurate in conveying her sense that the students accomplished less than they might have. In negotiating among these varying demands and constraints, she pushes up against and tests the constraints of genre, thus developing identity as a writer for public relations.

Conclusion

Reviewing Erin's writing activity in the communities of practice of academia and public relations creates a portrait of a writer negotiating her identity as she becomes aware of and contends with the constraints of the genres she chooses to use. In working with and resisting the constraints of academic writing, Erin gains an understanding of how she can challenge the genre's positioning of her as a novice who lacks agency. In experimenting with the genre of public relations writing, she enjoys its freedoms while learning about and challenging its constraints as well. Erin's internship in public relations transforms her attitudes toward the college and toward college writing, as she reveals in her final essay for the internship. In this description of her learning in the internship, Erin writes that her choice to complete an internship is dangerous. She explains her belief that in her role as both a student and intern, she is crossing boundaries and taking on roles that some in the college would disapprove of. And she further politicizes the experience with her assertions in her internship final paper that "I am a pesky guerilla warrior, sneaking from the ivory towers to the gritty streets, acquiring the one thing professors loathe most: experiential knowledge." In this essay, Erin depicts herself as a warrior occupying new territory, and she sees her branching out into new writing activity as a political act, one that challenges what she perceives to be a stuffy, conservative community of practice in academia:

> After four years, my papers became more concise and more accurate. But they were drier than the Sahara desert. Tethered (and sometimes shackled) to form, I crammed my ideas into the skeleton of hypothesis→evidence. I was

> given a frame; my job was to fit pieces of proof into the confines of this
> frame.

As do Dias et al. (1999), Erin depicts her work in the two communities of practice in architectural terms: "My internship offered a unique opportunity to integrate academic and applied knowledge; if the goal of a liberal arts education is to create floor space in the mind, an internship creates the opportunities for entirely new levels." We also want to make clear that these struggles to fashion new spaces in the architecture available to her are political choices that signal her resistance to practices that constrain her desire to be both creative and truthful.

Examining how Erin participates as a writer in the two communities of practice requires that we consider the often-conflicting motives and power relations Erin must understand and negotiate successfully in her writing activity. As Russell (1999) reminds us:

> Our discipline's motive is to provide tools (commodified knowledge) to other
> activity systems, so they can better understand and use this marvelous tool
> called "writing together" to harness for good the variety and power human
> beings have in this protean technology. And to do so we might do well to
> understand the (power) relations mediated by the genre systems (writing
> processes) of school and society (p. 91).

Of course, Erin's story of negotiating the transition between writing for academia and writing for work is unique. But her experience suggests one way in which students might learn about writing in different communities. Erin's consciousness of her identity as a writer is heightened by her work on the boundaries of two contrasting communities of practice as she thinks about and comes to understand the constraints and freedoms afforded by each community. Her participation in the two communities of practice enhances her understanding of writing as a complex interaction between the writer's identity and social cultural practices of the community. As do Dias et. al (1999), we see that the ways of learning about writing and the purposes of writing activity in academic and workplace communities of practice can differ, but we learn through this study that Erin benefits more from her participation in each because of her participation in both.

In considering the implications of this finding for the teaching of writing in colleges and universities, we discover that Erin's academic writing experience might have been more powerful for her if she had felt more agency in her writing activity. As Dias et al. (1999) remind us, too often students perceive the writing they do for college as an end in itself. As Erin's experience exemplifies, many do not view writing as a means of discovering something or of gaining new understanding. Teachers can help students understand that writing activity offers opportunities to gain new understanding. In addition, they can, as Erin's history professor does, structure assignments so as to communicate the genre expectations for a discipline as ways of knowing and being. Teachers can also invent projects where writing becomes more clearly a means to an end, to "constitute the class as a working group with some degree of complexity, continuity, and interdependency of joint activity" in order to mirror the rich "communicative relations that contextualize writing in the workplace" as Dias et al. (1999, p. 235) advocate.

In contrast to Dias et al., who depict writing activity in the academy as a solitary act for an audience of one, teachers of writing need to help students reconceptualize all writing activity as collective work. As Journet (1999) reminds us, "Because genres represent socially constructed forms of typicality, they are property of communities, the patterns of social life operative within particular groups of people" (p. 100). When students write in a college class, they do not write for the professor solely, nor do they write alone. Instead, writing activity is one means through which all members of a liberal arts college community work together to both reinscribe and redefine the community's and individual participants' values. Thus, as Erin comes to realize through her work on the boundaries of academia and public relations, all writing activity involves its participants in power relations through which they continually renegotiate and redefine their identities.

Finally, we believe it is not enough simply to advocate that academic or workplace communities of practice mirror each other, although practices in one may enhance writing activity in the other. Rather, our study shows the benefit of providing opportunities for teachers and students to explore how contrasting communities of practice define successful writing activity and how writing activity operates in the cultural and political sphere of each community. Thus, we believe, academic communities of practice should provide students with opportunities to write in non-academic contexts and should encourage students to reflect about and discuss how these non-academic contexts frame writing activity. At the same time, students may benefit from discussing how the academic contexts in which college writing often occurs also affect writing activity. Such discussions should include how writing activity, both in academia and in other contexts, is a means of operating purposively in the world. While we have focused on how one student uses her experience on the boundaries of two communities to develop as a writer, future research may explore ways that student and teachers together can examine how communities of practice, through the writing activity they encourage, create and value knowledge. Academic communities of practice can encourage students to develop the self-reflexivity that will enable them to chart their own identity definition and to understand the power relations they engage in as they write. By doing so, students are more likely to learn from their writing activity and to gain the agency that makes writing activity meaningful to writer and reader alike.

References

Dias, P., Freedman, A. P. Medway, & A. Paré. (1999). *Worlds apart: acting and writing in academic and workplace contexts*. Mahway, NJ: Erlbaum.

Elbow, P. (1991). Reflections on academic discourse: How it relates to freshman and colleagues. *College English*, *53*, 135-55.

Geisler, C. (1994). *Academic literacy and the nature of expertise: Reading, writing, and knowing in academic philosophy*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Hillocks, G. (1995). *Teaching writing as reflective practice*. New York: Teachers College Press.

Journet, D. (1999). Writing within (and between) disciplinary genres: The adaptive landscape as a case study in interdisciplinary rhetoric. In T. Kent (Ed.), *Post process theory: Beyond the writing process paradigm* (pp. 81-96). Carbondale, IL: Southern Illinois University Press.

Nicklin, J. L. (1996, January 26). Turnover at top alumni magazines spurs debate about their role. *Chronicle of Higher Education*, A23.

Peterson, Erin. (1998, Summer). Alternate reality. *The Grinnell Magazine*, *30* (4), 18-21.

Russell, D. R. (1995). Activity theory and its implications for writing instruction. In J. Petraglia (Ed.), *Reconceiving writing: Rethinking writing instruction* (pp. 51-78). Hillsdale, NJ: Erlbaum.

Russell, D.R. (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication, 14*, (4), 504-554.

Russell. D.R. (1999). Activity theory and process approaches: Writing (power) in school and society. In T. Kent (Ed.), *Post process theory: Beyond the writing process paradigm* (pp. 80-95). Carbondale, IL: Southern Illinois University Press.

Strauss, A. & Corbin J., (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: SAGE.

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. New York: Cambridge University Press.

Notes

[1] These included papers written for courses in Women's History and Russian literature, and a summary paper about her internship.

[2] These include articles written for the public relations office's flagship publication, the Grinnell Magazine, disseminated to all Grinnell alumni. In addition, she wrote for other areas of public relations as well: press releases, nomination descriptions for graduation speakers, a feature describing the benefits the college received from a Hewlett grant, and an article describing the college's presidential search for the campaign newsletter.

[3] Wenger argues that learning occurs through social participation in learning communities, a participation that entails active participation in the "practices of social communities and constructing identities in relation to these communities" (p. 4). All of us belong to many communities of practice, and participation in all of these communities contributes to our identity formation.

[4] After the college's president of seven years resigned effective December 31, 1997, the college was run during this spring semester by an acting president. During the same semester, the faculty, in the midst of a self-study for North Central Association accreditation and a governance struggle with the trustees, approved a list of core values that

included "an ethic of social responsibility and action" (Grinnell College North Central Association Self Study Report, 36).

Part 3: Producing Education

'Big Picture People Rarely Become Historians': Genre Systems and the Contradictions of General Education

David R. Russell and Arturo Yañez*

English Department
Iowa State University
Ames, Iowa 50010
drrussel@iastate.edu
www.public.iastate.edu/~drrussel/

*Department of Languages
University of the Andes
Merida, Venezuela
arturo_yanez2000@yahoo.com

Abstract

This study synthesizes Y. Engeström's version of cultural historical activity theory and North American genre systems theory to explore the problem of specialized discourses in activities that involve non-specialists, in this case students in a university 'general education' course in Irish history struggling to write the genres of professional academic history. We trace the textual pathways (genre systems) that mediate between the activity systems (and motives) of specialist teachers and the activity systems (and motives) of non-specialist students. Specifically, we argue that the specialist/lay contradiction in U.S. general education is embedded in historical practices in the modern university, and manifested in alienation that students often experience through the writing requirements in general education courses. This historical contradiction also makes it difficult for instructors to make writing meaningful for non-specialists and go beyond fact-based, rote instruction to mediate higher-order learning through writing. However, our analysis of the Irish History course suggests this alienation may be overcome when students, with the help of their instructors, see the textual pathways (genre systems) of specialist discourse leading to useful knowledge/skill in their activity systems beyond the course as specialists in other fields or as citizens.

Introduction

In this chapter we'll introduce some basic principles of activity theory (in Y. Engeström's version, 1987, 1999, 2001) and genre systems theory (Bazerman's version, 1994) to show how they can be combined to analyze writing in human activities (Russell, 1997). The broad goal of this synthesis of activity theory (AT) and genre systems theory is to understand the ways writing mediates human activity, the ways people think through and act through writing. We look specifically at an educational use, though there are many others, as this volume illustrates. We suggest ways these theories can help teachers and students learn and critique existing discursive pathways (genres)—and create new ones—for expanding involvement with others.

The case we'll use addresses the role of specialized discourses in activities that involve non-specialists—a crucial problem in writing research. Specialist knowledge mediated through specialist discourse (and genres) can be useful in helping non-specialists solve problems. But it

can also be alienating and disenfranchising for them (Geisler, 1994; Ronald, 1988). The problem of student alienation by specialized discourse is especially evident in undergraduate general education courses in U.S. higher education.[1] U.S. undergraduates are typically required to take a certain number of these (usually chosen from a large menu) that are not in their chosen field of study and not systematically related to it.

These courses are designed to give students a broader view of knowledge and, often, to teach what faculty hope will be generalizable information or skills useful in their chosen fields or, more broadly still, in their personal or civic lives. However, the institutional position of general education courses produces a fundamental contradiction, as their name suggests. On one hand, students and teachers are pulled toward one disciplinary specialization; on the other hand, they are pulled toward 'general' or broad education for civic life or other professional specializations—with alienation often resulting. The teachers are specialists in the fields they are teaching and tend to use that discourse and expect, to a greater or lesser extent, consciously or unconsciously, that students will also use it. But the students cannot and do not typically need or want to be specialists in each of the disciplines of the courses they are taking to satisfy their general education courses requirements. What knowledge and discourses (and genres), then, will students read and write?[2] And how—if at all—will they make sense of the knowledge and writing in the discipline they are being introduced to, in terms of the writing they do other courses and life activities? How will it engage them in such as way as to be generalizable?

Geisler (1994), in her incisive AT analysis of the contradiction, has forcefully argued that general education courses were historically the result of a compromise between proponents of professionalization and defenders of liberal culture. Because there was little effort expended to create a dialog between experts and non-experts in academe, the courses lapsed into either a recruiting campaign for majors, or "service courses" to "cover the content" with "no intrinsic value to the discipline itself." (p. 254). (In U.S. higher education students are not required to specialize until well into their undergraduate education.)

The contradiction, she continues, is made more intractable (and less obvious) by deeply entrenched contradictory attitudes toward writing in the modern U.S. university. On one hand, writing is viewed in terms of a transmission model, in which writing is thought of as a conduit for transmitting pre-formed content, and learning to write is thought of as the acquisition of a "remedial" set of transcription skills. On the other hand, writing is viewed in terms of a natural acquisition model, in which writing is a natural gift or unconsciously developed knack that cannot be taught explicitly but must be acquired through immersion in a discipline. Geisler concludes that this contradiction cannot be overcome unless professional specialists "reconnect expertise to the arena of civic action." We must "find our general readers and talk to them" (p. 253).

Geisler's analysis of the contradiction in general education is persuasive to us, and her call to action compelling: greater dialog among specialists and between specialists and non-specialists. We want her to extend her analysis by developing a theoretical model (Russell, 1997) that would help specialists and non-specialists to understand the specific relations between the genres of

specialists in a particular profession (e.g., research reports) and the genres of non-specialists encountering its activity (e.g., textbooks and journalistic accounts). Such analysis may be useful in designing curricula and teaching strategies that use writing in new ways, ways that serve both specialists and non-specialists.

We argue that Y. Engeström's version of cultural historical activity theory, combined with North American genre theory, can help us explore this contradiction in new ways, ways that allow us to trace the textual pathways (genre systems) that mediate between the activity systems (and motives) of specialist teachers and the activity systems (and motives) of non-specialist students. We'll illustrate this widespread problem of general education courses with examples from a university-level general education course in Irish history. Specifically, we argue that the contradiction in general education is embedded in historical practices in the modern university, and manifested in alienation that students often experience through the writing requirements in general education courses. This historical contradiction also makes it difficult for instructors to make writing meaningful for non-specialists and go beyond fact-based, rote instruction to mediate higher-order learning through writing. However, our analysis of the Irish History course suggests this alienation may be overcome when students, with the help of their instructors, see the textual pathways (genre systems) of specialist discourse leading to useful knowledge/skill in their activity systems beyond the course as specialists in other fields or as citizens.

We first outline the problem of specialist discourse in general education, then explain Y. Engeström's version of AT as we have used it to analyze the alienation experienced by students in the Irish history course. We then explain genre systems theory to understand how one student, Beth, used the contradiction to expand her learning in ways useful to her beyond the course.

Big Picture People: The Problem of 'General' Education

A Calvin and Hobbs cartoon illustrates well this basic problem of alienation through literacy practices in specialized fields. Calvin is taking an essay test in American history and the question is, "What was the significance of the Erie Canal?" He writes, "In the cosmic sense, probably nil." And then he tells us, "We 'big picture' people rarely become historians." We are all Big Picture People when it comes to most things. And our students are too. But of course we must specialize in our lives, particularly in our modern society. And writing some more or less specialized genres, such as a history class essay, is necessary to successfully entering adult life— as Calvin will find out when he gets his grade back on the essay.

The students in the Irish History general education course were mostly juniors at a good Midwestern public university, which we'll call MWU. They were middle-class young men and women who were mainly in the course because to graduate they needed to fulfill a general education requirement. They were not history majors and, generally, had no particular interest in Irish History before enrolling in the course. This course fit their schedules. The instructor, Corey, was very dedicated, and worked hard to put together a good course because this was his specialty

and he loved teaching. He was recognized in the history department as an outstanding classroom teacher, and had taught first-year composition (Rhetoric 101) as well.[3] He also believed in a common goal of general education and emphasized it in the course: making students critical readers and writers, for their activities as citizens or their activities in other fields. Developing the students' critical thinking through their writing was very important to him, and he found ways to accomplish this goal through the writing. At the end of the course, the three students we focus on in this chapter recognized, in new ways, the difficulties and rewards of writing to learn history. On an initial survey, they all checked the response: "Good writing is the same no matter the discipline."   They left the course with a more sophisticated understanding.[4]

> **Mia:** It was interesting to see how some of us, actually three of us, had different hypotheses in relation to one particular newspaper article, Civil Rights. Corey was right when he talked about the high level of uncertainty that comes from making reasoned historical arguments. Writing history is certainly difficult and different. No doubt about it!

> **Michael:** One semester is not enough to learn the intricacies of historical writing. But I know, thanks to Corey's class, that writing history is not exactly the same as what we do when we write a paper for our religion class, for instance. I mean, writing varies according to the discipline. From now on, I'll keep that in mind

The third student, Beth, whom we'll concentrate on, also learned much about specialized writing in the course, as we will see in detail. But it was a struggle for them to arrive at that understanding because, we argue, of the contradiction in general education between specialist and generalist discourse and the resulting alienation.

The students warmed to the study of Irish history, its stories, its personalities, its cultural and intellectual currents--made more relevant by the events then transpiring in Northern Ireland. Yet initially these three students, like Calvin in the cartoon, saw little direct significance for them in the *writing* they did in the course. The three students we focus on all expressed a sense of alienation from the writing assignments. Here are some comments that show this initial alienation.

> "It's just memorization. You can't apply it to other parts of your life."

> "It was a waste of time, useless, just busy work, a painful chore."

> "I don't get it. These are his writing tasks and he wants me to write in his way."

These comments are, we believe, typical of many students in general education courses across the curriculum where writing is central to the learning (Geisler, 1994). How can we understand why some students feel alienated by the specialist writing? To answer this question we turn to an AT analysis of the contradiction in general education.
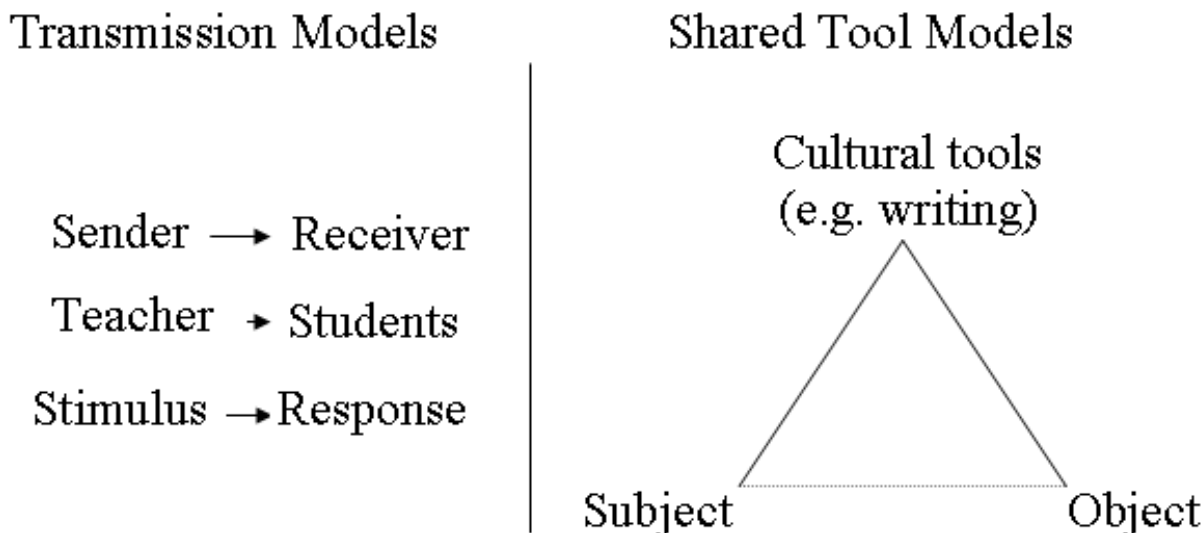
Transmission Models   Shared Tool Models

Cultural tools
(e.g. writing)

Sender ⟶ Receiver

Teacher ⟶ Students

Stimulus ⟶ Response

Subject   Object

Figure 1. Transmission versus Shared Tool Models of Communication and Learning

What Is Activity Theory and What Is It Good For?

Cultural Historical Activity Theory (abbreviated CHAT or AT) is one of many social approaches to learning, and its insights are very compatible with other social approaches, so much so that AT is not really a single theory as much as an orientation to learning. It grew out of L. S. Vygotsky's cultural psychology (1978, 1986), and was developed by his collaborator A.N. Leont'ev (1978, 1981) and, in the last 20 years, by many others worldwide (see Mind, Culture, Activity website, http://communication.ucsd.edu/MCA).

AT is a way of analyzing human activity over time, especially *change*—including that kind of change called *learning*. It does not claim to provide a neat way to predict outcomes, but rather offers tentative explanations. It is a heuristic. That is, a way of finding useful questions to ask. It asks those questions not to find any final answer, but to give people working in some activity a useful perspective from which to develop new approaches, new mediational tools (or new ways of using old tools) to transform or "re-mediate" their activity.

Activity theory (and the North American genre theory we'll get to shortly) view writing and learning in very different terms than transmission models of writing and learning. We illustrate the difference in Figure 1, Transmission versus shared tool models. Transmission models view communication and learning as fundamentally between individuals, such as sender-receiver (the engineering model), teacher-student (the banking model), or stimulus-response (the behaviorist model). Writing is a container for knowledge, and learning is putting knowledge "into" individual minds to be put back "into" writing for assessment. In contrast, shared tool models like AT view communication and learning as social in origin, and human activity as collective. In these models, we humans (subjects) act together with others humans and material tools to change something in our world, the object of our activity. The tools that we use, including writing, mediate our thinking and doing. One such tool, writing (and the action of writing) actively mediates—shapes—both our thinking and our action together, our activity.

An analogy will illustrate. In basketball, players (subjects) use a ball, a hoop, and a lined floor (tools) to try to score more points than the other team (the object of the activity or game). In the Irish history class, the teacher and students used such oral and written genres as lectures, discussions, readings, book review assignments, and so on to teach and learn Irish history, the official object of the course activity.

Notice that learning is not neatly "transferred" from one activity to another. A lot of games are played with a ball, just as a lot of fields use the tool called writing. But the ball is different, the rules of the game are different, the object of the game is different. And knowing how to shoot a basketball (or write in one way, one genre) doesn't mean you know how throw a baseball (or write in a different activity or genre). Learning a new game (or academic field and its ways/genres of writing) means participating in a new activity, and using tools (including the tool or technology we call writing) in different ways. Knowledge and skills are not things to be transferred between individuals through a conduit but social accomplishments developed through joint activity with mediational tools.

Learning by Expanding: The Problem of Con-text

Activity theory, then, sees learning in broader—and messier—terms than transmission theories. Higher-order learning (unlike rote learning or mere imitation) is viewed as expanding involvement with others over time, in systems of social activity, mediated by tools, including writing. This change through social and material involvement with others is part of what Y. Engeström (1987) calls *learning by expanding*. And as we argue later, the written genres people use are often pathways for expanding involvement. However, in this view, learning is devilishly hard to analyze, because it is hard the result of complex interactions of people and tools over time.

As Figure 2 suggests, the transmission models of learning and communication generally see transmission of between individual minds (or brains) as the focus, and lump everything else together as context (the left side of Figure 2). Social context is what *contains* the interaction. Shared tool models (the right side of Figure 2) see context as a weaving together of people and their tools in complex networks. The network is the context. Context (con-text) is actually from the Greek term for weaving, as in textile, or texture. In this sense, context is what is "woven together with" (Cole, 1996). We view the diagram on the right, the messy one, as a much more accurate picture of what instructors and researchers face when they try to figure out what's happening with a student or a classroom. Students' interactions, past, present, and (hoped for) future, all play a part in their (and the instructor's) learning. The problem is that it is hard to know what to focus on in our analysis. How can we do justice to the complexity while still coming up with a useful analysis?

Transmission Models

● *Context as con-container*
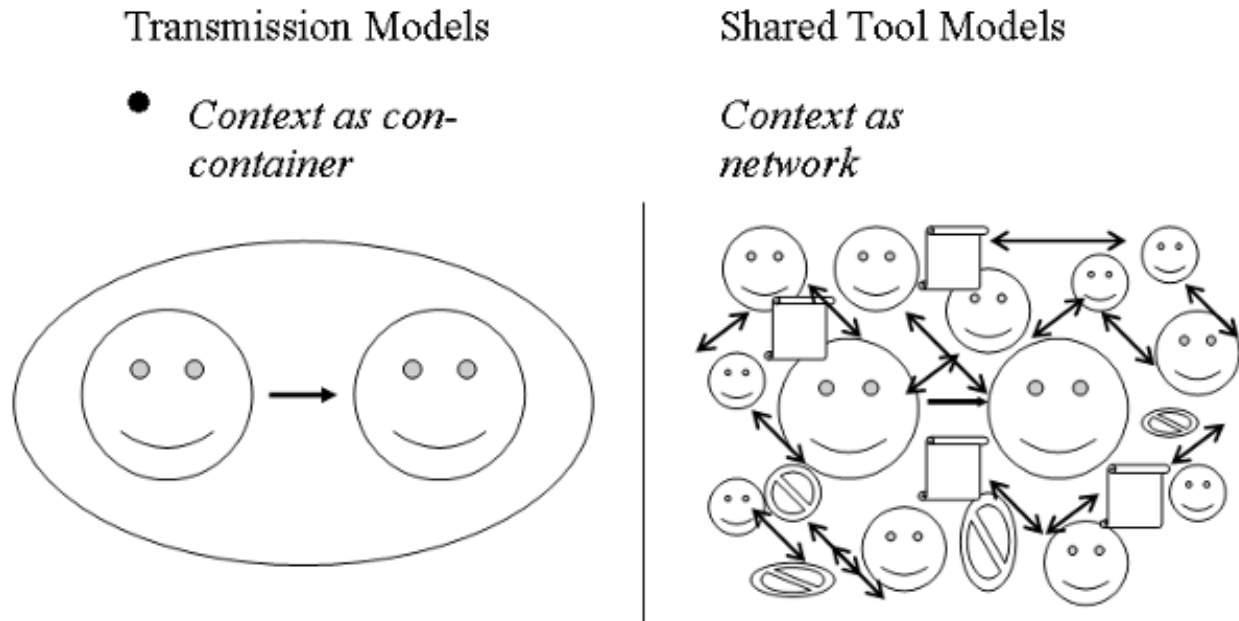
Shared Tool Models

Context as network

Figure 2. 'Context' as Container or Network

Activity theory tries to make sense of these networks of human interactions by looking at people and their tools as they engage in particular activities. Activity theory calls these networks *activity systems*. For example, singing (like writing) is a single human activity, but it is immensely varied—from a celebrated diva singing a Mozart aria at the Met to a writing researcher singing "Your Cheatin' Heart" in the shower. But this activity of singing goes on in lots of systems that we can identify. Just because you are an opera singer doesn't mean you can croon a country ballad or scat an Ellington tune. And each activity system of singing has its own genres, its own expectations and norms and rules, its own culture and historical traditions and ways of making sounds in the air with the voice. Writing (making marks on surfaces) is even more varied than singing, because it is used to mediate so many more human activity systems. What do we need, then, to think about in order to analyze specialized systems of activity mediated by the tremendously plastic tool called writing? What do we need to analyze writing (as we usually put it—ignoring the differences among activities that mediated by writing)?

We need a way of going beyond specific interpersonal interactions (the unit of analysis of transmission models) to understand ways broader social interactions, mediated through various tools, condition interpersonal interactions. Though AT is a dynamic and evolving orientation to learning, several basic principles are shared by its adherents, which we adapt from Cole's important book, *Cultural Psychology* (1996).

- Human behavior is social in origin, and human activity is collective (Cole and Engeström, 1993).

- Human consciousness—"mind"—grows out of people's joint activity with shared tools. Our minds are in a sense co-constructed and distributed among others. Our thoughts, our words,

and our deeds are always potentially engaged with the thoughts, words, and deeds of others. Through involvement in collective activity, however widely distributed, learners are always in contact with the history, values, and social relations of a community—or among communities—as embedded in the shared cultural tools used by that community(ies) to mediate activity.

- AT emphasizes tool-mediated action. Human beings not only act on their environment with tools, they also think and learn with tools. At a primary level these tools are material, "external"—hammers, books, clothing, computers, telecommunications networks. But we humans also fashion and use tools at a secondary or "internal" level—language, concepts, scripts, schemas, and (as we will see) genres. Both kinds of tools are used to act on the environment collectively (Wartofsky, 1979).

- AT is interested in development and change, which AT understands broadly to include historical change, individual development, and moment-to-moment change. All three levels of analysis are necessary to understand people learning (beyond mere rote learning).

- AT grounds analysis in everyday life events, the ways people interact with each other using tools over time, historically.

- AT assumes that "individuals are active agents in their own development but do not act in settings entirely of their own choosing" (Cole, 1996, p. 104). Individual learners learn, of course, but they do so in environments that involve others, environments of people-with-tools that both afford and constrain their actions.

- AT, as Cole says, "rejects cause and effect, stimulus response, explanatory science in favor of a science that emphasizes the emergent nature of mind in activity and that acknowledges a central role for interpretation in its explanatory framework." Accordingly, it "draws upon methodologies from the humanities as well as from the social and biological sciences" (1996, p. 104).

An Activity System

Activity theory, in Y. Engeström's version, expands the basic mediational triangle we saw earlier to consider essentials for making sense of activity. This expanded triangle is a theoretical tool, a kind of heuristic lens, for viewing complex activity (as is Burke's pentad, for example). It doesn't give us neat answers, it gives us useful questions. We'll use this model to think through the Irish history course. It provides us a way to focus in on essential aspects of human social interactions to construct a flexible unit of analysis. Figure 3 depicts Y. Engeström's expanded mediational triangle, an activity system. We'll start on the left of the diagram and move clockwise.
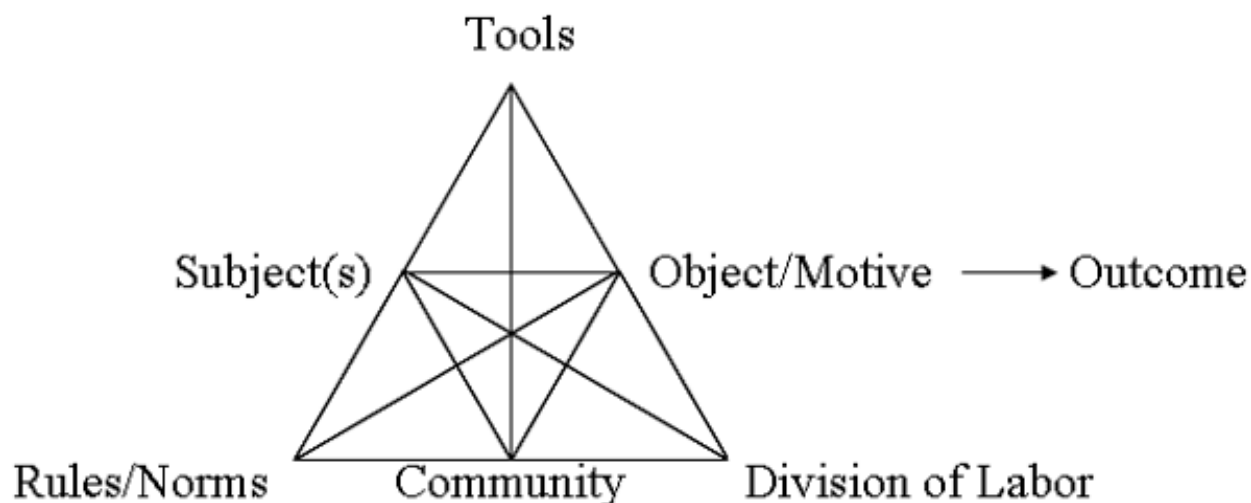
Figure 3. An Activity System

Of course there are the people involved, the students and teacher. These are the *subjects*, with their identities, their subjectivities. And we could use this flexible triangular lens to zoom in and out to one student, to several or all the participants, or to the whole university, depending on the question we're asking. We're asking here why some students felt alienated by the writing in the course and how one student moved beyond that alienation. So our unit of analysis is, to begin, the students and teacher and the tools they use together to mediate their joint activity.

The course has a range of *tools*. There are desks, chalkboard, and so on, but also other material tools (sounds in the air and marks on surfaces) which we will analyze as discursive tools in various *genres*, oral and written: syllabus, lectures, discussions, readings, writing assignments, grade book, grade report forms. It has an *object and motive*, though here we get into difficulties because the teacher and the students sometimes had very different—even contradictory— perceptions of the motive. Officially, the object is Irish History. And the motive? Corey thought of it primarily in general education terms, as developing students' critical thinking and writing. One of the students, Beth, saw the motive as learning interesting facts about Irish history *and* getting a good grade on a general education requirement so she could graduate and get a job as a journalist—a basic motive in her life (she was already working as news director at a small radio station). So we have a potential contradiction in motives, which we will analyze later in much greater detail as it shaped the writing and learning.

There is a *division of labor.* The teacher does certain things and the students do other things. One has more power than the others. There is a *community* in the classroom, though the kind of community differs in different classrooms. There are *rules*, both official rules and that kind of unofficial unwritten rules we call norms. Some of these rules or norms are expectations, conventions for using writing in the university and in the discipline of academic history—genres. Finally, the activity system produces *outcomes*. People are potentially different when they leave, one way or another, individually and perhaps collectively. Learning (a kind of change) went

on—though not always in ways that the teacher, much less the students, had in mind. Let's look a little deeper, using this heuristic lens of activity systems.

People Act in Multiple, Linked Activity Systems

The Irish history course is linked, through its participants and tools, to other activity systems. All of us carry on multiple activities in multiple systems. That's what makes us different, and sometimes produces conflicts, contradictions, and change—even learning. Figure 4 shows *some* of the activity systems that participants mentioned as affecting their behavior in the course.
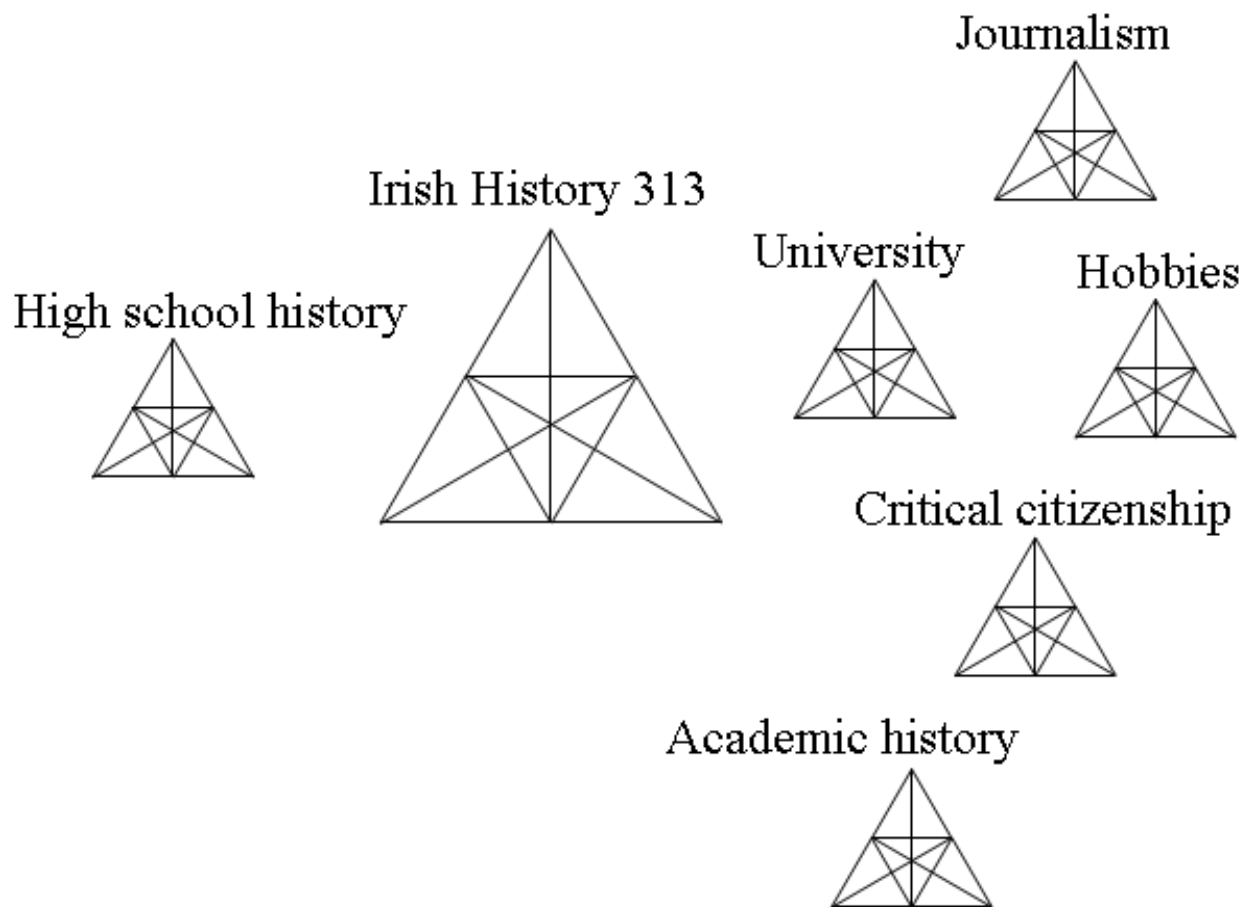

Figure 4. People Act in Multiple, Linked Activity Systems

All of the students had taken high school history, which very much affected their perceptions of and actions in this course, including their writing. Students expected a similar object and motive, similar tools (including genres) and rules (for those genres) in this college general education course. They expected to find interesting facts—and a single truth. Corey wanted them to orient toward another activity system, that of academic history, whose object, motive, tools (including

genres), and rules (for those genres) were different, in subtle but important ways, from high school history, as we will see. All were part of the university activity system, with its characteristic tools (grades, for example) and rules (such as general education requirements) and division of labor.

Some individual students, such as Beth, were hoping the class would involve them in ways that would be useful in other activity systems important to their lives. Because Beth wanted to be a journalist, she saw the course as potentially useful in helping her get historical background and improving her writing skills. Other students sometimes mentioned religion, sports, or hobbies. Corey (and the MWU's official goals for general education courses) mentioned citizenship, in various ways. By looking at other activity systems that participants belong(ed) to, we can broaden our lens to construct a wider unit of analysis. As we will see, these activity systems are often intertextually linked through systems of genres that mediate them.

Each of these activity systems has a history, which is important to an understanding the subjects' interactions with tools of literacy. Yañez (1999) has traced the history of MWU's general education program back several decades. Others (Russell, 1991; Veysey, 1965) have traced the history of general education in the U.S. This historical analysis suggests that the contradiction in general education we noted earlier is deeply embedded in the institution of U.S. higher education.

Dialectical Contradictions

These differences in participants' perceptions of the object and motive, within and among activity systems, mean that people are often at cross-purposes. The object and motive of the activity system are inevitably contested, negotiated. Similarly, the tools, rules, community and division of labor are often perceived differently, and thus also resisted, contested, and/or negotiated—overtly or tacitly, consciously or unconsciously. In Y. Engeström's version of AT, these tensions within and among activity systems are viewed as symptoms of deeper *dialectical contradictions*, "historically accumulating structural tensions within and between activity systems" (Engeström, Y., 2001, p. 137). All human activity is contradictory at a very basic level. Human actions are at once individual and social. In each culture and each activity system specific contradictions arise out of the division of labor. These contradictions are the source of discoordinations, tensions and conflicts. "As Leont'ev shows, in complex activities with fragmented division of labor, the participants themselves have great difficulties in constructing a connection between the goals of their individual actions and the object and motive of their collective activity. This is what gives rise to alienation" (Engeström, Y., 1999, p. 173). But contradictions also present a constant potential for change in people and tools (including writing)—for transforming—re-mediating—activity systems. Thus, there is always potential for learning, both individual and social, for becoming a changed person and changed people, with new identities, new possibilities—often opened up (or closed down) through writing in various genres. These deep dialectical contradictions within and among activity systems profoundly condition (but never finally determine) the what individual teachers and students do (and do not

do)—and what they learn (and do not learn) (Engeström, Y., 1987, Chapter 2) [Note: References are to the searchable online version.]

As we noted above, one fundamental contradiction in U.S. higher education is between disciplinary specialization and 'general' or broad education for civic life (Russell, 1991). Curricular documents and interviews with faculty at MWU revealed ways this contradictions condition attitudes toward writing. "Effective writing" was universally acknowledged as an important goal of general education courses. But there was no agreement on what effective writing is, no operational definition useful for pedagogy. These ambiguous attitudes toward the role of writing in general education can be seen, in part, as a reflection of this fundamental contradiction.

Interviews revealed that some faculty in some moments separated form from content: the content to be taught in a course in some subject, the form to be taught elsewhere (secondary school or first-year composition [general writing skills instruction or rhetoric] courses). Writing in this view is a conduit for content, transparent—and rather uninteresting intellectually. At other moments some faculty thought of "effective writing" as a developing accomplishment bound up with a discipline, in which content and form are inseparable. In this view, writing is an essential tool of learning to become a well-rounded citizen or a competent professional. And helping students develop writing is considered the "responsibility of all." Thus, "effective writing" was sometimes viewed as related to discipline at other times independent of it, sometimes the responsibility of others (who teach "general" skills or education), sometimes the responsibility of those who teach a discipline.

A "historical perspectives" general education course was one of several general education requirements for all students (Irish History was one of many such courses). The goal of these courses was, officially, "to develop an understanding of historical processes and a sharpening of students' analytical skills through training in the evaluation of evidence and in the development of generalizations and interpretations" (Bulletin, College of Liberal Arts, 1998-1999). Was the motive to teach students the methods of professional academic historical research (knowing that they would <u>not</u> become professional academic historians)? Or to reinforce and develop ("sharpen") general analytical skills (<u>not</u> knowing the activity systems in which the students would write)? Or if both, what is the relation between the two? In AT terms, there was a contradiction in the motive, which made it difficult to decide what and how and <u>why</u> students would write in general education courses.

MWU's official policy suggests what organizational communication theory calls "strategic ambiguity" (Lerner, 1980; Eisenberg, 1984; Hartman, 1978). It allowed the MWU to pursue both motives without confronting the consequences. The strategic ambiguity made it possible for faculty and administrators to invoke one and ignore the other of these two official (and admirable) motives when necessary or convenient in working out the division of labor (who would teach what to whom and when). Not having to examine the relation between GE courses and students in terms of the writing (genre) allowed a much more flexible apportioning of human resources for teaching and research. Graduate students, for example, generally taught the

"historical perspectives" courses, freeing tenure-line faculty for teaching majors and doing research.   MWU's Goals for General Education carefully construct this ambiguity: "Effective use of the English language" is a goal and courses should include writing and speaking, but only "where feasible and practical." And the "kind and amount" will "vary widely." The official goals list a wide variety of possible genres, and specify they are to be "evaluated for form as well as content," but there was scant oversight of these policies and, more importantly, there was no process in place for discussing what "effective writing" is or how to develop it (College of Liberal Arts Classroom Manual, 1996, p. 12).

This seems to us an example of what historian of education Gerald Graff (1987) calls the "patterned isolation" of U.S. higher education, particularly in the humanities. Patterned isolation and strategic ambiguity are useful in an organization with multiple and contradictory objects and motives. Writing is acknowledged as important as a tool, but the forms and uses of that tool are ignored. In this sense, writing becomes "transparent," a tool that is used—and officially praised as important—but rarely examined.

And alienation is often the effect of this contradiction, with its strategic ambiguity and patterned isolation—particularly for those who do not benefit from the division of labor this contradiction makes possible. Students and instructors are sometimes caught in this contradiction, which was dramatically manifest in the activity system of the GE Irish history course. We now turn our lens back to the class as our unit of analysis, to see the ways students experienced this contradiction in the motives of general education courses, as they used a central tool of the course, writing. Y. Engeström (1987) argues that individuals often experience these deep dialectical contradictions as what Bateson (1972) and others have called a *psychological double bind*, an inner contradiction arising out of the dialectical contradiction in the activity system. "In double bind situations, the individual, involved in an intense relationship, receives two messages or commands which deny each other" (Chapter 3). The individual is unable to resolve the inner dialog. The result is a feeling of "I'm damned if I do and damned if I don't!" Over time, "important basic relationships are chronically subjected to invalidation through paradoxical interaction." (Dell, 1980, p. 325)

We look now at some double binds that Beth experienced in the class, as revealed in her comments. Her inner contradictions, we argue, grow out of contradictions arising from the historical contradiction in general education. And as we'll see later, these contradictions are manifest in the intertextual genre systems linking the course to other activity systems, such as previous schooling (especially high school history), future professions, and future civic activities.

Contradiction in Motives: Exchange Value v. Use Value (Doing School v. Doing ?)

Y. Engeström (1987, Chapter 3) argues that the fundamental contradiction of educational activity in capitalist societies is that of exchange value versus use value (socialist education has its own contradictions, which require a different analysis). This contradiction, he says, produces alienation, as in many other activity systems in capitalist societies. Are students just 'doing

school,' doing it 'for the grade,' which will be exchanged or cashed out later? Or are they doing something for which they can see some use value in their lives, now or in the future? This is fundamentally a contradiction between the subject (e.g., Beth), and the official object/motive of the course. What am I doing here anyway? Where am I headed with all this Irish history stuff? At times students expressed this alienation very eloquently. Another student, Mia, put it this way when she discussed trying to write initially: "I feel like I'm just drowning in this class. I'm just in this perpetual dark. I'm like, there's no light switch, no exit sign. I can't! I'm lost! I know there's a floor, but I can't find the wall, and I know it is a big room."

Beth often experienced a double bind in terms of the relevance of the specialist writing in the Irish History course to her motive of becoming a journalist. As the blue line in Figure 5 suggests, one motive for her being in the course was to get a good grade so she could get a degree so she could get on with her life as a journalist. In this sense she was operating in the university activity system only, obediently hoping to get some exchange value. But as the red line in Figure 5 suggests, there was a contradictory motive she perceived, one with use value. Was there something she might learn about writing history in this course that would be useful to her—and to those she hoped to serve one day in her career?
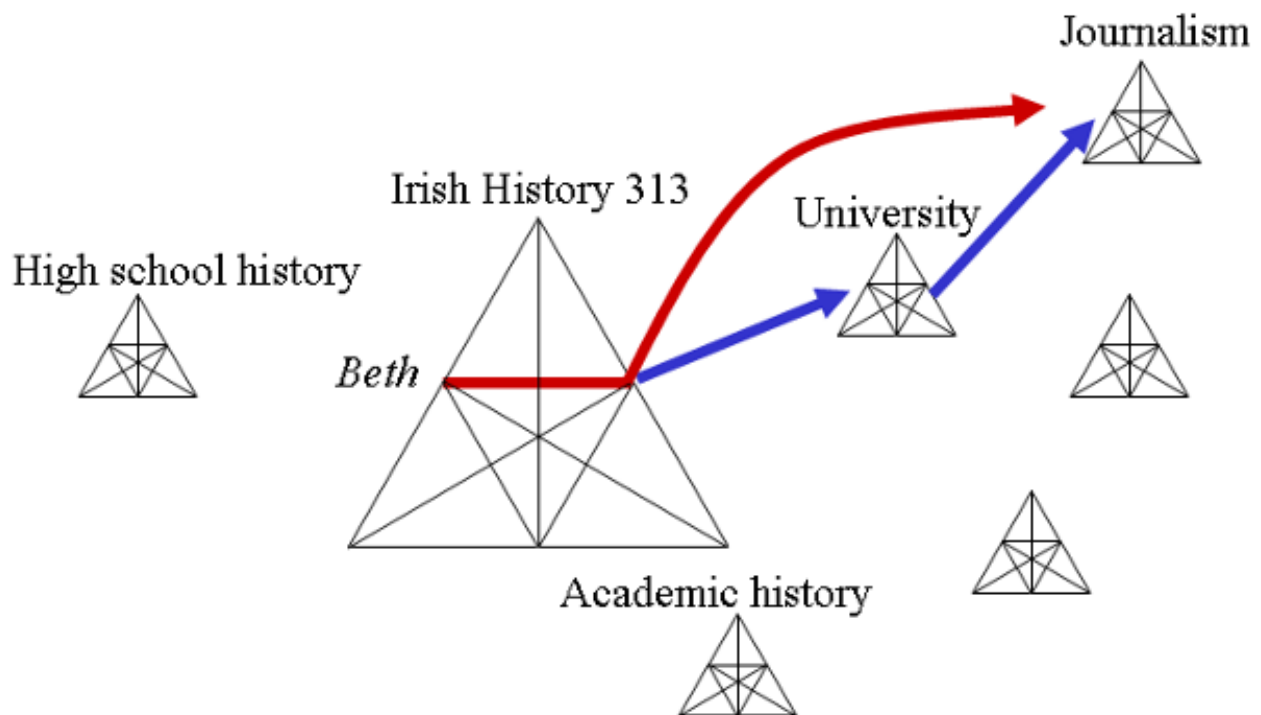

Figure 5. Contradiction: Exchange value versus use value for Beth

"You know," she remarked of Corey in an interview, "we have very different writing styles. The thing is that I'm a journalism major and he's a historian." Initially, she saw his writing expectations as restricting her professional style (which she was committed to in forming her

identity as a journalist)—and then grading her down for it. She experienced a frustrating double bind when Corey wrote a comment suggesting that she make a *historical* argument in a book review she was writing. He "made me mad about that. Because he wrote all these comments on my [paper] about how it didn't have, like what was the argument of the book? . . . I was frustrated that he didn't tell [me] that the first time around. Why didn't he point that out earlier? I could have gotten an A instead of a B on it." (Actually Corey repeatedly discussed the importance of making a historical argument but, as we shall see, Beth had initially interpreted that discussion in terms of her current understanding of history as fact-telling.) Her conflict over writing 'style' was symptomatic of a deeper contradiction in motives: pleasing the teacher for a grade (to be exchanged for a diploma and grade point average) in the activity systems of schooling—versus resisting the teacher in order to make meaning useful to her life and future as a journalist. What Beth felt at this stage in the course was a painful psychological double bind: damned if she wrote her way and damned if she'd write his way. Writing in the ways (genres) the course seemed to her to demand would get her a high grade. But to her those ways of writing seemed to require she violate the rules of writing in her field—and thus invalidate the learning she had come to MWU to accomplish.

Contradiction in Tools and Object/Motive: Recall v. Expanding Involvement

Another very common—and related—contradiction has to do with the tools and object/motive. Are these tools going to get me where I want to go or where somebody else wants me to go?

As Figure 6 suggests, if students see themselves acting in terms of the university (requirements, grades, etc.), then the literacy tools in various genres (such as readings, lectures, writing assignments, etc.) are interpreted in that light (exchange value: for the grade). They are tools for recalling information and algorithmic procedures that will result in a grade (and perhaps a diploma). But if students see the tools as potentially useful in activity systems beyond the university, then the literacy tools of the course have use value for expanding involvement with other activities, other people and their ways of being and doing. New transformations of the activity (and identities) are possible.

Many students in Irish History saw the course (and other general education courses) primarily as a hurdle on route to a diploma. Students often opted to be "a grade maker, not a sense maker," in Y. Engeström's phrase (1987, Chapter 3). Mia, for example, could not see a rational motive in Corey's insistence that the tools of a professional historian were relevant to her: "Well, he wanted us to become good history writers. Why he wanted us to become good history writers didn't really make much sense because we're not history majors." Beth struggled with this too. She complained in interviews that the writing assignments were a hurdle to the grade she wanted but not relevant to her future as a journalist. But as we'll see, she moved past this contradiction, at least in part, as her struggle with the double bind led her to work with Corey on the writing. Corey and Beth were able to negotiate a provisional, mutual understanding through the tools of writing Corey taught. Corey was able to see her professional goals in her style. And she came to

understand something of the potential for writing in those ways to teach her something useful for her career. She transformed her understanding of the writing tools of the course from facilitating recall for a grade to a different and less alienated motive, expanding involvement with history to critically engage its relation to journalism.
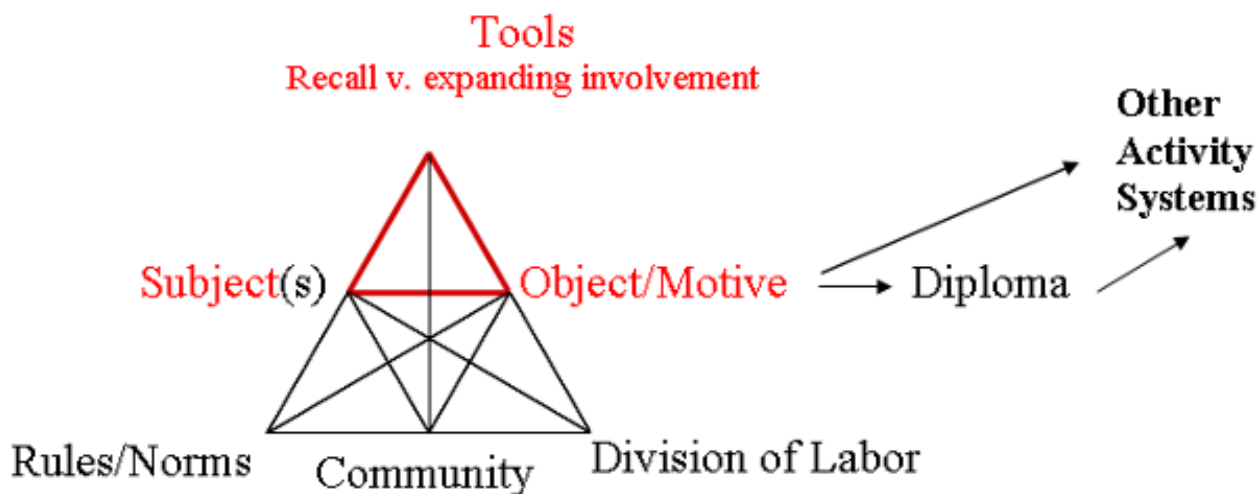

Figure 6. Contradiction: Tools for recall versus expanding involvement

Contradiction Among Rules, Tools, and Object/Motive: Just What Are We DOING on This Assignment Anyway?

Part of Beth's alienation from the specialist writing had to do with another contradiction—among rules, tools, and object/motive. Here's what she wrote in her book review assignment, critiquing the author's lack of objectivity:

> **Beth:** (critiquing a book in a required review): "We must expect the author not to be biased or slanted when reporting…"

And here's Corey's marginal comment on her book review:

> **Corey:** "Actually, I would suggest that objectivity is a myth. We must expect that the author is biased."

Beth later recalled in an interview: "I felt really frustrated. Kind of mad." She expressed an inability to do things right, no matter how hard she tried (and she tried very hard, despite a very full class schedule and work commitments at in the radio news department). What lies behind this psychological double bind?

As Figure 7 suggests, this double bind seems to grow out of a contradiction among the rules, tools and object/motive. Beth was writing a book review, something she'd written in high school and in journalism. It was a tool of historical discourse she thought she understood and could use.

But the rules of the game, the genre expectations, were different in this new activity system—
without her knowing it. There was a fundamental contradiction between the genre rules or
norms she'd come to expect in writing high school history or writing journalism (the activity
systems she had operated in when writing about past events) and the rules/norms of writing in
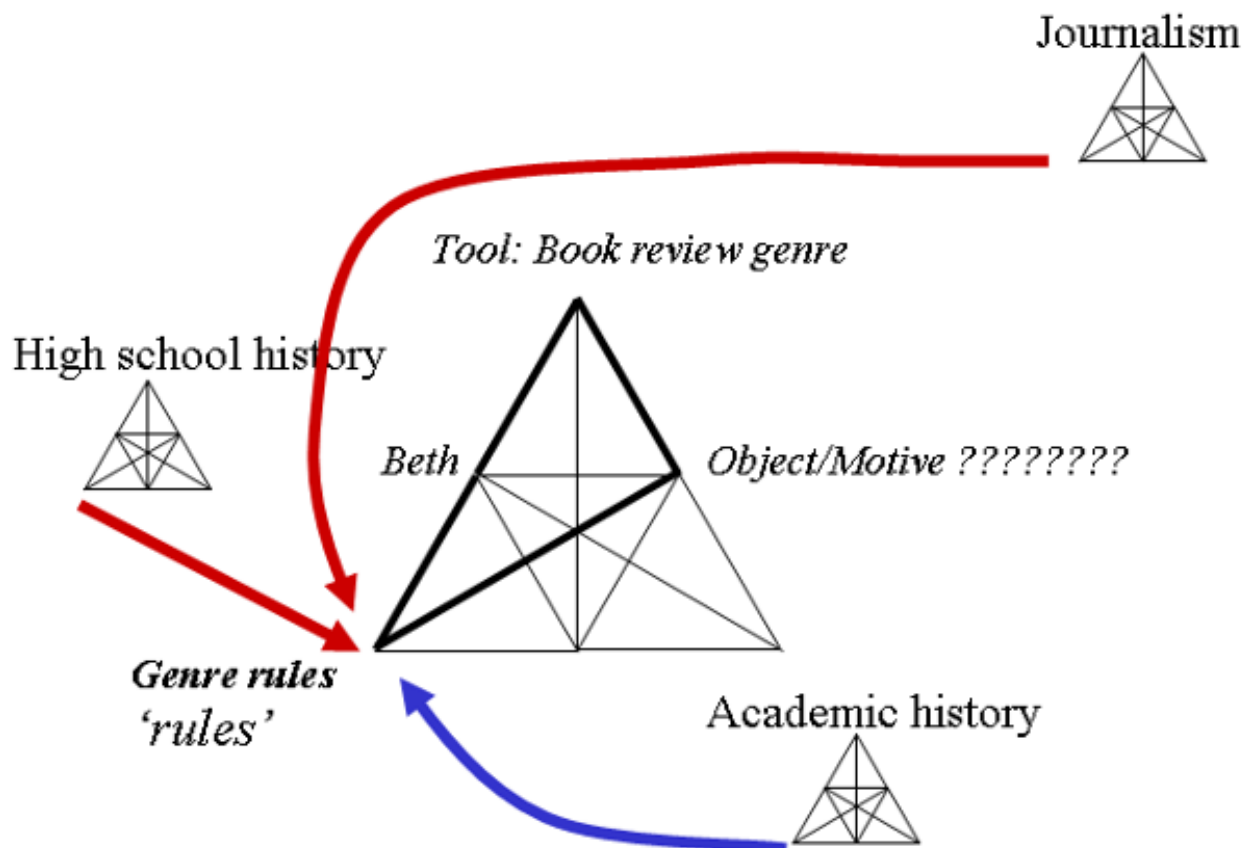this course (on genres as rules, see Engeström, R. 1995).

Figure 7. Contradiction in rules and tools: Conformity versus rebellion

Irish History seemed to be a history course, and she'd written book reviews before in history.
But this similarity proved to be maddeningly deceptive. In AT terms, she was in a new activity
system for her, academic history. The double bind she felt grew out of this contradiction. She
didn't see, initially, that the object of the activity was very different than that of high school
history or journalism, as she understood them. And therefore the genre rules were different.
Corey was trying to lead Beth and the other students to an "understanding of historical
processes" and "a sharpening of students' analytical skills through training in the evaluation of
evidence and in the development of generalizations and interpretations," as the College of
Liberal Arts Bulletin puts it. The "historical processes" are processes of interpretation, and the
genre rules (and the epistemology and methods of academic history those genres mediate)
require that one not treat history as if one could move past interpretation to final and absolute

historical truths. And "sharpening analytical skills" means writing about the past in the critical ways that professional historians do. However, to sharpen in one activity system meant (in Beth's perception) to dull her critical edge in journalism—give up her quest for objectivity. And because the system of general education does not provide a forum, a ground, a vocabulary for articulating these differences genre rules—which are also differences in the methodological tools and the objects and motives of disciplines—she and Corey had to struggle toward some understanding between the contradictory poles of expert and lay (complicated by the fact that the laity include specialists or would-be specialists in many other fields).

Contradictions & Genre

The issue of genres, as tools and rules, leads us to see the specialist/lay divide not in terms of a neat division or unassailable contradiction, but in terms of the circulation of discourse, how genres intertextually link activity systems. Activity systems are not hermetically sealed, neatly divided between specialist and generalist, but in complex textual (genre) systems, through which the specialist/generalist contradiction is created and maintained. In the case of Beth and Corey, we're talking now about a genre, the history book review. But from the perspective of AT and genre systems theory, it is a single genre in name only. As Beth found out—with great difficulty and much frustration—a history book review is different in crucial ways when it is written in different "contexts" or, in AT terms, activity systems. The object and motive of the different activity systems have historically led people in each activity system to expect different things of the genre—thus there are different genre rules or norms.

As Figure 8 illustrates, the students came into the course perceiving history primarily as *facts,* the most common perception held outside of professional historians (Welton, 1990). In Beth's view, one norm or rule for a book review in a newspaper book section is *Be factual*, because the object/motive is to inform readers of the interest and accuracy of the book, to help them make a decision about whether to read it. In a typical high school history class, one genre rule is also to *Be factual*, because the object/motive is to learn the facts or, more generously, to become accurately informed citizens. But in a book review in an academic journal of history, another rule is to *Critically interpret,* because the motive is to persuade other experts that one's interpretation is the most believable.

But what about activity system of the General Education Irish History course? What are the genre rules? And at a deeper level, what is the motive of this course that gives rise to the genre rules? Is it doing professional history? If so, the motives of the instructor and Beth's motives are deeply contradictory. Is it learning something about writing that will help her as a journalist? She expressed that hope. But if so, what's the point of writing 'opinions,' as she called them? Beth was caught in a contradiction and felt a painful double bind. Will she write in his way or her way?
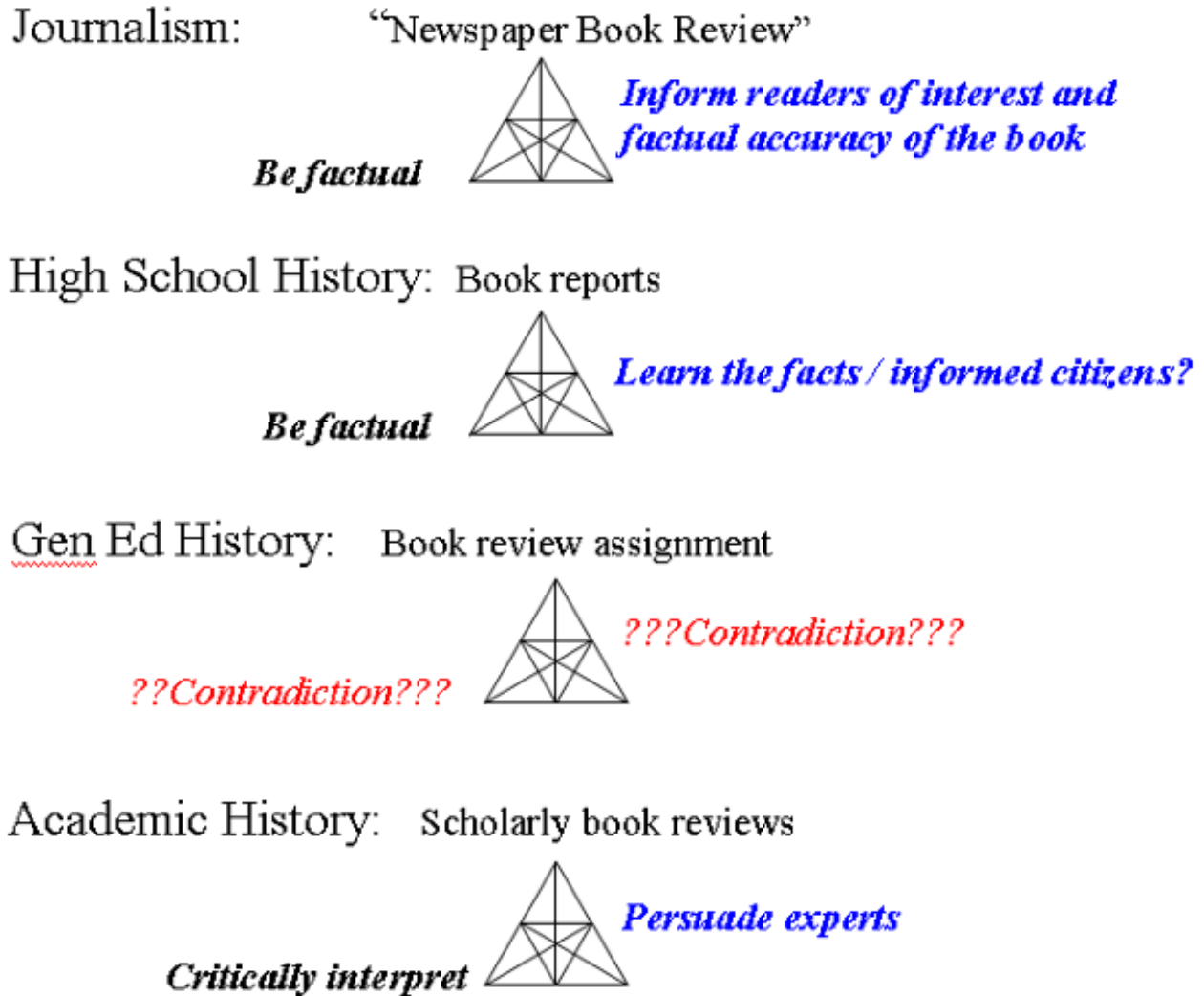
Journalism: "Newspaper Book Review"

Inform readers of interest and factual accuracy of the book

Be factual

High School History: Book reports

Learn the facts / informed citizens?

Be factual

Gen Ed History: Book review assignment

???Contradiction???

??Contradiction???

Academic History: Scholarly book reviews

Persuade experts

Critically interpret

Figure 8. Contradictions in the course's system of genres

Students Personalize What Is Professionalized

One common way the three students in this study responded to double binds arising from this contradiction in general education was to personalize what is, from the teacher's point of view, a professional (and pedagogical) motive. In interviews, Beth and the two other students perceived that it was the instructor's individual, personal preferences for writing that lay behind his comments. As one student, Michael, put it, "I don't get it. These are his writing tasks and he wants me to write in his way."

But as we suggest in Figure 9, from Corey's point of view these were not personal preferences but the collective ways of doing things in his profession, the genres and rules of the activity system of academic history. He was re-presenting his profession. These ways with words, these genres and genre rules, had become central to his professional ethos and identity. He saw their value to the profession in making the study of history a socially useful critical enterprise, where

interpretations of history are continually negotiated and, perhaps, refined. He also saw their value in general education and their potential use value in students' lives beyond the course, in terms of critical citizenship. He communicated that often in his classroom presentation, in his assignments sheets, and in his comments. Yet despite Corey's efforts, the genres of academic history often seemed to these students to be dichotomous, contradictory, unrelated to the genres in which the students had previously experienced history textually (in textbooks, popular history, and so on). Because of the historical contradiction in general education, there was no textual space (in Geisler's term) for representations of history outside of expert versus popular.
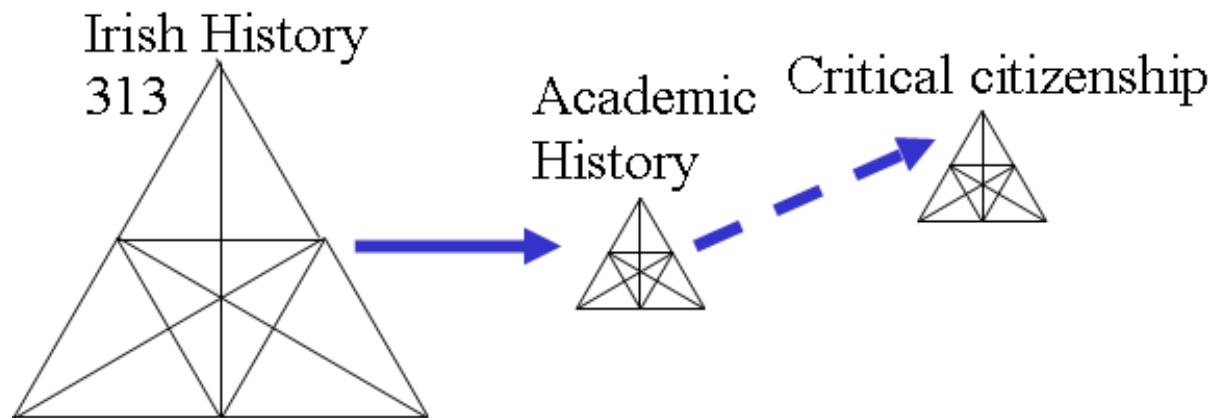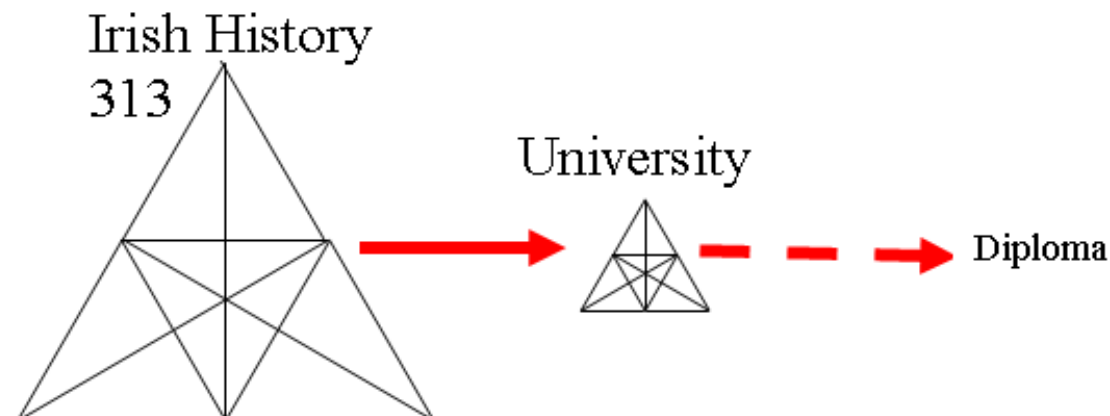
Figure 9. Students personalize what is professional

Mia responded to Corey's attempts to get students to write critically about history by perceiving his comments in the activity system of schooling, teacher versus student. "He is too picky. I think he values more how I say it than what I say. Now, I can see that that [first] sentence can be improved, but you know, he's always looking for those mistakes to dock my grade. There is nothing I can do about it." She realized she was not perceiving historical issues in the way he did. "I don't know what I should be questioning [in the papers] and what I shouldn't be questioning. My questions are based out of confusion." She had no map of activity system of academic history, no sense of its object and motive, that would allow her to make meaning of the readings and discussions, to engage in expansive learning rather than making a grade by doing 'picky' things. His comments were perceived as being 'about' the facts or 'about' the writing, not about the ways critical historical analysis might work for her, textually, in the circulation of discourse in the field of academic history—and beyond.

Some students, like Mia, took a long time to see that Corey was trying to lead them to expand into his activity system *in order* to see the potential for critical citizenship that his disciplinary activity offered. Students are alienated in part because they don't see the genres assigned as part of a human activity that makes sense that has uses beyond pleasing the teacher to get a grade. Instead they often personalize what is professional because they do see beyond the individual person to the discipline he re-presents. Typically, they do not see the history of the activity system, the many people who have talked in these ways (genres) for these reasons (motive) in the past. Nor do they often look into the future, to see how the insights of this discipline—and its ways of writing—might help them and their culture to think and act in new ways, ways that might improve their lives and those of others. This takes time spent in the field, something that general education students do not typically have.

So how can teachers and students expand to see and experience these relations mediated by genres? To make sense of specialized literacy? Beth's work with Corey suggests ways students can get past the double binds and alienation that specialized discourse in U.S. higher education creates.

Genre Systems of History

We've been using the term genre here in a way that some may not be used to. So we need to explain further. In North American genre theory (Freedman and Medway, 1994a, 1994b), genres are understood not merely as formal textual features, the *what* and *how* to write. Genres are also seen as expected ways of using words to get things done in certain recurring situations—the activity system, in AT terms. This brings into genre analysis questions of social motive and identity. The *why* and *who* of genre.

And thus genres, as Bazerman (1994) has argued, form systems that follow and mediate the work pathways within and among activity systems. They realize social motives, focusing attention and coordinating action, and they shape (and are shaped by) the identities of participants. In a hospital, for example, medical records in a huge range of genres are all intertextually linked, now on computer: medical histories, test results, prescriptions, insurance forms, and on and on

(Bawarshi, 2000). To take another example, in a university, grades are entered on grade forms and then transcripts and eventually produce diplomas, one hopes.

Genres and their systems help us make sense of what's happening. They allow us to do certain kinds of work that are otherwise impossible (imagine a hospital without medical records). But of course they can also be constraining (they are expectations, rules, norms, after all). Teachers and students may potentially follow these genre pathways to new ways of getting involved with others, new ways of living, new identities, as students come to read and write similarly to some and differently than others, expanding their involvement with some activity systems and perhaps restricting their involvement with others.

However, the expectations created by the genre may not allow one to do the kind of work—or learning—that one wants or needs to (as happened to Beth). So genres are also sites of contestation. In genres (tools for coordinating actions) deep dialectical contradictions are instantiated and negotiated, and the political and personal struggles those contradictions give rise to. In this contestation, learning can also occur, as participants struggle with the constraints, and see new possibilities for transforming (re-mediating) their activities, themselves—and their genres, for genres are always only stabilized-for-now, as Catherine Schryer (1994) puts it.

These stabilized-for-now genre systems, evolved over months, years, decades, even centuries, can explain much about the ways students and teachers perceive and do their work. The genre system of history, for example, reveals Beth's predicament. Figure 10 analyzes some aspects of the system of genres in history relevant to the course. Professional historians (at the bottom of the diagram) critically examine and interpret (and reinterpret) primary documents according to the methods (rules, norms) of history. They argue and debate to persuade other experts. And when enough experts (or the enough powerful experts) arrive at consensus, that consensus is put into textbooks for high school students and generally perceived as 'fact.' And, perhaps, that consensus is eventually put into popular history books, of the kind that journalists review and the rest of us Big Picture People sometimes read—to find the 'facts' of history.

But historical facts and genres are only stabilized for now. They can be reopened to debate, as new evidence or new theory or political pressures move experts to take another look. And in this sense, the genre system works in the other way too, if we take a long enough cultural-historical view. Academic historians often read old newspapers and other kinds of popular documents to write history. And political pressure from the 'public' can force historians to defend or even rethink their views, as in the famous Enola Gay exhibit at the Smithsonian (Kohn, 1995).

Thus historical knowledge circulates in a system of genres, though a very loose and unofficial system (at least as compared to the system of medical records, for example, which is highly regulated, often by law).

So in the light of the genre system of history, Beth's position in the General Education Irish History course is ripe for learning from the contradictions we noted, placed between the activity system where historical knowledge is produced (as contested interpretation) and activity systems where it is primarily consumed, in K-13 schooling, journalism, politics, and so on. She was in a

good position to get a critical view of 'facts,' to see how and academic history works the way it does, to learn how facts are made (and sometimes unmade) through interpretation. And this has use value, potentially, for many people besides professional historians. It is useful for journalists because they also interpret information, and shape what is considered to be fact. Journalists are integral to circulating discourse in various genre systems (which is why some journalists even specialize: in science or medicine or politics, for example). And for every citizen, too, a critical perspective on history may be useful, when they are reading a history book—or a newspaper.
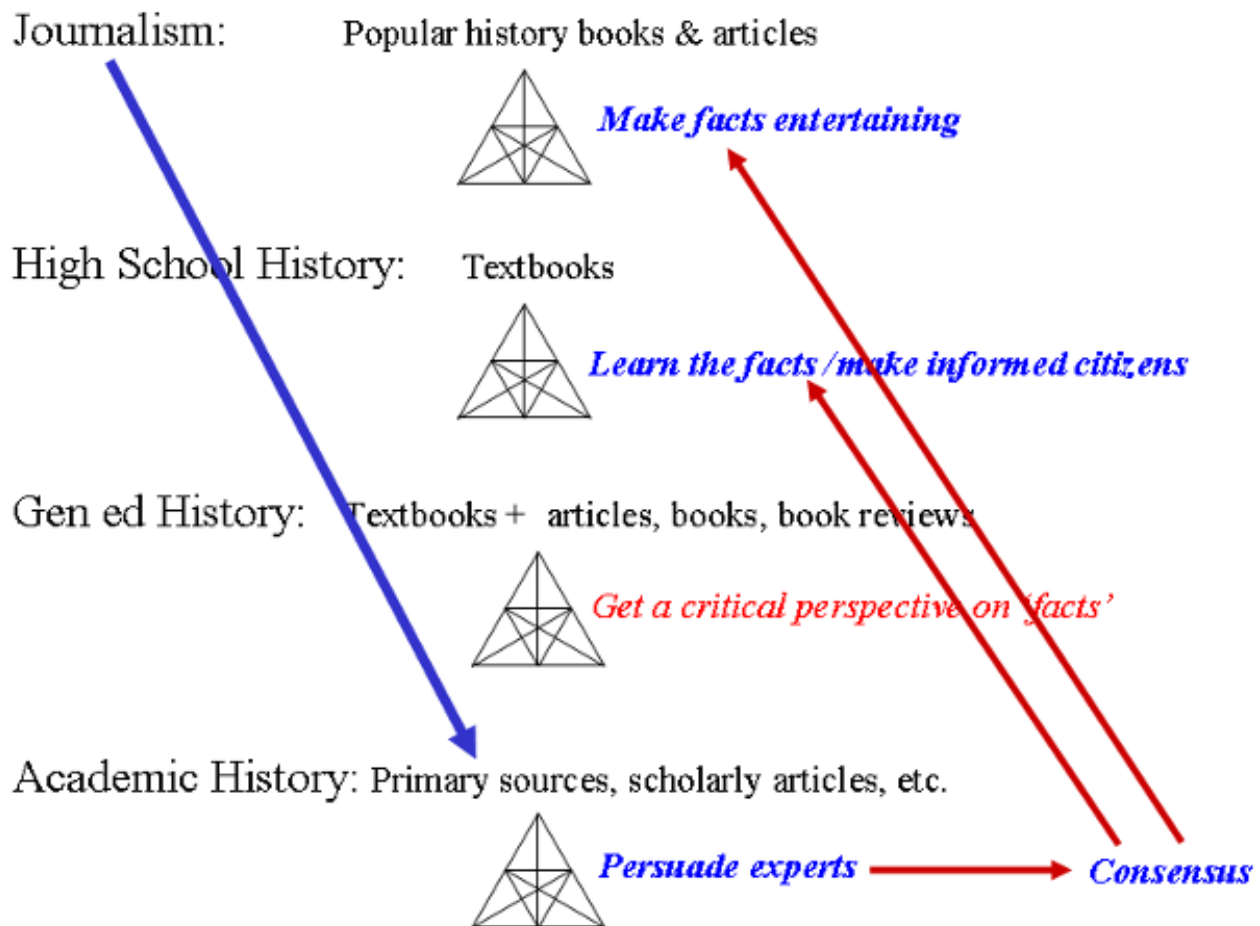
Journalism: Popular history books & articles

Make facts entertaining

High School History: Textbooks

Learn the facts / make informed citizens

Gen ed History: Textbooks + articles, books, book reviews

Get a critical perspective on 'facts'

Academic History: Primary sources, scholarly articles, etc.

Persuade experts ⟶ *Consensus*

Figure 10. The genre system of history

Using Contradictions for Learning by Expanding

Beth struggled mightily with the contradictions in the course, and she seemed to use those contradictions to learn by expanding her views of history and writing. As we noted, Y. Engeström argues that double binds can sometimes lead people to transform their activity, to

expand their ways of knowing and acting with others—learning not by merely reacting but by expanding. And that seems to have begun to happen with Beth.

At the beginning of the semester, when the students took a survey of their attitudes toward writing, Beth, like most of the other students, checked the response: "Good writing is the same no matter the discipline." When Corey introduced and explained the assignments, none of the students asked any questions or expressed any concerns. Indeed, Beth was frustrated with all the talk of writing, because to her, "This [was] just Rhetoric [101, the first year writing course] all over again." They did not recognize this was a new activity system, mediated by different discursive tools with different motives and rules. Indeed, the terms Corey used to explain the 'writing' were the 'same' (thesis, argument, organization, etc.). Unfortunately, we do not have a robust vocabulary for talking about the differences in writing in different activity systems, which can make the differences salient—in part because of the patterned isolation and strategic ambiguity the contradiction in general education gives rise to.

But after experiencing great frustration over not being able to satisfy him (and being particularly grade-motivated), Beth came in to talk. "What would it take to get an A?" she asked. Corey's answer did not satisfy her. In her opinion, he "was kind of vague, like listed off the same things that he told me before, like 'you need to have a thesis statement,' blah, blah, blah, blah. You know that was kind of vague." She concluded, "I didn't get a lot out of those conversations in his office."

Yet when Corey realized that Beth was a journalism major, he was at least in a position to dramatize the differences. For example, Corey commented on one paper, "This intro seems journalist-like. It is broken up into several paragraphs perhaps unnecessarily. History intros are typically longer and flow towards the thesis w/out paragraph breaks." After the paper had been returned, she said in an interview, "I use a lot of long introductions, because that's the way I like to write. You know we have very different writing styles. The thing is that I'm a journalism major and he's a historian."

The differences in the activities (and thus genres) had become an issue that could be negotiated. He could understand her writing expectations because he was familiar (as most all of us are) with journalistic conventions (genre rules). And she could see him as fundamentally different—not merely that he was a teacher but that he was an academic historian, going about a very different activity, yet one that might have value for her beyond the grade.

For her final paper, Beth chose to write a critique of a *New York Times* account of a meeting between Gerry Adams and Tony Blair. Her critique shows that she had come to see the value of the academic historian's critical perspective for her chosen field, Journalism. She had used the double binds she experienced to transform her understanding of both activity systems through the mediation of a genre that combined both journalism and academic history. She begins her critique with a typical "Five W's" journalistic reporting of the meeting. But she quickly moves to "how differently this story might have been reported and relayed in Ireland, Great Britain, and beyond." This concern for how the news was handled outside the United States suggests that

Beth was well aware of the newspaper's American "bias," as she put it (still using the epistemological framework of her understanding of journalism).

It seemed that Beth had begun to question her earlier, dearly held belief in the objectivity of the news. In this respect, she pointed out that "even from various media in America [United States] we see unique perspectives to this story." In the closing paragraph of her introduction, Beth highlighted the limited knowledge of some journalists about the history of Ireland. In contrast, she stated that her "historical background knowledge [of Ireland] will form the basis [to analyze] this paper['s perspective on the event]." This comment suggests Beth had begun to view the news from the epistemological perspective of academic history rather than journalism.

As the paper continues, Beth begins to use the analytical language of academic history, and for similar uses (though not entirely). Acknowledging an audience that will be critical of her claims, she qualifies her statements, usually with "seemed": "seemed to almost play it [the handshake] down" and "this seems to suggest an understanding by Blair. . ." She uses (almost correctly) the terminology of academic history: "Some journalists do not know Ireland's history, therefore, they are very inclined to be [synchronically] biased," as opposed to the "diachronically biases" of historians. Beth is still looking to root out "bias" (a value of the activity system of Journalism, in her view), but she sees bias in more complex terms—and both in journalism and academic history. This use of analytic terms and metadiscourse suggests she is aware that arguments are not to be regarded as unalterable truths, but as dialectic interpretations. She is between activity systems, between discourses, but trying to use this expanded perspective in ways that will be useful to her.

Similarly, her analysis contrasts depictions of Blair and Adams in the account (adjectives, number of mentions, etc.) to make the point. And she accounts for the differences with a cultural explanation ("We are more familiar with British's government, their leaders, and their culture from our own history."), which is developed in terms of the contrast with Irish Catholic versions of the history. In her conclusion, she maintains that the article did not fully depict "the importance and the possibilities for this meeting, simply because [the author] does not utilize a wider historical perspective." For Beth, the use value for journalists of the "wider historical perspective" of critical—academic—history was apparent. But this expansive learning was purchased at the price of struggle with the contradictions of general education.

When the semester was over Beth admitted that she had "improved a lot as a writer, [and] learned a lot from him." In balance, for Beth "this class was very beneficial. I learned a lot about Irish history and about historical writing. Specifically, I learned about how historical and journalistic writing are different." When asked in the final interview if she was a better historical writer, she replied,

> I don't know. But I can tell you that I'm more aware of historical writing these days. I'll be more careful about analyzing arguments. Like if I'm in a position where I have to agree or disagree with an author, I'll consider the evidence used by the author to support her argument. As a result of this

> class, I think that I'm also a more critical historical reader, too. I don't know.
> Does that answer your question?

Her writing and comments suggest she had begun to perceive use value in the experience of writing the genres of academic history. (And she got her A.) In a sense, she had realized the general education goals Corey had for the course ("promote learning of modern Irish history and analytical thinking abilities") and the hopes she had for a course (getting an A and improving her writing skills). Yet this happened in a way that surprised her, that made both history and writing different for her, as she confronted the contradictions of general education.

Making the Contradictions Productive of Expansive Learning

In general education history courses, sensitive, insightful teaching to deal with issues of motivation and the expert/lay split, such as Corey displayed, and expansive learning, such as Beth displayed, are not uncommon. But we suspect it happened after a struggle with the contradictions of general education—and with the wider contradictions that the division of expert/lay labor in the wider culture creates and maintains. For the contradiction in general education is part of the wider contradiction between the knowledge and activity of experts and the knowledge and activity of the rest of us Big Picture People, in our various systems of activity, when we encounter academic history at various points in its genre systems. One cannot eliminate the contradictions that specialization creates by changing the genres by fiat (that would mean changing the activity systems they mediate). But this synthesis of AT and genre theory may help us think through work in new ways, and perhaps even make the contradiction productive of expansive learning through re-mediating activity with new tools, including new genres.

Let's return to our original question: How can we understand why some students initially felt alienated by the writing? We have argued that the fundamental causes do not lie in the actions of the teacher or the student. The teacher was skilled and dedicated; the students were competent and willing. Rather the causes lie in the constraints under which they carried on their activity, the deep dialectical contradiction in U.S. general education between specialist and non-specialist activity and discourse, as it is manifest in capitalist schooling.

The students' alienation occurred in terms of the writing, because they had to use this tool in these genres (with these genre rules) to pursue their motives (grades and useful knowledge/skill). Yet the motives seemed contradictory. The institution (department, general education program, university) did not have to encounter the contradiction in written texts that mattered (the official documents were strategically ambiguous and mediated the patterned isolation of their activity, which in turn afforded greater flexibility in the division of labor for the faculty and administrators). Our analysis of the genres in these various intertextually linked genre systems suggests that the alienation students experienced can be traced to the ways the activity of history is mediated in a complex circulation of texts in genres. That is, that the contradiction in motives

(and the alienation it gives rise to) is embodied in the ways people read and write texts of various kinds.

We have also suggested that the contradiction can, under the right conditions, become productive of expansive learning. Beth and Corey were able to use their differences in approaching texts ("styles," in Beth's word) to expose deeper differences in motives. Beth found textual pathways to connect two specialized activities, academic history and journalism. Through the writing, she was able to transform the activity of the class from "grade-making" to "sense-making," and find use value where she saw only exchange value.

However, Beth was a highly motivated student who said from the outset, "I really like writing and I like doing research." She was working in a professional field already. And she was highly grade-motivated. Other students were not so research-competent, grade-driven, or career-motivated that they were willing to endure the double binds and alienation of the general education contradiction long enough to transform the activity from doing school to doing some new activity, one with use value. And Beth also had the advantage of finding, through Corey's guidance, an individual connection between her future and academic history, through which she could expand intellectually and professionally.

How then might an activity and genre analysis offer tools for exploring ways of making the general education contradiction afford, rather than constrain, expansive learning for a wider range of students? Further studies might explore ways of making the contradiction—and the genre system of a field—explicit, a specific and conscious part of the teaching and learning. Representations of the genre system (looking at texts in various genres and discussing their relation) might help teachers and students locate their motives in terms of the motives of the discipline, as Beth did.

Viewing teaching learning through the lens of activity systems and the genre systems that mediate them may give teachers and students a sense of what goes into the making of, for example, historical argument, the *why* (motivation through potential use value) as well as the *what* and *how* of writing academic history. Similar research among advocates of critical pedagogy in the discipline of history suggests various strategies: for example, starting students with primary sources (because that's where academic historians often start), and then comparing differing accounts, popular and academic, to understand how interpretation works within and beyond academic history (Greene, 1994; Shay & Moore, 2002; Leinhardt & Stainton, 1994; Leinhardt & Young, 1996; Newell & Winograd, 1996; Perfetti & Britt, 1995).

Ultimately, however, the means to make the contradiction more widely productive of expansive learning lie beyond changes in individual classrooms. They lie in the activity systems where the general education contradiction was constructed: departments, universities, professions. We agree with Geisler that "we need to use the curriculum to find a way to interact with those who are different from us and intend to stay that way . . . to acknowledge the difference between expert and amateur perspectives and give as much attention to educating the one as the other" (p.

225). And we agree that professions should "reconnect expertise to the arena of civic action" and specialists should "find our general readers and talk to them" more (p. 253).

But a genre systems perspective would suggest that there are already people in each discipline who do just that (textbook writers, writers of popularizations, teachers of general education courses, etc.)—though this work is of lower status. The division of labor in professions is such that few professionals need routinely carry on a dialog with other activity systems. Yet professionals who interact with non-specialists as part of their work—not least teachers of general education courses—might more productively carry on that work if they analyzed—and, when useful, taught others about—the system of genres that mediates their profession. With such a recognition, it might be possible to understand the contradictions that the division of labor creates and to re-mediate their work (and recreate their genres) to make those contradictions afford rather than constrain possibilities. Activity and genre theory offer a vocabulary for discussing the contradiction in terms of writing, for having a dialog among professionals in a field (such as those teaching general education courses in a department) as well as among those in other professions and publics.

Conclusion: The Challenge of Working Through Writing in Our Fields

Students and teachers might profit from thinking about the 'big picture,' how their courses (and the disciplines and professions they re-present) work in terms of their own discursive systems—and in relation to those of other systems of activity. Teachers might be able, as Corey did with Beth, to help students see genre pathways for expanding into a discipline or, using a discipline's critical tools, expanding into other systems of activity, civic, personal, or professional.

For general composition courses, AT and genre systems theory are particularly significant (Russell, 1997) because students (like those in this study) will participate in systems of activity and read/write genres that are very different than those of their general composition courses. Seeing writing as 'Big Picture People' means teaching students to recognize and in some sense analyze those new systems of activity and genre. They must not only learn new ways of writing but also learn when to ignore what they have learned about writing elsewhere—even when the terms used to discuss writing seem the 'same'. To do that in a critical way, they must learn (or at least sense) not just 'what' or 'how' to write in a new discipline, but also the 'why' or motive of writing. They need ways of understanding the differences, especially differences in motives for writing in different activity systems, intellectual and emotional (*mot*ive and e*mot*ion are both ways of talking about what moves us to activity).

A long tradition of WAC research, beginning with Lucille McCarthy's (1987) appropriately titled article, "Strangers in Strange Lands," suggests that students often react to the unspoken differences in writing across disciplines by feeling alienation and even cynicism. What they learned about writing often seems to do them little good—or even be counter-productive—as they move from course to course. They must continually 'reinvent the university', in David

Bartholomae's (1997) phrase, often working in isolation. They (and faculty) have few theoretical tools (lenses) for getting a critical perspective on what they feel and on the meaning of their work in 'writing'. Critical consciousness of race, class, and gender differences is crucial, and has received much attention in composition. But disciplinary and professional differences are important too (and interact powerfully with the former).

That is why seeing writing in terms of activity systems and genre systems may be helpful in developing students' (and our own) critical consciousness. These theoretical lenses remind us that writing is never writing period. It is always writing as part of some system of human activity, as infinitely varied as modern life. And as Bakhtin (1986) says, every text is in some genre. We've tried to show that these genres can be seen as working together in systems, intertextual pathways that mediate and shape activity. From this perspective, writing cannot be learned as a single generalizable skill, once and for all, like learning to ride a bicycle. It is a developing accomplishment, like learning a musical instrument (in some genre/s of music, but never all genres).

Because writing is so varied, it is hard to study (and teach). It tends to disappear into the activity it mediates. It is messy to analyze, because contexts are networks, not containers. People act in multiple, interacting systems of activity where writing that seems the 'same' as what one has read or written before is in practice very different—and not only in the formal features, the 'how' of writing. Lying behind the *how* are the *who*, *where*, *when*, *what* and—most importantly—the *why* of writing, the motives of people engaged in some system of activity. Furthermore, because of these differences in activity, the writing that mediates human activities is as full of contradictions as the activities themselves, always only stabilized-for-now, yet useless without that more or less temporary stability that genres bring to our human interactions mediated with writing.

We've tried also to show that activity theory and genre theory can help us ask useful questions about what's involved in writing—and how to involve students in our fields through writing. We've suggested some ways that these theories of human activity and genre systems can be useful for thinking through and working through writing in our fields. And thinking through the systems of activity and the genre pathways of education, may suggest to us and to our students new pathways for expanding involvement with others. Learning, in a word.

References

Bakhtin, M. M. (1986). *Speech genres and other late essays.* Austin: University of Texas Press.

Bartholomae, D. (1997). Inventing the university. In J. V. Villanueva (Ed.), *Cross-talk in comp theory* (pp. 589-619). Urbana, IL: National Council of Teachers of English.

Bateson, G. (1972). *Steps to an ecology of mind.* New York: Ballantine Books.

Bawarshi, A. (2000). The genre function. *College English 62*(4), 335-60.

Bazerman, Charles. (1994). Systems of genres and the enactment of social intentions. In A. Freedman & P. Medway (Eds.), *Genre and the new rhetoric* (pp. 79-101). London: Taylor & Francis.

Cole, M. (1996). *Cultural Psychology*. Cambridge, MA: Harvard University Press.

Cole, M., & Engeström, Y. (1993). A cultural-historical approach to distributed cognition. In G. Salomon (Ed.), *Distributed Cognitions: Psychological and Educational Considerations* (pp. 1-46). Cambridge: Cambridge University Press.

Dell, P. F. (1980). Researching the family theories of schizophrenia: An exercise in epistemological confusion. *Family Process 19*(2), 321-335.

Eisenberg, E. M. (1984). Ambiguity as strategy in organizational communication. *Communication Monographs, 51*(3), 227-242.

Engeström, R. (1995). Voice as communicative action. *Mind, Culture, and Activity, 2*(1), 192-215.

Engeström, Y. (1987). *Learning by expanding*. Helsinki: Orienta-Konsulti. [Online]. Available: http://communication.ucsd.edu/MCA/Paper/Engestrom/expanding/toc.htm

Engeström, Y. (1999). Communication, discourse and activity. *Communication Review, 3*(1-2), 165-185.

Engeström, Y. (2001). Expansive Learning at Work: Toward and Activity Theory Reconceptualization. *Journal of Education and Work, 14*(1), 133-136.

Freedman, A., & Medway, P. (Eds.) (1994a). *Genre and the new rhetoric*. London: Taylor & Francis.

Freedman, A., & Medway, P. (Eds.) (1994b). *Learning and teaching genre*. Portsmouth, NH: Boynton/Cook Heinemann.

Geisler, Cheryl. (1994). *Academic literacy and the nature of expertise. Reading, writing, and knowing in academic philosophy*. Hillsdale, NJ: Erlbaum.

Graff, G. (1987). *Professing literature*. Chicago: University of Chicago Press.

Greene, S. (1994). Students as authors in the study of history. Teaching and learning in history. G. Leinhart, I. Beck and C. Stainton. Hillsdale, NJ, Lawrence Erlbaum Associates**:** 137-170.

Hartman, J. B. (1978). Change and conflict in the university. *Journal of Educational Thought, 11*(1), 3-15.

Kohn, R. H. (1995). History and the culture wars: The case of the Smithsonian Institution's Enola Gay exhibition. *Journal of American History, 82* (3), 1036-1063.

Leinhardt, C. and K. Young (1996). Two texts, three readers: Distance and expertise in reading history. *Cognition and Instruction,* 14(4): 441-486.

Leinhardt, G., C. Stainton, et al. (1994). Learning to reason in history: Mindlessness to mindfulness. In M. Carretero and J. Voss, (Eds.), *Cognitive and instructional processes in history and the social sciences* (pp. 131-158). Hillsdale, NJ: Lawrence Erlbaum Associates.

Leont'ev, A. N. (1978). *Activity, consciousness, and personality.* Englewood Cliffs, NJ: Prentice-Hall.

Leont'ev, A. N. (1981). *Problems of the development of the mind.* Moscow: Progress.

Lerner, A. W. (1980) On ambiguity and organizations. *Administration and Society, 10*(1), 3-32.

McCarthy, L. (1987). A stranger in strange lands: A college student writing across the curriculum. *Research in the Teaching of English 21*(3), 233-265.

Newell, G. E. and P. Winograd (1996). Writing about and learning from history texts: The effects of task and academic ability. *Research in the Teaching of English 29*(2), 133-163.

Perfetti, C., A. Britt, et al. (1995). *Text-based learning and reasoning: Studies in history.* Hillsdale, NJ, Lawrence Erlbaum Associates.

Ronald, K. (1988). On the outside looking in: Students' analyses of professional discourse communities. *Rhetoric Review, 7*(2), 130-49.

Russell, D. R. (1991). *Writing in the academic disciplines, 1870-1990: A curricular history.* Southern Illinois University Press.

Russell, D. R. (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication*, 14, 504-54.

Schryer, C. F. (1994). The lab vs. the clinic: Sites of competing genres. In A. Freedman & P. Medway (Eds.), *Genre and the new rhetoric* (pp. 105-124). London: Taylor & Francis.

Shay, S. & Moore, R. (2002). Roles under construction: The intersection of writer agency and task design. In D. Foster, & D. R. Russell (Eds.), *Writing and Learning in Cross-National Perspective: Transitions from Secondary to Higher Education* (pp. 272-318). Urbana, IL: NCTE Press.

Veysey, L. (1965). *The emergence of the American university.* Chicago: University of Chicago Press.

Vygotsky, L. (1978). *Mind in society.* Cambridge: Harvard University Press.

Vygotsky, L. (1986). *Thought and language.* Cambridge: MIT Press.

Wartofsky, M. (1979*). Models, representation and scientific understanding.* Boston: Reidel.

Welton, D. (1990). Teaching history: A perspective on factual details. *Social Education 54*(6), 348-350.

Yañez, A. (1999). Issues in composing a discipline: An analysis of general education students' attempts to write history. Unpublished Dissertation, University of Iowa, Iowa City, IA.

Notes

[1] "General education" in the U.S. refers to a requirement that undergraduates take a range of general courses in various fields, usually selected from a menu of approved courses (typically in sciences, social sciences, foreign languages, and humanities). It is similar to the "modular courses" introduced recently in the U.K.

[2] For the methodology used in the study, see Yañez, 1999.

[3] First year composition is a 10- to 30- week for first-year university students (typically 18 or 19 years old). The course is a requirement students in almost all universities in the U.S. Though the content and methods of the course vary widely, the course usually is usually intended to prepare students for writing in higher education.

[4] All names of students are pseudonyms.

Legends of the Center: System, Self, and Linguistic Consciousness

Janet Giltrow

Department of English
University of British Columbia
Vancouver, Canada V6T 1Z4
giltrow@interchange.ubc.ca

Abstract

Commentators on language standardization, including Bourdieu and Bakhtin, provide various perspectives on what this chapter calls *modern linguistic consciousness*: speakers' awareness of their own speech in relation to others' and in relation to the operation of centralizing *system*. In this chapter, these formulations are used to analyze interview data collected from readers and writers at a South Asian university—and, in turn, these data elaborate the picture of modern linguistic consciousness. Readers and writers can pick out *self* amidst the words of others, and in the presence of centralizing mandates; they can position themselves in working spaces adjacent to *system*, and, while recognizing speech norms, imagine themselves as not occupying those norms. Linguistic consciousness can be detected in the expression of *rules*—but rules themselves turn out to be complex spaces hosting diverse possibilities. Moreover, modern systems, in managing the speech of populations, may not always operate exclusively in the service of the centre.

Modernity has struggled to locate system in diversity, and then self in system. Reasoning about language has hosted many episodes of the struggle, as the normative face of speech confronts the private one—the rise, decline, and residual of structuralist explanations of language being the commanding example.

In the aftermath of structuralism's ascendancy, the search for a modern conception of language goes on in many domains, for questions persist about the nature of the speaker's participation in the system. New-rhetorical genre theory has de-centered attention by disregarding universal measures of communicative effectiveness and focusing instead on local contexts for expression, and the regularities in situation, form, and content (or "symbolized experience" (Burke, quoted in C. Miller, 1984, p. 160) which develop over accumulating instances. These regularities are visible in textual outcomes, but, more important for this discussion, they are apprehended in language-users' *intersubjective consciousness*: speakers' and listeners' not only recognize typical situations but also recognize one another's mutual awareness. If we look for *self* in this model of individuals' participation in a system, we find it in speakers' identification with the roles and motives available in the speech situation, and performance of these roles and experience of these motives. If we want to add *agency* to conceptions of self, we find it in the contingencies of situation: typifiable but also historical, contexts change—at least partly in response to individual instances of participation. This view of self and agency comes at some cost to ideals of originality and self-expression, but also with some profit to ideals of the sociality of language.

In the genre-theoretical model, consciousness is a play of intersubjectivity—and it is also structured for tacitness. Intersubjective recognitions go on at levels not entirely available for explicit expression. Tacitness explains discrepancies between what language-users do and what they say about what they do, and explains the inadequacy of rule-giving and direct instruction in speakers' learning of a genre new to them. In this chapter, I look again at what people say they are doing, but with a different or complementary interpretation of what has been taken to be discrepant: the excess, the seemingly overgeneralized surplus as language-users give an account of themselves and of others.[1] In this chapter, I try the proposal that some of what speakers and writers, listeners and readers say about language is also an expression of a broader domain of linguistic consciousness, and, further, that it is an indication of modernity itself: a sign of center and system, and self in relation to those. While later sections of this chapter silently consult new-rhetorical genre theory, I mainly intend to resume linguistic explanations of speaker and system, for these continue, and they go beyond the structuralist analysis of competence which formerly attached speakers to their language. Thereby, they uncover areas of sociality and planes of regularity which genre theory, given its focus on the contingencies of local contexts, has had to take for granted: standard language and its extensions.

In this chapter, I first look into a relatively recent round of discussion which inquires into language through critical analyses of centralizing systems which regulate its use. The prominent commentators I will briefly cite – James Milroy and Lesley Milroy, Tony Crowley, Pierre Bourdieu, Deborah Cameron – are not always in sight from disciplinary perspectives in rhetoric and writing, for they all keep in mind processes of *language standardization*, usually a province of sociolinguistics and historical linguistics. But each gestures far beyond the usual topics of standardization mechanisms and their realization in lexicon, morphology, and syntax.[2] The standard is advanced not only by dictionaries and grammars but by the provisions of modernity: institutions, roles, disciplines, techniques, policies, publicity. From the perspective of these accounts, the "standard" is only one expression of centralizing forces and motivations. Equally, each analyzes standard as established not by decree but in the intersection of system and self in *linguistic consciousness*, which speaks to what Bakhtin calls "verbal-ideological consciousness" (1981, p. 342). Each discovers aspects of language-users' awareness or behavior in the presence of centralizing systems and amid populations administered by those systems. Moreover, tracing links to Bakhtin's reasoning, we are reminded that Bakhtin had in mind more than heteroglossia and dialogism[3] when he explained the sociality of language. By putting Bakhtin in the company of current theorists of the standard, we are reminded that Bakhtin's observations of genre, often cited by new-rhetorical genre theorists, took place in a context of reasoning about the broader formations of modernity. Each of these writers addresses the forces Bakhtin describes as *centripetal* (roughly, centralizing and homogenizing) and *centrifugal* (roughly, decentralizing and diversifying), and they also offer hints of certain irrepressible conditions which we can find specified in Bakhtin's account. These conditions restore self to settings that might seem most likely to elide it. We can also discover these conditions, with some complications, in the comments of those cited in the second part of this chapter: readers and writers in the English department of a South Asian university.

Standard and Center

James Milroy and Lesley Milroy's landmark *Authority in Language: Investigating Language Prescription and Standardisation* (1985/1991)[4] examines the historical centralizing forces accompanying the production of Standard English. Most forcefully, they note first that standardization, in the presence of variety, ordains one form, and second that the prescription is not equal to the task, for variety persists. So standardization is not to be viewed as accomplishing actual uniformity in speech, but as inducing widespread consciousness of the standard, and of companion variety. Consciousness of the standard produces auxiliary discourses and publicity, among them the "complaint tradition," which inspires both officials and citizens to lament over variety and interpret it as decline and deterioration. The complaint tradition is one index of linguistic consciousness: in the current round of discussion, it is an early indication of positions and attitudes *vis-à-vis* system and self, the speech of others and one's own speech.

While Milroy and Milroy defend speech variety from centralizing insult, however, they leave writing to fend for itself. Standardization, they say, is a requisite for modern systems, assuring clarity of communication across time and space. At the same time, Milroy and Milroy's critique of prescriptivism points to reform: They recommend changes to conceptions of variety in spoken English, urging such change in educational policy especially. To this extent, liberal-reformist aims can be themselves normalizing, and centralizing—corrections to the system.

Tony Crowley's genealogy of the standard (*Standard English and the Politics of Language,* 1989) exposes centralizing forces as personages and postures, defensive against the barbarians at the gate, and the "mob" within. Crowley's story of the standard, and its contribution to nation as comfort to official anxiety over class conflict, suggests the illegitimacy of centralizing aims and expands the social-ranking capacity which the Milroys identify in linguistic consciousness. Self-interested and domineering, centralizing ambitions inculpate class privilege, and commandeer both official and public consciousness—both administrative and commonsense evaluations of variety in expression. Moreover, the official discourse on language which Crowley quotes calls not only for grammatical policing but also for inculcation of common, "national" values, these introduced on the vector of the standard.

By invoking *symbolic domination*, Pierre Bourdieu's analysis (1991) is most aggressive in its measure of the penetration of centralizing forces into linguistic consciousness. Aware of variety and schooled to anticipate correction, speakers and writers learn how to rate their own speech and writing, and are thereby recruited to the service of their own domination, intimidated by the Milroys' complainers. Bourdieu dismisses the claim that standardization is necessary for writing in modern societies, suggesting that the claim is itself an exponent of centralization. The terms of symbolic domination describe a linguistic consciousness steeped in the schemes of the center: Indentured by *habitus* to their styles of speech, language users absorb the means of interpreting distinction in the "unified linguistic marketplace," that unification itself a dimension of modernity, and manifested in both administrative systems and class differentials. In the meantime, the forms of speech are beginning to fill with content: While the Milroys, Crowley, and Bourdieu all analyze conformity to and deviation from the standard as activating class

awareness, in Crowley's version national and literary materials slip in the door opened by the standard; in Bourdieu's famous measure of habitus, speech embodies practical preferences and daily dispositions.

Like the Milroys, Crowley, and Bourdieu, Deborah Cameron (*Verbal Hygiene,* 1995) rates those aspects of linguistic consciousness that absorb authority as tending to accrue to conservative interests.[5] But, at the same time, the aspects of linguistic consciousness which, by Cameron's audit, absorb authority are mobile, and not in themselves illegitimate, despite the prejudice, injustice, faulty reasoning and quackery which they can serve. She identifies the impulse to evaluate language as indigenous to linguistic competence. While some forms of evaluation, or some occasions for it, are prone to contribute to centralization, prescription in itself is not necessarily hegemonic, and some forms of "verbal hygiene" which Cameron investigates, such as plain language movements and campaigns for non-sexist language, can stand up for dissenting attitudes and oppositional interests. In Cameron's analysis we begin to see signs of life: speakers emerging from their subjugation, organizing outposts of value.

Verbal-ideological Consciousness

If we steer Bakhtin alongside these commentaries, we arrive at intersections and contiguities. Milroy and Milroy's claim that standardization is the production of consciousness of the standard, rather than actual uniformity of speech, finds a forerunner in Bakhtin's observation that the standard – the "unitary language," the "literary language" – is surrounded by its Other: "alongside the centripetal forces, the centrifugal forces carry on their uninterrupted work" (p. 272). And by naming the standard the "literary language," Bakhtin specifies implications of Crowley's analysis—the historical complicity of literary studies and canonical appreciations in producing the center and the notion of common cultural resources. And like Bourdieu, Bakhtin denies the efficiency rationale for standardization – "the myth of perfect understanding."

Able to enter into productive exchange with current commentaries on language-centralizing systems, Bakhtin's analysis nevertheless advances into otherwise unexplored areas, at first challenging but finally indemnifying to intuitions of the self. The advances go forward on two related fronts. First, Bakhtin finds that unitary conceptions of language (housed not only in systems but also in consciousness) are also sites for conceptions of the "originality" of the individual "voice", the unique style ripe with individual intention. How can the centralizing formation host the individual one? Its hospitality flows from the theory of the language itself as a universal and accessible system—a common "treasure" available for the use of the individual and unchanged by that use. Recognizably modern and cognate with structuralist conceptions of language, this one sees the individual entering and exiting the system without disturbing it.

Second, Bakhtin denies (as the other commentators do) the naturalness of the standard. The idea of the system is produced by centralizing forces – institutions, organized privilege, state. Its companion idea, then, the pure originality of the individual voice, is also denied by Bakhtin, and replaced by less systematic conceptions of self. While other commentators also doubt the standard and the center as the legitimate source of words, Bakhtin goes farther by identifying the

actual sources: Words come to the speaker not from a central repository ("it is not … out of a dictionary that the speaker gets his words!" p. 294) but from other speakers:

> the transmission and assessment of the speech of others, the discourse of another, is one of the most widespread and fundamental topics of human speech. In all areas of life and ideological activity, our speech is filled to overflowing with other people's words, which are transmitted with highly variable degrees of accuracy and impartiality. (p. 337)

Transferring from other speakers, words can be introduced by reporting devices—or they may settle into the current utterance without syntactic markings:

> not all transmitted words belonging to someone else lend themselves, when fixed in writing, to enclosure in quotation marks…; of all words uttered in everyday life, no less than half belong to someone else. (p. 339)

The contract for the individual voice (guarantor of the belief in unique expression) is cancelled in this bazaar of used words, marked by the wear-and-tear of their previous uses, and their services to other speakers' purposes. But the self re-emerges from the process by which "[o]ne's own discourse is gradually and slowly wrought out of others' words that have been acknowledged and assimilated, and the boundaries between the two are at first scarcely perceptible" (p. 345). Even in "exact transmission" of the others' words, there is "change", calibrations of "distance" (p. 342) and refractions of "authority" (p. 343). In the appropriation of others' language, speakers come into their own, absorbing the word, working on it by using it. The word engages the attention and inclination of the speaker, whose consciousness entertains and prepares for it (the "'theme' [of another's word] may sound in the text long before the appearance of the actual word" [p. 346]), employing "many means of transmission" of the "internally persuasive word":

> these methods account for other peculiarities as well, which also express the essence of the internally persuasive word, such as that word's semantic openness to us, its unfinishedness and the inexhaustibility of our further dialogic interaction with it. We have not yet learned from it all it might tell us; we can take it into new contexts, attach it to new material, put it in a new situation in order to wrest new answers from it, new insights into its meaning, and even wrest from it new words of its *own* (since another's discourse, if productive, gives birth to a new word from us in response). (p. 346-347)

The word of another is both set in and set off from the speech that becomes one's own, and this space around the word of another sets it moving, an active instrument and accomplishment:

> Such variants on the theme of another's discourse are widespread in all areas of creative ideological activity, and even in the narrowly scientific disciplines. Of such a sort is any gifted, creative exposition defining alien world views: such an exposition is always a free stylistic variation on another's discourse; it expounds another's thought in the style of that thought even while applying it to new material, to another way of posing the problem; it conducts experiments and gets solutions in the language of another's discourse. (p. 347)

This high-traffic area is the stage for the person's "ideological becoming," not only a way of speaking but a "basis for behavior" (p. 341), and an emergent self. This is not the self proposed by a "Ptolemaic" conception of language (that is, one which imagines the absolute eminence and authority of a center): not the self which materializes as an autonomous voice by virtue of unprecedented ("original") use of the centrally managed resource, its intentions fully declared in the unique utterance and uncontaminated by the intentions of others. Rather, it is the self proposed by a "Galilean" conception of language, materializing not in the unprecedented but in the "typical." To apprehend this self, and to round out this philosophy, it is

> necessary to come to terms with discourse as a reified, 'typical' but at the same time intentional phenomenon; … we must learn how to develop a sensitivity towards the brute materiality, the typicality, that is the essential attribute not only of actions, gestures and separate words and expressions, but the basic ingredient as well in points of view, in how the world is seen and felt, ways that are organically part and parcel with the language that expresses them. (p. 367)

In Bakhtin's account, self –while not necessarily exempt from the mistakes and dominations pointed out by other accounts of standardization —emerges amid them. The Bakhtinian account acknowledges centripetal forces as part of the life of language (but not on terms like those which expect language standardization for purposes of efficient communication):

> A unitary language is not something given [*dan*] but is always in essence posited [*zadan*]—at every moment of its linguistic life it is opposed to the realities of heteroglossia. But at the same time it makes its *real presence* felt as a force for overcoming this heteroglossia…. (p. 270, emphasis added)

The norms of "a common unitary language" (a "real, although still relative unity—the unity of the reigning conversational [everyday] and literary language, 'correct' language" [p. 270]) do not "constitute an abstract imperative," but a force against heteroglossia. And these are the norms not of the linguistic "*minimum*" of comprehension (which would be the "imperative" of standardization for "efficient communication") but of a "*maximum* of mutual understanding in all spheres of ideological life," agents of "forces working toward concrete verbal and ideological unification and centralization, which develops in vital connections with the processes of socio-political and cultural centralization" (p. 271). This step in the analysis carries linguistic consciousness into verbal-ideological consciousness, and finishes the job of filling form with content. Crossing this threshold, we take linguistic consciousness (ideas about one's speech in relation to others' speech) into the realm of ideas about one's self as rendered or positioned in negotiation with the words of others, these negotiations involving contacts, citations, world-views, intentions. It is these resources that centripetal forces attempt to manage. In fact, their busyness with dictionaries, style-guides and copy-editing may be only a distracter.

Gathering Bakhtin's observations, we might re-invest in inquiry into the center and system, hoping eventually for dividends for the self. We invest in system and center not as necessary for communication, and or even as confirmed (the unitary language is only posited, an eminence of

consciousness) but as a "real presence" nevertheless, and an inconclusive condition of "ideological becoming," this process registered in linguistic consciousness.

How do we find out about linguistic consciousness? What measures are available? In tracking consciousness of the standard, the Milroys, Crowley, and Cameron all quote the declarations of commissioners, educators, politicians—executors of centripetal intentions. The Milroys and Cameron quote less prominent figures too, ordinary folks who are inspired to make their complaints in public settings. The Milroys add sociolinguistic evidence of speech variety and consciousness of the standard. Cameron adds anecdotal[6] evidence of linguistic consciousness from those who know about copy-editing practices and those who remember their schooldays. For his part, Bourdieu looks at the platforms on which the "legitimate language" is publicized by dignitaries, and the institutional structures which support these platforms: From these observations he interpolates the symbolically dominated consciousness. Like Bourdieu, Bakhtin doesn't quote, but in the spiraling deliberations characteristic of his commentaries, circles over the site of linguistic/verbal-ideological consciousness. In this study, I go to ground level, investigating places for which Bakhtin provides an aerial view. I present remarks from conversations conducted in a place that, like many others in modernity, stages language in the "real presence" of system.

At this site, consciousness of the standard develops within a broader consciousness of centralization itself. This aspect of linguistic consciousness attends to one's own participation in language-administering systems in relation to others' participation: *Many people do this but I don't*, or *we all do this because of the system*. In the meantime, expression of rules—which we might look to as agents of central enforcement—can seem instead to assign authority off-center. These aspects of linguistic consciousness sketch the coordinates of self, as do other dimensions of awareness: On many occasions, writing is represented as active negotiation with words arriving from both ratified and unratified sources—a register of *ideological becoming*. On other occasions, these seemingly centrifugal processes can be represented more systematically: teachers can see them as developmental. Similarly, "originality" can be drawn into the orbit of either "Galilean" or "Ptolemaic" conceptions of language. While ideas of originality can be summoned to endorse ideological becoming, it is in the vicinity of the most commanding feature of the landscape of the center—the national examination[7]—that they are most likely to stake a claim for the self. As Bakhtin predicts, the center, to strike a bargain with self, puts "originality" on the table—but we will see that the profits fluctuate. And even when the center presides, its modern sovereignty can be painted in folk terms, and in some old stories of class differentials.

Method: Eliciting Representations of Linguistic Consciousness

The conversations reported here took place in an institution with which I had no previous connections except for correspondence with the host department outlining the project and asking permission to carry it out: The project was described to the administration of the English Department of the University of Mumbai/Bombay as developing from new-rhetorical theory and

intended to discover aspects of language-users' awareness of their activities as readers and writers in academic settings. At the University of Mumbai, I conducted 40 hours of interviews on student writing with 22 students (graduate and undergraduate) and faculty, with the help of two research assistants, one an M.A. (English) and M. Phil. candidate at another Mumbai university, the other an anthropology B.A. from Canada. The Canadian researcher and I lived on campus, and stayed also some nights at the homes of faculty, and at the distant home of our fellow researcher; we dined and picnicked with students and faculty. I visited one college in the area, but mainly subjects came, from tributary colleges as well as from the English Department, to our interview room amid classes and offices at the university.

Participants were people whom our Mumbai colleague found interested in talking to us, and willing to select papers from their own portfolios (as writers or readers) as in some way "representative." Telling invitees that we were interested in their ideas about writing in academic settings, we left "representative" to be defined by participants. We asked students to read aloud essays they had written and professors to read aloud essays they had marked, commenting as they went along, reporting what came to mind as they read.[8] If interviewees lapsed into more reading than reporting, we posed routine prompts; for example,

Do most people do that?

Where did you learn to do that?

Would people not in the class understand that?

Other questions arose from participants' remarks.

Sounding "The Theme of Another's Discourse"

In the interviews, there were many reports corroborating Bakhtin's survey of the traffic in words, and many indications that writers are aware of the processes by which words are handed on. They calculate the space around cited words—taking some to heart, holding some at arm's length; they point to self in the techniques by which they absorb the words of others.

Throughout the interviews, writers acknowledge their words' histories. An M.A. student can track a long chain of citation, as residue from generations of discourse appear here in a present-generation postcolonial discourse on literature, entering "new contexts, [attaching] to new material, put … in a new situation in order to wrest new answers from it" (Bakhtin, p. 347):

> **M:** There is **a biography of Ngugi's which talks about** how when he was Leeds he was greatly influenced by Marxist ideology and **he read a lot of Marx and Engels**…. **the reference that I was doing on Ngugi, it mentioned** this thing about change in society, you know, one thing impacting the other in a kind of continuum … that was **originally Engels' idea** … So when I was doing my reference work, I think there were **about two books** that were, you know, **reiterating** the fact that ... Ngugi's influences especially Engels' influence is very predominately this text[9]

And words can also be traced across current planes of intersecting activity—not only reading but also class discussion:

> **M:** "[Karanja] felt like a failure and joining forces with the whites gave him some sense of identity and power." I mean I've … discussed postcolonial theory, certain aspects of the white man and the native's relationship, how it's informed by power, how the white, native wants to identify with the white man because it's identification with power ... [mentions Franz Fanon] I think this comes, **this idea comes in from there** /…/ I have a copy of the text / … / These are **things that we discussed in class**, and the theory we discuss Fanon, we discuss Edward Said *Orientalism* and you know we are doing theory basically so these aspects have been talked about in class.

In the interview, the writer at the M.A. level recovers several planes of disciplinary discourse in which she has participated. In the paper itself, however, reporting expressions associate her words only with her reading, and not with, for example, class discussion.

Among writers at the B.A. level, reporting expressions were much rarer (as Bakhtin notes, syntax by no means exhausts the means by which others' words are absorbed into one's own utterance). But these writers nevertheless also traced their words to others, although they were less likely than M.A. students to trace a chain of citation or to identify the authors of the statements from which they derived their words: [A:]"I've referred to **three books**"; [F:]"I've referred to **two books**, they are both on the problems of Indian society and one is on the philosophy of education." Contributing books can be located in different information-organizing systems. (We will see later that writers are thoughtful in drawing on these different arrangements of information, calculating their positions relative to the center.) Some are "in the syllabus"; others are in libraries, reading rooms, and homes: [C:] "I have read up on [Plato's] ideas in **the encyclopedia that I have at home**"; [E:] "Frankly speaking this is not my own title — there was **a book in our college**."

The books are more or less accessible, both in terms of location and in terms of their proximity to the writer's sense of her own position as a thinker:

> **E:** What happened **I had the book but it was a reference book, I couldn't take it home**. When I'm not clear about a concept I don't feel I can talk about it. / ... / Mostly in my papers I write my own, I study only the points [provided by teachers as "notes"], then write my own. But here — **I didn't have time** for this thing. And **I was not clear with the topic**, what I had to do.

This writer seems very aware of "borderline" conditions, the line that language draws "between oneself and the other" (Bakhtin, p. 293). At the border, one admits others' words, populating them with one's "own intentions, … accent" (p. 293). But "not all words for just anyone submit equally easily to this appropriation ….; many words stubbornly resist….; they cannot be assimilated into [the speaker's] context and fall out of it" (p. 294). For this writer, the words of the "reference book" seem to have stubbornly resisted appropriation.

Some wordings are traced not from books but from teachers' "notes" and lectures, as well as presentations by fellow students, or consultations with classmates, or "points" distributed by teachers. Writers are also aware of wordings coming from the public domain. Mention of some legislation comes from general reading: [B:] "I read it elsewhere, in **the newspapers** probably." In other cases the means of distribution have vanished by the time the statement appears in the writer's hand:

> **B:** "In India the seeds of communalism were sowed by the British before 1947. They introduced the policy of divide and rule so they could rule over India comfortably for a very long time." /Are there **a lot of people who think that? /** I think so, I think so.

Tracing ideas and their transformation, writers represent their own work as active productions (and would probably agree with Bakhtin in calling such activities "a difficult and complicated process" [p. 294]): [F:] "I have added … I made it concise"; [A:]"the examples I have coined on my own." The writing self can be located in its performance arranging, compiling, and coming into its own:

> **A:** some things are taken from the book, but **I have arranged them in a different way**, like I didn't get everything from one source. Different sources have been combined. I added some, I deleted some.... Annie Besant was not available in any of the books, only one book I got and one source notes and I really compiled. So it is extended, only four pages of notes was given to me **I have added** … It's **my own points**, only the substance is taken and it is made into a sentence.

The student who, using her home encyclopedia, wrote about Plato selected high-value items which, in their "new contexts, new applications" (Bakhtin, p. 346), accrued to her:

> **C:** Certain important words, those have been used, but generally **it's an original essay** … I would say I have tried to **understand it in my own way** and put it in a summary.

Materials transferring from other speakers can share a spot with home ideas which coincide with them: [F:] "Sometimes it is **something already there in your mind**." Or other ideas, arriving to acclamation, are seized and pronounced: [F:] "This is something that **I totally agree on, and I have read it and put it here.**" Or the current speaker, finding an idea of hers already in circulation, maintains her stake in it:

> **M:** This is **what I made out of the text** when I read it and this has been said by a lot of people, a lot of people think that this is the theme of the text and I have not, I mean I've just **stuck to my idea and what I thought about it**

Sometimes when an idea is brought home it gets special attention which still picks it out as an import: [H:] "It was **really interesting** the material I had collected."

Reports of the processes by which words are handed on represent busy combinations, borrowings, additions, coincidences, collections—the "critical interanimantion" of languages (Bakhtin, p. 296), the "new contexts and applications," the "experiments" which Bakhtin detects in "ideological becoming."

System and "originality"

At the same time as they represent consciousness of the processes by which others' words are appropriated, incorporated, shared or collected, and as they calculate the space around others' words and thereby locate themselves, these writers are also aware of the system which administers their reading and writing. In this phase of reasoning, "originality" appears in the context of reception, a scene often characterized as inhospitable to that "originality."

> **E:** Our mind is conditioned that whatever we write **from the book**, we are going to get marks. **Your originality** is going to be subdued everywhere.

Whereas, in their accounts of their writing practices, students seem confident in their negotiations with the words of others, in the scene of reception the "critical interanimation" of languages subsides to "the book," which is "everywhere." In this consolidation and expansion of its powers, "the book" may draw it status from the category Bakhtin calls "authoritative discourse:" Unlike "internally persuasive discourse," with its "*open*" semantic structure affording "every newer *ways to mean*" (p. 346, emphasis in the original), authoritative discourse is inert, its semantics finite, its very authority placing it beyond the "zone of contact," in an area where "the context around it dies, words dry up" (p. 344). Nevertheless the same student still estimates "everywhere" as an extent that's hard to fathom:

> **E:** Some essays I write I feel I have written very well, and I've included **my own ideas**, and I find that it is appreciated. / *The ones that are appreciated — where does the difference come? /* I don't know, maybe where the thing goes wrong. Very few teachers would take into consideration when we put in **our own ideas**.

While the syllabus pulls consciousness into its centripetal current, this current does not sweep all before it. Outcomes are not entirely foreseeable, and individuals' participations in the system are not uniform. For example, in the presence of this centralizing energy, the "personal" can be a writer's name for readings not on the syllabus, and students can feel that they take risks when they refer to "personal" reading they have done. But they go ahead and take these risks. One student [Q] who herself uses "three of four books" to compose her essay contrasts her practice with that of other students who "always restrict themselves to what is in the syllabus." The syllabus centralizes reading, but it also inspires measurements of individuals' variable participation in the system.

This kind of reasoning may be typical of any school-writing situation, where writers see themselves relative to one another, possibly recognizing a norm, but rarely seeing themselves as occupying it. The particular shape of reasoning here, among these readers and writers, may be

specific to the intersection of policies, practices, and institutions which support a presiding genre which everybody mentioned to us: *the examination*, a national genre.

The modern system of examination is staffed by persons individually anonymous but known by reputation. Students tell us

> **F:** They may **want the textbook material** to be written on the exams as it is, they don't want to be exposed to **any kind of creative or literary writing**, their vocabulary may not be that good.

Even when the exam is down the road, it can influence other writing activities, as writers anticipate eventual reception by examiners, as this next student reports—yet at the same time, this student, like the one who reported her awareness of others' safe practices, also sees variety when she looks at language behavior in the vicinity of the center. She sees her own practices— and others':

> **M:** [on choosing to write about a book which was not discussed in class] most of the people actually stick to the text because it's easier to do and you have a time, you have deadline ... in fact I think it's the easy option plus **it's also preparation for the exams so you don't really have to wrack your brains when it's exam time,** so /*Because the exams will be on those texts?* / Oh these texts, yes, definitely. That's why most people prefer to do — whatever you do in a paper, **the exams, that's going to judge you for a long time in life**, because you have a mark sheet that says you are first class or you [aren't].

In a complex cycle of reasoning, demonstrating a highly mobile linguistic consciousness, an education student describes a norm—

> A: All the students they tend to read what is put in the text and reproduce, so there's not much scope.

—which she seems not to occupy, or does not occupy wholeheartedly, for she can imagine a teacher's perspective, and from this perspective, copying is undesirable:

> **A:** When I'm teaching, suppose I'm an English teacher and I am going to teach an essay surely I'm not going to give them a free essay on [?] from which they can easily copy and give me the points.

Yet she can also imagine examiners' frames of mind, and presents that picture as an inducement to her own practice, possibly bringing her closer to the norm:

> **A:** If I were to write the same thing from the examination point of view, I cannot utilize so much of freedom. In the first place because the time constraint is there and secondly because what they check on the examination is **something which is there in the syllabus and nothing beyond that**.... sometimes these examiners who correct our paper, **they don't do a lot of extra reading, so they have typical answers in their mind**.... I included [discussion of Yeats' cyclical philosophy of time, as discussed with professor]

> on my answer sheet but I think it was completely ignored, probably they had not understood what I was trying to say.

From exam results or rumors of them, the student derives an image of examiners that acknowledges their authority (constraining her "freedom") but limits their prestige. In their efforts to regulate reading and writing, the imagined examiners end up dumbfounded by anything atypical, and reward the copied answers of which examinees themselves have a low opinion.

Reckoning reception, writers picture the center. Remote and anonymous, the center is nevertheless figured as attitudes and even as reading habits—a dispreference for "creative or literary writing," and limited experience of ideas. The examiners are folk figures, formidable for both their authority and their limitations, and the system that assigns and circulates readings dominates some sectors of writers' consciousness. But at the same time its reputation is in the hands, and minds, of the writers who regard it. These writers take a variety of positions in relation to it and plot a variety of working spaces adjacent to it. While centripetal forces organize reading and writing, centrifugal ones go on, as Bakhtin says, "uninterrupted"—although, if not interrupted, at least conditioned by the eminence of the examination.

Reading "The Theme of Another's Discourse"

As Bakhtin tells it, the story of ideological becoming unfolds in the speaker's consciousness. Yet those words adopted and entertained are uttered and accented, and in their utterance, heard. So, the compilations which students see themselves actively composing are also read by teachers. Teachers' representations of these episodes of utterance in many ways mirror the writers' own, and they also refract them.

For example, teachers hear the contributing voices that the writers themselves identify in interviews. Teachers can trace a word two generations back: [D:] **"this is all taken from a book**. 'Goodman decided ...' **somebody else said this** in his or her book ... this is **also from a book**." Detecting the population of words by others' intentions, they can hear multiple voices: [N:] "It almost seems as if these are **taken from the generalities of two different articles**."

While students report themselves actively collecting, poaching, and incorporating, teachers observe from slightly different positions, from which they can see indications of system:

> **N: hardly anyone can be said to write on their own**…. They just don't give them sufficient writing practice right through their educational careers. So they're just afraid to write on their own…. one of the reasons why people are reluctant to rephrase is because they are **afraid the moment they rephrase, their articles in the first place will go haywire and many other things**. So they're **anxious to just take over things from books** /… / because they're not sure of their own writing ability ... they feel that they will not be able to write so elegantly, will not make much of an impact.

No students who spoke to us about their writing considered either this systemic deficit in writing practice, or their own anxiety over the standard.

Teachers also attempt to manage the process by which students participate in the system, but these attempts are not entirely successful. A teacher in an M.A. course in linguistics explains the difference between the paper we looked at and those that she did not select for our meeting:

> **J:** it was a totally unseen poem and I specifically asked them not to refer to any reference books.... there were other papers which had a better theme than this girl has been able to provide but I haven't brought them here because **they were obviously from various books**. So in spite of the fact that I asked them not to I could make out from the way they had done the stylistic analysis later that the theme had been picked up from reference books.

Like students, teachers also recognize the materials for statements coming from many planes of activity. They see, for example, cooperation among friends ([J:] "A friend's helped her ... to do this"). In students' writing, teachers also recognize the classroom and their own performance in it:

> **J:** "It reinforces sense with sound and is used too as a device of phonological foregrounding of the prominent sounds in the text"... / ... / I think she's just, she's putting, **she's quoting me ... from other poems**..."...an example of structural parallelism, which is made use of by the poet for emphasis and memorability" /... / [these are terms] that were **used in class / ... / noted down in their diaries** and /*everything [every stylistic feature] is for "emphasis" /* for "emphasis."

> **K:** She said [the words in rhyme] are the thematic words of the poem. I agree that they are. /*...saying that the rhyming words are the thematic words, is that from class, or — ? /* Yeah. **Some other poem that we have done and said that** ... " The alliteration adds to the music of the poem." **All of them have said this**. / *They've all said this? /* Most of them have said this. / *Where would they have got—? /* **From me obviously**. / *In class /* **In class.**

According to teachers' reports, some wordings transfer easily from the teacher's classroom voice to students' writing.[10] But others do not. Even when a ratified view is offered for students' appropriation, the offer can be declined. No matter how insistent the teacher that a certain view be tried on, writers can refuse to join this chain of citation.

> **N:** I should I also say that sometimes it's disheartening to find that however much one puts forward **different viewpoints in the classroom**, ultimately what is **there in the book they are reading** is the one that they would adopt as their viewpoint. Now I have been speaking as much as I can against objective testing and I've been pointing out, and I do this every year and every year everybody speaks in favor of objective testing.

Some views may be more internally persuasive than others. Or, possibly, the syllabus-sanctioned "authoritative discourse" of "the book" eclipses other voices.

While they notice the up-take or the dead-letter of their own words, teachers also detect voices from beyond the classroom. A wording which might have had its origins in popular political discussion, and which appears re-accented here, is acknowledged as the student's "own":

> **G:** "To build a mighty nation — mighty in thought, mighty in action, mighty in culture, and mighty in peaceful service to humanity." This amuses me, this "mighty" word.... It's **the student's own language**, and I feel there's no need to be mighty, to be good, to be a small good nation is enough. */Where would she have picked up "mighty" as a word? /* **It's used currently**.

And, just as students measured their accomplishments in reading and compiling, teachers measure value-added, and increments in students' own understanding:

> **N:** She has **managed to put this together** and it's **very coherent**, you know.... I don't think she's doing a bad job ... at least **she's got the material**, she's trying to put it together.

> **D:** It's clear that this concept has become **clear to her.**

Teachers also participate in making the legend of the exam, in terms like those by which students estimate the reception of their work, although teachers seem more likely to scan the horizon of the examination's reach:

> **N:** [students fear rephrasing] But then, they're also right that **examiners are not used to looking for evidence of thought**. So they would be marked lower for doing that and they would be marked higher for doing this, so therefore they are quite justified in carrying on in the same way*/But which examiner are we referring to? Not the examiner reading this paper? /* Yeah, but then they have **one style of writing**. And this is ingrained you know, **deeply ingrained** ... **not much store is laid by originality, certainly.**

Yet, as this professor continues – "But people do want to have decently written language as well" – she also acknowledges a stake in another campaign, too: The macro-acquisition of a standard Indian English, a goal mentioned to us by several faculty members.

The general desire for "decently written language" brings a complication attending English as a medium of instruction: Copying is a tactic to avoid penalty for non-standard usages in a tongue that is, for most students, not the language of the home, or the street ([N:] "they are afraid the moment they rephrase, their articles … will go haywire and many other things. So they're anxious to just take over things from books "). Centralizing systems like this one privilege consciousness of the standard; Crowley and Bakhtin both suggest that the standard is also a vector for shared thinking, and common values. Yet, somewhere in this process, the transmission of values on the vehicle of the standard can stall, caught on the cusp of thoughtful iteration and submissive copying: Teachers don't see examiners looking for "evidence of thought." While, at some levels, the writer's participation in the system can be an occasion of "ideological becoming," it can also be a moment that dictates "authoritative discourse": "context … dies, words dry up" (Bakhtin, p. 344). The "originality" which the ideology of centralized language

promises is not delivered, and, in fact, "originality" remains a goad to the system, a rallying point for challenge to it, although students and teachers may come to the rally from different positions.

When teachers witness the dictatorial effects of the examination, *change* becomes a topic. Teachers talk about adjustments to the system, recognizing that the examination produces not only writers' linguistic consciousness but also examiners':

> **N:** they're just afraid to write on their own ... and they're perfectly justified as we said earlier. So **we have to train examiners** if we want to change, if we want to make students think and write, thinking you know, applying their minds, taking the material and putting it together.... in order to do this we'll have to train examiners. And it's going to take quite a bit of training because examiners have gone through this whole system themselves.

System-level changes may not be possible independent of consciousness-level changes, but, at the same time, changes in consciousness depend on changes in system. Reasoning about these reciprocals is carried on in the spirit of modernity: System regards itself, and thereby designs and re-designs itself. This condition both contains the opportunities for change, keeping them within the system's reach, and also incurs tactical responses of one system to its neighbor: Teachers also talk about "lenient" internal ratings to counteract the examination's morbid effects.

The Developmental Curve and the Chronotope of the Center

The examination system encourages ideas of central rating, of reading and writing regulated not by decree but by a consciousness of central reception, this consciousness executed in a variety of tactics, attitudes, and positions. Many remarks were offered on the effects of examinations, including : [N:] "They're perfectly justified as we said earlier... [examiners] are looking for standard answers and the guide books do provide these standard answers." Others commented on the effects of teachers' practices generally: [G:] "They are afraid of making very emphatic statements, like 'none.' / *Why ... ?/* Because when they say 'none,' we say 'some'"; [K:] "Of course they do this [take a stand too early in a discussion] because they are always being asked, 'Do you agree?'" But alongside or in the shadow of the historically imposing system of examination, interpretations of student writing activate consciousness of other schemes.

One of these is developmental: Writers proceed along a route, passing stages of accomplishment. Students themselves occasionally report some of these stages: [H:] "This kind of format was new to me, it daunted me"; [M:] "It's not something that you learn in a day or two, it's a process and you keep learning all the time." Teachers notice them much more often:

> D: She's on her way to becoming a better academic writer

> **G:** So with age, more reading, experience, **that type of writing** [which uses modality and limiting expressions to moderate 'emphatic' statements] **will come.**

> **K:** I think she hasn't got the entire theme but **she is beginning to get there**
>
> **L:** This is **the right time for them to pick up some discipline** in the field of research, and how it could be helped with series of textual details, critical analysis, cross references ... **it is a long process**, it needs a lot of reading and discipline.
>
> **N:** I think with more training of this type she will learn to organize

These observations and interpretations may systematize the processes of "ideological becoming," stages which Bakhtin calculates too: For example, he figures that "initially" the consciousness awakened to the surrounding world of alien discourse "cannot … separate itself " from that discourse: "the process of distinguishing between one's own and another's discourse, between one's own and another's thought, is activated rather late in development" (345).

While these observations explain features of student writing by referring to an ideal train of progress, others explain features of student writing in terms of the writer's degree of participation in other systems—social, historical, political, and even geographic. Here a professor takes time to remark that certain desirable features of a literary-critical genre are inaccessible from the position this student occupies:

> **J:** So the laws were designed to give greater freedom to the people of Britain but it didn't work that way according to Blake. So that is what she has completely missed out. But I think it would have been a historical allusion, this is a very clear historical allusion to the charter of rights and the girl obviously didn't know this because **I don't think she has read much of the history of Britain** and what Blake is alluding to. **So I have not taken this** [the missed allusion] **into consideration in my marking.**

Just as this student's position is discovered as being relatively distant from some canonical readings, other remarks also locate students relative to the center and positioned by systems intersecting with syllabus and examination. Readers can locate writers beyond the immediate institutional situation—calibrating the schools and colleges where students have received their prior education, and estimating students' positions in the urban order. A professor compares the work of two students in terms of this proximity to the center:

> **N:** [the first student comes from] **a regional language background**. I mean she studied not in English before ... in school and so she has this complex about her English not being good enough ... that's a constant fear that she has. She tries to overcome that by working very very hard. **She also lives very far away and spends a lot of time traveling** ... [turning to a second, and highly regarded, essay] In order to use a computer **you'd have to be fairly well off** ... **[computers] are not available to [students on campus].** So this girl [author of the second essay] has in fact had it done elsewhere. **She's probably had access to her father's office** and had it done there or something or the other. **I think there must be a class difference in these two students as well.** This girl [the one who comes from a regional language background] is working desperately hard ... and ... for **what she has managed to achieve**, I think one should give her **a lot of**

> **value**. **It's fantastic** that she's managed so much ... [the other student,
> with access to a computer] lives in [?] which is sort of central, I mean
> halfway between here and [?] **Not far way**.

Fusing with the literal and figurative geography of the center, *time* occurs to both teachers and students. In a city as populous as Mumbai, where students can spend four hours a day traveling between home and school, and class assignments are produced between the pressing schedules of family life and commuting, time is a force to be reckoned. As they approach the center, students cross differential zones in the use of English; once they reach the examination itself, time restrictions are intensified when writers work in a language that has not been uniformly the medium of instruction. In the chronotope of centralization, writers and readers imagine time not only as progress along a developmental curve but also as an arrangement of relative routes towards the center. When teachers tell this story, they expose the grid of class hierarchies which lie across the geography of the city and its regions.

Types and Rules

In the neighborhood of the center we might expect to meet ideas of uniform expression, in keeping with consciousness of the standard (a teacher quoted earlier does notice "one style of writing" as an examination effect). But centralization induces awareness of many categories, a proliferation of images of types. Here are some (but not all) of the types students and teachers mentioned to us:

> **A: life sketch**, **seminar paper**, **essay; research paper**; **B:** [you get a
> topic, you write a] **report**; **C: compilation** is from *one* book *vs.* **summary**;
> **D: research work**; **F:** [making something concise] could be called
> **summary**; **G: talking** [identified by reader when writer refers to "*our*
> children"]; **H: paper** *vs.* **arguing with an examiner**; **H:** writing which is not
> intended to **convince** reader but to give **information**; **L:** something without
> details is a **summary**; **compilation** *vs.* **research document**; **M: exams,**
> **written papers, comprehensive papers**

Taken from institutional designations or put together from vernacular materials, the types recognized here don't obviously involve complex social roles, so they may not be on the same plane of typicality which Bakhtin recommends for acknowledgement. At the same time, they are also not codified, bureaucratic, or taxonomic: As working terms, they may be fleshed out in consciousness by ideas of roles and situations.

Consciousness of types materializes in expression of rules. Rules are often used in a discriminating way by participants, to distinguish between one type and another —

> **A:** [quotation] is important, like **when you're talking about a leader**,
> surely the dialogues have to be given

> **C:** If it is about a particular philosopher or thinker's relationship to education
> we generally do **write a bit about his life**.

— and some frequently expressed ideas are used to distinguish between exams and other genres —

> **G:** I feel going to the next subtopic like this closes the continuity of thought. It is **almost like essay writing for examinations, not essay writing for essays**.

But there is also a lot of overlap: You couldn't say that each type or genre exclusively owns its own rules. For example, there is a widespread conviction among both teachers and students that one must not go "astray" from the topic, no matter the genre. And other rules are not specifically tied to particular genres. Some principles expressed by writers implicate readers' general dispositions and capacities, rather than a specific type of writing:

> **C:** When you divide it into subtopics you make it **easier to understand.**

> **E:** if you directly start with something abstract **they may not find it interesting** because if you read any article even in our newspapers the catchy thing is a title and a starting thing […] Wherever I've underlined, these are punch lines. I feel when we speak after some time **it becomes monotonous for some people to hear**. To grasp attention there should always be some punch line.

While some rules present themselves as self-evident, or derivable from an idea of human nature, others are described by writers as developing from long experience of schooling:

> **F:** whenever we are writing you are **not supposed to write directly on the answer**, we are supposed to give some background. / *Who tells you this?* / It becomes a habit now, nobody tells me. It's become a habit from five years of studying arts, it becomes a habit. Whenever I write **I start with the background**.

> **H:** This is exactly **what is expected** ... I begin with a definition of alliteration every time I do a stylistic analysis.

Teachers also express rules, some of which they vouch for:

> **L:** A survey [of the literature] ... should be just a page. Not more than a page. Perfectly sized, just a paragraph.

Other rules teachers recognize but regard with detachment:

> **G:** Expected styling is to **begin with various definitions** and then come down to what you think of them. But somehow students get stuck with those definitions and never come down to the definition they think is best. */... /...* **It doesn't matter** how they begin according to me.

Both writers and readers expressed many rules, and we might think rules would be the location in consciousness of centripetal forces, or that rules in students' minds are transfers from teachers

or from general edicts. But in fact consciousness of rules is heterodox and relative: People have a range of ideas about the origins of rules, and they take a range of positions in relation to the rules. For example, we find some rules, like the definition one above, about which teachers are indifferent, and some which teachers recognize as widespread in students' practice and consciousness, but which they themselves do not endorse:

> **J:** I think what she's trying to do is highlight the unusual collocations that she has found out. I think she's falling back on **the same old story that teachers don't read the whole thing so if you have them underlined it strikes out** and they would pay more attention to it.

> **O:** She … is trying to give importance to the subject by tracing the Classical roots of the subject. *…* **a lot of people in the Indian context wish to go back and provide some history** and I think reference to, to whatever Classical writers there are, **reference to previous periods is always considered a worthwhile thing to do. I don't necessarily think that it has made a great impression**.

Teachers and students are also split on the use of subdivisions and headings: Teachers are skeptical about them, but students believe they are called for. Writers learn some rules, and apply them with confidence — but readers aren't necessarily in agreement with the rule or the application. Rules can disseminate and flourish in some sectors and not others, and the rules belonging to sectors which are not apparently dominant can still prevail.

Including ideas of where rules come from, linguistic consciousness represents authority as widely distributed, rather than centralized. Some rules are noticed as originating within the writer herself: asked *Is that how most students would do that, put it that way? "A"* answers

> No. / *Where did you learn that?* / It all comes **from within**. […] It's not taught, but I suppose **all of us have some kind of ability** to [use examples from the Indian context]

While schooling can be observed as a direct source of rules ("The title should be a very catchy one, and the first paragraph should be interesting *... / Where did you learn to do it that way? /* This is the way we had in school, that is what **our English teachers** made us do"), it is not always so direct, or such an efficient transmission of a standard.

In one writing episode, students are provided with a "checklist" ("based on the checklist provided in Leech and Short's book *Style in Fiction*") and with repeated instructions:

> **J: I have told them** that always after finishing their stylistic analysis they must come back to the theme and revise their theme accordingly.

But students mainly do not do this. Explicit instructions do not guarantee an outcome:

> **J: I have asked them to give me the definitions** to see whether they've understood it or not. There are **very few who have done it** … **Again,** reflect which theme of the poem and how.

Indeed, instructions do not guarantee an outcome even when they are repeated, as this student report verifies:

> **H:** In fact this is what she mentioned in class, every time you analyze something, tie it back to the theme. This is **something she has mentioned time and again.** But I guess **not everyone** is doing it.

And other teachers also find that between direct teaching and actual doing there's room for a variety of outcomes:

> **K: I think somewhere along the line they have misunderstood what I have said**, what I had said was that after you finished the context I would like you to make general comments about what you felt about the poem, something you had missed out in the theme, you can go back to the theme and add your impressions after the stylistic analysis.

> **L:** We provide them with **a model, how the thing is to be approached,** but it's clear that she hasn't been able to get to all those **nuances**.

A genre-theoretical perspective on rules could predict these last-mentioned episodes of shortfall between direct instruction and actual practice: Rules can be ineffective half-measures for conveying the tacit know-how which genre users share. But this perspective would overlook surpluses too substantial to ignore. There is, for example, a substantial regularity in students' failure to observe the rule; there are substantial regularities in the observance and expression of rules which have not been officially issued or institutionally authorized. Similarly, a common-sense perspective on rules could predict reports of rules absorbed by writers from centralized schooling but could not account for self-regulation surplus to officially sanctioned rules. Conversations in Mumbai suggest that the expression of rules—of not only their content but also their origin, distribution, and observance—can represent aspects of linguistic consciousness which find authority locally as well as centrally, with rules springing up in many sectors.

Conclusion

Both Bakhtin and Bourdieu imagine a moment before modernity when linguistic consciousness would have been different. [11] Before centralization, language was a normative condition, but not yet a normalizing one. Modernity introduces a particular kind of linguistic consciousness, which in turn cooperates in the design and routine maintenance of modern systems. While consciousness of the standard is not the only indication of modern linguistic consciousness, it is the most prominent one. So prominent is it that it can fill our window—with the common-sense view of the standard as the universal instrument of self-expression, or with the critical view of the speaking self impressed into silence, as Crowley pictures non-standard speakers in the presence of the standard, or hesitant and intimidated by symbolic domination, as Bourdieu pictures them. But there is a wider view than these of the speaker's participation in the system.

Expanding the view, we might see in the scene of modern linguistic consciousness a capacity for recognizing systems themselves as open to correction: a capacity for monitoring the institutions

of language centralization, and their systemic effects. So Milroy and Milroy recommend changes in educational policy and testing to accommodate speech variety and thereby improve the integrity of the system and its ability to survey all instances. Under some circumstances such recommendations may be executed, but whether they are or not, they still comprise an element of modern linguistic consciousness (and complainers themselves frequently impugn educational systems, their complaints sometimes heeded and sometimes ignored). In Mumbai, readers and writers regard the examination system and evaluate it even as it evaluates them. As de Certeau (1984) says generally of institutional conditions, the examination is a fact rather than a law, so students imagine that it might be otherwise: Examiners might be better read, might be well-versed rather than narrow-minded, might be sharper in their evaluation of worth and "creativity" — but they're not. In a different vein but similar spirit, teachers manipulate their own participation in the system: Tactically, they calibrate internal ratings; strategically they theorize adjustments to the system. Imagining change, in the spirit of modernity, speakers establish outposts of value: not yet, or possibly never to be, drawn into the center, but circulating a petition for consensus nevertheless.

In the conversations reported here, these outposts are heard from in the proposals for change— and also in the expression of rules. While rules might seem the most likely opportunity for centralizing motives to unify consciousness, rules seem instead to incur themselves and position speakers to produce diverse conditions: Images of types are inherited from the center or arise locally; a rule is found deep within, or picked from the surface, or taken from the teacher; one does as one is told—or not, discovering a respectable option. The self is found in the observance of a rule, or in degrees of observance, or in shrugging off a rule. A rule is followed with conviction, or with detachment. A rule is declared—and ignored. Rather than a place for consolidation or for simple conformity or resistance, rules are a complex space in consciousness from which the speaking self witnesses variation in the presence of regulation. Most important, when estimating compliance, and customary ways of getting on, speakers tend not to represent themselves as occupying the norm—but neither do they (with one exception in the interview data) represent themselves as renegade. In modern systems, the speaking subject hears others, and hears itself among administered populations. Possibly, these conditions of modernity provoke a particular kind of linguistic consciousness and a particular sense of self, neither wholly conforming nor radically resisting.

Other measures of linguistic centralization have also gauged the self in its variation. Milroy and Milroy deliberate on "non-standard" linguistic identities in terms of solidarity and stigma: Even in their consciousness of the standard, people can apparently refuse its social advantages and choose instead affinity with groups stigmatized by non-standard speech (a refusal which has baffled generations of well-meaning teachers in systems of mass education). Crowley's and Bourdieu's measures of centralization estimate selves and consciousness as less choosy and more regulated—or betrayed once more by their choice: In speakers who have acquired rather than inherited the standard, it will always display marks of its acquisition. In Bourdieu's linguistic domains, the "legitimate language" is the arena where self is equivalent to *habitus*, and consciousness is the experience of correction (for non-privileged speakers) or confidence (for

speakers whose privilege destines them for long years of schooling). The scene projected by conversations in Mumbai, however, suggest a terrain more like the one which Cameron surveys, where in the vicinity of the standard she finds pockets of rule-givers and fringe enforcers, schemes of intervention and projects for change. In its mobility among speakers, linguistic authority delegates many agents of regulation, amateur as well as official, and unlike the complainers in the Milroy tradition or the grammarians in Bourdieu's, they don't necessarily have close ideological ties with the center.

Moreover, the "center" is itself multiple, or distributed. Even where the center seems most systematic, most assured of control over reading and writing, as in for example the relationship between the syllabus and its examination, it is vulnerable to agitation or interruption. In the slender space between these sites (measured as very slender indeed by the many reports of examiners' preoccupations with syllabus materials), librarie*s* insert themselves: college and university libraries, home libraries, teachers' collections, departmental reading rooms — each used, accumulated, organized, and on-loan according to different principles of information, and liable to accidents. (So, on a particular afternoon, Annie Besant, required in the syllabus, can't be found in the library.) Writers explain their negotiations with published statements as demanding in production and uncertain in reception: Books themselves can be centered as the seat of authority—"the book" of the syllabus—or they can veer off, becoming "personal" (or, as in the case of Yeats' philosophy, possibly canonical in another system). Even at the heart of this public system, looking for books can be a private venture, a wilderness expedition with uncertain destination, an investment with uncertain returns.

Modern consciousness can also rescue the self from aggregates by tracing the developmental curve: Teachers can follow the progress of the speaking subject towards an ideal, although writers themselves seem to have a less calculating sense of this progress. So we might wonder about these perceptions, and the effect of their expression, which may be within or beyond earshot of writers themselves. To see oneself approach an ideal may be an impossible aspect of modern linguistic consciousness, and one may learn to rely on watchful, semi-official overseers to estimate one's progress.

While teachers recognize writers' approaches to an ideal, they also recognize a self emerging amid the words of others ("this 'mighty' word.… It's the student's own language.… It's used currently"). But especially it is writers themselves who can pick out the boundaries between others' words and words that have become their own. They are aware of activities at the border, where a word's credentials are called for, or it is asked to account for the company it keeps.

> [people] transmit, recall, weigh and pass judgment on other people's words, opinions, assertions, information, people are upset by others' words, or agree with them, contest them, refer to them and so forth. (Bakhtin, p. 338)

The actions of taking an interest, agreeing, compiling, condensing or elaborating—even knowingly taking the dictates of "authoritative discourse"—all these actions pick out self in its "ideological becoming." Even though writers may not identify this becoming, their remarks

suggest that these processes go on at some level of awareness in linguistic consciousness. Speakers are not unwittingly filled up with words.

Bakhtin's analysis invites us to concentrate on the opposition between centripetal and centrifugal forces: Centralizing and decentralizing motives engage in a never-ending pull and push, a tug-of-war which results not in homeostasis but in the monitored instability of language. The pull of the center can never overcome the push away from it, but neither will the center cease in its efforts. Yet it also seems that, even as the center is multiple, it can also detach itself from hegemonic interests and re-form in circles of organized linguistic consciousness. These appear—and disappear—in moments of perceived regularity, when rules and their distribution are noticed. They also appear in larger formations. Particularly at the B.A. and B.Ed. level, writing and reading address goals beyond the examination — without necessarily defying it, and possibly even cooperating in the creation of the common values which Crowley describes as "national." Teachers report as currently and urgently demanding attention from students each of these discourses: environmental concern; the status of women in Indian society; the sectarian crises of communalism and the problems of civil unity. Students develop wordings for these issues; they adopt, adapt, and elaborate attitudes. And at the M.A. level particularly, students configured and re-configured postcolonial theory, performing readings of colonial history and Indian contexts. In these cases, ideological becoming owes a lot to the mechanisms of the center, even if these are not operational in the narrow mandate of the examination. Some features of modern systems may, as Bakhtin says, aim for a "*maximum* of mutual understanding in all spheres of ideological life," as exponents of "forces working toward concrete verbal and ideological unification and centralization, which develops in vital connections with the processes of socio-political and cultural centralization" (p. 271). But other features of modern systems may operate on planes other than those controlled by the center.

And, even while the center is tireless in its efforts to convince itself of its own control over language, as Susan Miller (1991, p. 58) describes the schemes which administer composition in U.S. universities, it cannot control its own reputation. Participants in the system rework the center and personify its anonymity. Students share the work of making the legend of the examination, taking as well responsibility for knowing the techniques and rumors which address the legend. Holding their own against the magisterial eminence of the exam, they devise tactics and develop tricks. Students also consult the category "originality," one which Bakhtin analyzes as deriving from unitary conceptions of language, the domain of the standard and centralized examination: It is the promise of the center, and the artifact of the standard. Yet, students' consciousness of "originality"—which they may owe to the ideologies of centralization— nevertheless makes them skeptical of the promise. Possibly, the skepticism rationalizes outcomes, and the belief in "originality" secures a modern sense of self compatible with this centralized system.

"Originality" contributes to the legend of the examination which students compose, and also appears in teachers' accounts of the center. Teachers tell an additional story too, figuring the chronotope of the center. In this story, students venture towards the examination, from near and far, and pressed for time. The schedules of their journeys unfold the districts of the city and the

regions beyond, plotting grids of class hierarchy. In late modernity, this story is the sub-official narrative of centralization, an old story rumored beneath liberal systems and public mandate.[12] Possibly, in organizing and re-organizing people, modernity re-formats linguistic consciousness of class difference, as the centripetal current of standardization and systems of mass education both mystify and disclose hierarchy.

And lingering in the current episodes of examination are the annals of the examination system itself, instituted in the mid 19th century, centrally important to the political economy of the colonial regime, and surviving that regime to manage mass education in the late 20th century.[13] That history is itself infused with the record of English studies in India and the U.K.: As Gauri Viswanathan (1989) has explained, formal, examinable knowledge of English literature appeared in India in the 1830s, long before it did so in Great Britain.[14] Like any history worth telling, this one is not sealed but active in late-modern linguistic consciousness, and mentioned tangentially in interviews by both readers and writers. It is in mind as "J" evaluates a student reading which misses Blake's allusion. It is also again on the table when the professor provides a checklist from Leech and Short's *Style in Fiction*, which has come to the classroom via her graduate education abroad, and the western graduate education of those who determine the syllabus, their advanced studies supported by the British Council. James Clifford's (1997) thoughts on "travels and contacts [as] crucial sites for an unfinished modernity" (2) suggest, first, that students' "dwelling" (*vs.* traveling) may be what Clifford calls a "particular worldliness"—a position traversed by their well-traveled teacher; and, second, that the historical dimension of colonial inheritances is overtaken or at least fused with geographical dimension of late twentieth-century academic qualification: the chronotope of the British Council.

<p style="text-align:center">* * *</p>

In principle, a modern system performs unperturbed by changing content: Modern organizations, for example, are supposed to operate oblivious to the coming and going of particular individuals. So our experience of modernity can convince us that form is separable from content—yet this experience of separation may also arouse a compensatory sensitivity to specific content that has been overlooked: The oblivious operation of a bureaucracy, for example, can be decried for letting some particular person "fall through the cracks."

Accordingly, in matters of language, our modern attention is attracted by the transcendent form of the standard operating undisturbed by actual instances of speech. Myths of formality gather around the standard: the myth of perfect understanding, fetishized as "clarity" and "communication"; the myth of a centralized language as a value-free channel for the expression of the individual self and original "voice." When some voices go unheard or fail to sound, associated myths compensate for the discrepancy: the myth of "mechanical correctness," which inspires counter-fables of classrooms liberated from obsessions with form; the liberal myth of valuing all speech equally in the presence of the standard—for the differences are only formal. So Milroy and Milroy, early in the current commentary on the standard, rescue self and identity

by relativizing speech forms—a move which Bourdieu notices elsewhere and condemns as "naïve," for ignoring the telling particularities of distinction and its contents.

And Bakhtin also tells us that it is a radical error to separate form and content:

> Form and content in discourse are one, once we understand that verbal discourse is a social phenomenon—social throughout its entire range and in each and every one of its factors, from the sound image to the furthest reaches of abstract meaning. (p. 259)

His account of ideological becoming makes no distinction between form and content, nor does his category "verbal-ideological consciousness." Conceptually in opposition to formalist theories, typicality is "the basic ingredient … in points of view, in how the word is seen and felt, ways that are organically part and parcel with the language that expresses them" (p. 367).

Typicality fuses verbal materials with seeing, feeling, acting, and being. It is also the site of individual intentions, taking "discourse as a reified, 'typical' but at the same time intentional phenomenon" (p. 367). Paradoxical as this may seem, it is a conception nevertheless available to the writers and readers quoted in this study, who recognise the processes of ideological becoming amid the words of others. And they can distinguish this from the imposition of "authoritative discourse."

But they are also citizens of modernity, which respects form and system. So modern linguistic consciousness entertains multiple indications of self: in the "originality" which system promises—and in the ideological becoming amid the unorganized traffic of others' words. Modern linguistic consciousness induces awareness of speech norms and of one's own speech in relation to others—and also a sense of one's own speech not occupying those norms. Modern linguistic consciousness establishes confidence in systems; even makes it unthinkable that language could survive without dictionaries, copy-editors, style guides, or examinations in English. But it also imagines changes to system, and re-tells the center according to local legend. And it encourages the intuition that self is available to be discovered and redeemed in language.

Acknowledgements

References

Arnovick, Leslie K. (1999). *Diachronic pragmatics: Seven case studies in English illocutionary development.* Amsterdam: John Benjamins.

Bakhtin, Mikhail. (1981). *The dialogic imagination* (Caryl Emerson and Michael Holquist, Trans.). Austin: University of Texas Press.

Bourdieu, Pierre. (1991). *Language and symbolic power* (G. Raymond and M. Adamson, Trans.). Cambridge, Mass.: Harvard University Press.

Cameron, Deborah. (1995). *Verbal hygiene.* London: Routledge.

Cheshire, Jenny, & Stein, Dieter (Eds.). (1997). *Taming the vernacular: From dialect to written standard language.* New York: Longman.

Clifford, James. (1997). *Routes: Travel and translation in the late twentieth century.* Cambridge: Harvard University Press.

Crowley, Tony. (1989). *Standard English and the politics of language.* Urbana: University of Illinois Press.

de Certeau, Michel. (1988). *The practice of everyday life* (Steven Rendall, Trans.) Berkeley: University of California Press.

Giddens, Anthony. (1990). *The consequences of modernity* Stanford: Stanford University Press.

Giltrow, Janet. (2002a). Meta-genre. In Richard Coe, Lorelie Lingard & Tatiana Teslenko (Eds.), *The rhetoric and ideology of genre: Strategies for stability and change,* Cresskill NJ: Hampton

_____ (2002b). *Academic writing: Writing and reading in the disciplines,* 3rd ed. Peterborough Ontario: Broadview.

_____ (2000). "Argument" as term in talk about student writing. In Richard Andrew & Sally Mitchell (Eds.). *Learning to argue in higher education* (pp. 129-145). Portsmouth NH: Heinemann/Boynton Cook.

Giltrow, Janet, & Valiquette, Michele. (1994). Genres and knowledge: Student writing in the disciplines. In Aviva Freedman & Peter Medway (Eds.), *Learning and Teaching Genre* (pp. 47-62). Portsmouth NH: Heinemann.

Krishnaswamy, N., & Burde, Archana S. (1998). *The politics of Indian English: Linguistic colonialism and the expanding English empire.* Delhi: Oxford University Press.

Miller, Carolyn. (1984) Genre as social action. *Quarterly Journal of Speech, 70,* 151-67.

Miller, Susan. (1991) *Textual carnivals: The politics of composition.* Carbondale: Southern Illinois University Press.

Milroy, James & Milroy, Lesley. (1991) *Authority in language: Investigating language prescription and standardisation,* 2nd ed. London: Routledge. (Original work published in 1985)

Sarkar, Sumit (1998). *Writing social history.* Delhi: Oxford University Press.

Thornton, Geoffrey. (1986). *Language, ignorance and education.* London: Edward Arnold.

Viswanathan, Gauri. (1989). *Masks of conquest: Literary study and British rule in India.* New York: Columbia University Press.

Notes

[1] Giltrow & Valiquette (1994) explain the surplus as sign of tacitness; Giltrow (2002a) revisits that explanation to propose the category "meta-genre" to name the "atmospheres of wordings and activities, demonstrated precedents or sequestered expectations" surrounding genres (195); and to recognize "commentary on writing as functionally motivated rather than simply mistaken or immediately illuminating, … a site where language users give an account of themselves, and try to come to a situated understanding of their activities, their positions *vis-à-vis* one another, the risks incurred and the indemnities afforded as they compose" (203).

[2] Language standardization is a long-established topic in sociolinguistics and historical linguistics, the latter producing materials for the oft-repeated story of 18th-century prescriptivisms. While both sociolinguistics and historical linguistics have taken a turn towards more critical and social-constructionist analyzes (see, for example, chapters in Cheshire and Stein, eds., *Taming the Vernacular* (1997), and Arnovick (1999) on 18th-century prescription for *shall* and *will.* Acknowledging prescriptive projects as proscribing "common use" (and thereby having a social dimension), Arnovick's re-analysis of 18th-century rationalizations for prescription finds "elaborate" models of pragmatic symmetries, both patient with and appreciative of careful distinction, suggesting that the means of rationalizing the standard are sensitive to the sociohistorical moment. The commentators I will cite in this chapter, however, write in adjacent but different fields, and take a more a more focused look at *consciousness*—public and otherwise—of language, encouraging perspectives which look beyond developments in orthographic, lexical, morphological, and syntactic uniformity to the frames of mind which induce, resist, or cooperate in centralization of language.

[3] *Dialogism*, in Bakhtin's analysis, is a condition beyond *dialogue*, where separate speaking subjects engage in exchange: Dialogism is the infiltration of the single utterance by "alien" words. The speaking subject hosts visits from the words of others; inside the single utterance, these visiting words come up against, condition, or elaborate the speaker's "own" words. The surrounding *heteroglossia*—the multiple speech styles at work in a language, and available to speakers—is the circumstance that makes dialogism possible.

[4] Although 'landmark,' and polemical as if swimming against the tide, Milroy and Milroy were not the first (nor do they claim to be) to challenge naturalizing versions of the standard. See for example, Geoffrey Thornton 1986 *Language, Ignorance and Education*, and others whom they themselves cite.

[5] Also like the Milroys and Crowley, Cameron records how linguistic expertise can be alienated from the center, and from common sense, in late-modern times. This alienation is a fascinating feature of the history of linguistic consciousness, one which might be investigated by means of Anthony Giddens' (1990, p. 79-92) analysis of *trust* and expertise in modernity.

[6] Cameron doesn't report her method of collecting data, and organizes their presentation episodically. So I have called them "anecdotal."

[7] As they originated under colonial rule in the 19th century, centralized examinations of students in university-level studies have been interpreted—with much supporting evidence—as a strategy for recruiting qualified Indians to the civil service. Since independence, the examination system has continued. It is broadly administered by national commissions, and regionally managed by bodies that set syllabi for examination, these syllabi governing instruction in the many participating institutions. At both the undergraduate and graduate levels, students in India focus much of their attention on writing for the actual event of the examination, or on preparatory exercises. As we will see from data collected, however, there are also many other occasions for writing in coursework during the year, carried on in the shadow—or light—of the examination.

[8] These techniques are exemplified also in Giltrow & Valiquette, 1994; Giltrow, 2000; and Giltrow, 2002.

[9] In transcriptions of interviews, **bold** font indicates emphasis added in the analysis; ellipsis points with slashes— /…/—indicate omissions which across one or more turns in the conversation, e.g. (and typically)., the interviewer posed a question and the interviewee replied; ellipsis points without slashes indicate an omission of material within the turn (usually the repetitions or false starts typical of speech); *italics* indicate the speech of the interviewer.

[10] While students readily reported their incorporation of the words of others from books, they seemed less likely than teachers to report explicitly the transfer of teachers' words to their own discourse. This process possibly occupies another area of linguistic consciousness, maybe one that would come to light later in life, when people remember their schooldays.

[11] Bakhtin imagines the experience of "an illiterate peasant," assured in the "inviolability of his own language," living at the same time "in several language systems": prayer, song, family, address to local authority (p. 295). "But these language systems were not dialogically coordinated in the linguistic consciousness of the peasant; he passed from one to the other without thinking, automatically…" (p. 296). Not until the peasant recognizes that these languages can mutually regard one another, that they are neither "inviolable" nor "predetermined," not until he recognizes "the necessity of choosing one's orientation among them," does the "critical interanimation of languages" begin in the speaker's consciousness. Noting the process of standardization as having a beginning, and a course of development, Bourdieu distinguishes between the linguistic unification of the *pays d'oïl* and that of the *pays d'oc*—but both follow an earlier period, when "So long as a language is only expected to ensure a minimum of mutual understanding in the (very rare) encounters between people from neighboring villages or different regions, there is no question of making one usage the norm for another (despite the fact that the differences perceived may well serve as pretexts for declaring one superior to the other)" (p. 46).

[12] In *The Politics of Indian English* (1998), Krishnaswamy and Burde describe, in the teaching of English, a far greater range of differentials than our interviewees suggest: "Those who can afford, get imported whisky and the best English education; at the next level, people go in for 'Indian-Made-Foreign-Liquor' (IMFL) and better English education; at the lower levels, most people will have to be satisfied with the government-approved locally brewed

liquor sold in 'toddy shops' and government-run English medium schools; and still lower are those who consume the illicit arrack, the least expensive but the deadliest, while their children learn how to say 'Daddy and Mummy' in some 'teaching shops' which pretend to be 'English medium schools'" (p. 72).

[13] Sumit Sarkar (1998) analyzes the historical role of centralized examinations in the distribution of resources and prestige in colonial India, finding — then <u>and</u> now — a hierarchization produced by this centralization. While examination provided for the recruitment and credentializing of the middle class for the civil service, it also cooperated with impoverishment of that class. Nowadays, English-medium instruction produces a new, and complex version of hierarchization.

[14] Like Sarkar, Viswanathan also describes the hierarchizing effect of centrally examinable English (literature and language) education in India in the nineteenth century. Imperial administrators and reformers figured on literary education to strike a bargain between secular and European-religious educationists at the same time as it addressed the Indian "mentality" invented by managers and reformers: they intended that it would displace Asian-religious/intellectual affinities, and then "filter" down to unify and modernize the colonial population. In addition it would provide candidates for colonial office. But centrally examinable English studies had other effects in India in the nineteenth century: a sharpening of class divisions as resources for English-language education were allotted to élites; and, as Sarkar also observes, a confusion and translation of social distinctions acquired by those who engaged in literary study.

Accounting for Conflicting Mental Models of Communication in Student-Teacher Interaction: An Activity Theory Analysis[1]

Kathryn Evans

Assistant Professor and Coordinator of Rhetoric and Composition
University of San Francisco
San Francisco, CA 94117
kevans@usfca.edu

Abstract

Using activity theory as a framework, this article discusses a naturalistic study of two college classrooms in which the instructors often relied on transmission models of communication—models assuming that stable, fixed meanings can be neatly transmitted from person to person. Particularly noteworthy was that these instructors seemed to rely on transmission models despite training in recent theories of communication and that, contrary to previous assumptions that people's communicative models are stable, both teachers shifted in and out of these models. Based on an analysis of the contexts surrounding shifts into transmission models, the article argues that these shifts happened in patterned ways. It then accounts for the resilience of transmission models within a broader sociocultural framework.

We have long seen as problematic reliance on transmission models of communication—models which do not recognize the role of context in shaping interpretation and which assume that stable, fixed meanings can be neatly transmitted from person to person. Reddy (1979) has noted English speakers' extensive reliance on this transmission model, or as he calls it, the conduit metaphor. Thanks to Bakhtin and others, however, a variety of academic fields now understand that people can and do interpret utterances differently because of the uniqueness of their personal histories, material conditions, and belief systems. Composition studies, in particular, has achieved a consensus in critiquing transmission models (Eubanks, 2001).

The data discussed in this article, however, suggest that two scholar-teachers trained in recent theories of meaning-making nonetheless relied on transmission models. They did so, moreover, both when communicating with students and when reflecting on that communication in interviews. Drawing on a qualitative research project examining student writing and teacher response in two college classrooms, I note not only that these teachers seemed to rely on transmission models but also that, contrary to previous assumptions that people's communicative models are stable, they shifted in and out of these models.

How is it possible that teachers trained in recent theories of communication can find themselves intermittently, but consistently, acting as if meaning were neatly and unproblematically transmitted? A useful account can be provided by activity theory, particularly as elaborated by Engeström (1996). Like other advocates of activity theory, Engeström points out that we need to broaden our unit of analysis when we examine complex human interactions; thus, in this study of

two college classrooms, the basic unit of analysis won't be discrete entities such as "the teacher," "the students," or "the student texts" but rather an entire system of student-teacher communication—a system that involves complex interconnections among teachers, students, student texts, and means of responding to those texts, in addition to the myriad beliefs, histories, material conditions, etc. that influence these people, tools, and practices. Engeström elaborates:

> An activity system is not a homogeneous entity. To the contrary, it is composed of a *multitude of often-disparate elements, voices, and viewpoints.* This multiplicity can be understood in terms of historical layers. An activity system always contains sediments of earlier historical modes, as well as buds or shoots of its possible future. These sediments and buds—historically meaningful differences—are found in the different components of the activity system, including the physical tools and *mental models* of the subjects. (p. 68; emphasis added)

In the case of the research discussed here, activity theory helps explain "disparate elements" such as the conflicting mental models of communication that the teachers seemed to rely on; it helps us to better account for seemingly incompatible beliefs by seeing those beliefs as rooted in a complex system in which one shift in any part of the system can reverberate throughout the entire system.

These reverberations in the system will be apparent throughout the article as I account for why the two teachers shifted in and out of transmission models of communication. I suggest that, at least for these two teachers, transmission models were triggered by the arena of discourse in question (related to the teachers' training) as well as a complex interaction among a variety of other implicit theories, including perceptions of student competence and effort and perceptions of task difficulty. Then, suggesting that transmission models are both pervasive and resilient, I account for this resilience on a macro-social level. I conclude by recognizing that transmission models are sometimes appropriate and by discussing implications for research, theory-building, and teacher training.

Theoretical Background

Limitations of Transmission Models of Communication

Although scholars in the humanities and social sciences are keenly aware of the limitations of transmission models, a brief overview of recent thinking on this issue will help to lay out the specific sets of assumptions that are at play in the teachers' behavior and that they themselves critique in their stated beliefs. The limitations of transmission models are especially well-illustrated by recent theories of communication which hold that divergent understandings are an inevitability rather than a conversational aberration that can be avoided simply by being "open" and "honest." Among the primary scholars advancing this "miscommunication as the norm" claim are Coupland, Wiemann, and Giles (1991), who write: "language use and communication are in fact pervasively and even intrinsically flawed, partial, and problematic. To this extent,

communication is itself miscommunicative" (p. 3). These assumptions grow in large part out of ethnomethodology and discourse theory:

> Some semantic "slippage" is common in the management of meaning transfer, and in fact there are many reasons to suppose that this is *inevitably* the case. If we acknowledge that speaking occurs (a) under real-time processing constraints and (b) within the lexical and syntactic confines of particular linguistic codes, we must doubt that there are such entities as pure, unsullied and perfect semantic representations. In the ethnomethodological tradition, language use, the making of meaning and its reconstruction, has been viewed as inherently problematic, strategic, and effortful. Garfinkel's (1967) perspective on talk as "accomplishment" acknowledges the probability of communicative inadequacy and incompleteness. Discourse theory (van Dijk, 1987) similarly asserts that utterances are intrinsically *indeterminate*. Because meaning resides in the interaction of linguistic form and social context, exchanges of meanings operate under inherent constraints and communicative acts are creative in compensating for the inexplicitness and indirectness of speech acts and texts. (1991, p. 5; italics original)

Particularly important here is the notion that "exchanges of meanings operate under inherent constraints [given that] meaning resides in the interaction of linguistic form and social context." Completely shared meaning, then, such as is assumed in transmission models, would require at least two (interrelated) phenomena; first, it would require a shared linguistic form, which is precluded by the fact that, even when people happen to speak the same dialect, each person speaks a slightly different idiolect. Second, it would require a shared context, which is precluded by the uniqueness of our personal histories. Even what may appear to be a shared context in the moment that two people are interacting is far more complex than it appears. While a given moment in time may be shared by two people, the lived histories of each person prior to that moment are unique. These unique histories (and concomitant assumptions and ideologies) shape each person's interpretation of that particular moment, and thus people's interpretations of a seemingly shared moment may be radically different. Thus, as Chin (1994) points out, it is important to examine not just particular material and social worlds but also people's individual readings of these worlds. Because each person's reading is necessarily unique in some way, we can see the limitations of assuming that our intended meanings are transmitted neatly from our minds to our interlocutors'.

The limitations of transmission models are further implied by Goodwin and Duranti's (1992) point that context—in addition to being multiple and contested within a moment (i.e., one speaker's "context" may differ from another's)—is also dynamic rather than stable. That is, even if two participants did share a similar context at a given moment of an interaction, that context is constantly shifting—and often doing so in different ways for different participants. Interaction not only reflects but also shapes and creates context. In a given interaction, for example, one person may invoke a new context by referring to a new topic that would cue different schemata. New contexts might also be invoked by contextualization cues (Gumperz, 1982), features of linguistic form such as prosody and lexical and syntactic choice that help signal contextual presuppositions. Gumperz notes that new contextualization cues may be introduced in the course

of an interaction and that some participants may fail to notice this. In sum, then, not only are transmission models inadequate given that meaning resides in the interaction of language and context—neither of which is totally shared by any two given people—but it becomes even more inadequate given that these contexts are dynamic.

Every "context" or aspect of the world is necessarily seen through the lens of our senses, thoughts, feelings, and assumptions. Thus we have interpretations of contexts becoming part of contexts which then shape interpretations which may in turn shape other contexts and interpretations, etc. Seeing context in this way—as dynamic, complex, multi-layered, and rooted in interpretation at every turn—confirms the limitations of transmission models.

Transmission Models of Communication: A Continuum

Because the term "transmission model" is used in different ways, and because scholars have different means of determining when such a model is being relied on, these issues are worth examining in more depth. To accomplish the work of monitoring the implicit models that shape how we communicate, it will be useful to conceptualize transmission models of communication not as a single entity but rather as a family of closely related models. Although many scholars who discuss transmission models do view them as a single entity (cf. Reddy, 1979; Rommetveit, 1988), this article will, instead, conceptualize them as a continuum. On one end of this continuum is the assumption that meaning is automatically transferred; at a mid-point is the assumption that meaning should be transferred but is occasionally blocked by a faulty sender or receiver (what could be called a "messy" transmission model); and at the other end is the assumption that a variety of factors such as "noise in the channel," faulty senders, and faulty receivers often block transmission of meaning. The research on which this article is based suggests that the latter point on the continuum—what might be called a "sophisticated transmission model"—is relatively rare in comparison to the previous two points, and it is these first two points to which I will generally refer by the term "transmission models." The alternative to transmission models is referred to as a "post-transmission" model; this term will be used to describe assumptions that interpretive difference is normal and that contexts shape interpretation. In both cases, the term "model" refers to people's implicit or explicit theories about how communication works.

Reliance on Transmission Models in Two College Classrooms

The remainder of the article will explore the influences that seem to trigger people's shifts into transmission models. These influences will be illustrated on a micro-social level by a semester-long naturalistic research project that examined both the written and oral response rounds occurring in two college classes. One of the goals of the study was to explore the models of communication relied on by the two teachers, who will be referred to by the pseudonyms of Rick and Lynn. In discussing these cases, the goal—like that of most case study research—will be to illustrate the existence rather than the typicality of the phenomenon in question. While I do

believe that transmission models are typical and pervasive, the case for this will be made later, in the macro-social analysis. In this section, the micro-social analysis should help readers decide how many of the patterns illustrated by Rick and Lynn apply to their own situations.

Methodology

Investigating the literate activity occurring over the course of a semester in a writing class and a film class at a large Midwestern university, the study was designed to address several questions, including the two that will be the focus of this discussion:

- How do teachers conceptualize the process by which they construct meaning out of students' oral and written utterances? How do they conceptualize the process by which students construct meaning out of their utterances? To what extent is it a transmission model that structures teachers' conceptualization of these processes?

- To what extent are teachers' implicit models of communication stable or dynamic? If they are dynamic, what are the influences that trigger shifts from one model to another?

To collect the data to address these questions, I did the following:

- Observed, took notes on, and audiotaped almost all class meetings.

- Collected copies of all handouts given to the students.

- Collected and copied students' papers and revisions after the teacher responded to them.

- Asked teachers to audiotape any one-on-one meetings they had with students.

- Asked teachers to forward to me any e-mail interactions they had with students.

- Transcribed selections of the student-teacher conferences, classroom discussions, and interviews.

- Conducted discourse-based (cf. Odell, Goswami, and Herrington, 1983) and semi-structured interviews with the teachers and selected students several times during the semester, using as objects of focus the students' papers, the teachers' responses, and transcribed dialogue between students and teachers.

- Read almost all of the assigned readings that I had not previously read.

- Saw many of the films that students wrote about (I had already seen all the films on the syllabus).

- Gave students an end-of-semester survey on their experience in the class.

These data were collected from most students; there were only a few students, for instance, who did not feel comfortable having their papers copied, their meetings with their instructor recorded, or their e-mail interactions forwarded.

The Classes Studied

The classes studied included a business and technical writing class and an introduction to film class. These courses were chosen for several reasons. First, they represented a "content" course as well as a writing course. Second, the instructor of each class had a reputation for being an excellent teacher, and both instructors were accessible and open to the research. Finally, I had previously taught both courses and thus had a rich understanding of both the concepts being covered and the institutional contexts that shaped each classroom.

The introduction to film class, which had an enrollment of 36, drew a variety of students ranging from first-years to seniors. The gender balance was fairly even, and the students represented a variety of ethnic backgrounds, including European-Americans, African-Americans, Asian-Americans, and Latinos/Latinas. Not specifically required but fulfilling a general college requirement, the course also drew students from a wide variety of majors. It was a particularly challenging course to teach not only because there might be a first-semester biochemistry major sitting next to a senior English major, but also because it met only twice a week for 50 minutes each day.

While the introduction to film class was large and diverse, the business and technical writing class had only 13 students and was relatively homogeneous. Much of this homogeneity resulted from the course's emphasis on technical writing; almost all the students were majoring in fields such as biochemistry, computer science, and engineering. Because first-years and sophomores could not take the class, moreover, all the students were juniors and seniors. With the exception of one woman, they were all male, and with the exception of two Asian-American men, they were all European-American. Unlike the film class, which was too large to foster much interaction between students, the business and technical writing class enjoyed a very friendly and even intimate atmosphere.

Both classrooms were, of course, significantly influenced by the two instructors. Rick, the film instructor, was going on his ninth year of teaching at the time of the study, and his name had appeared several times on the university's list of excellent instructors. He was a post-doc who had significant experience not only in film production but also as a publishing academic and a teacher of film and first-year composition. The most notable characteristics of Rick's teaching were his charisma, enthusiasm, and genuine interest in and concern for students. Particularly impressive was that his expertise in film didn't prevent him from identifying with a novice's experience of his film class; he was aware that many students were having difficulty switching modes from film-as-entertainment to formal analysis, and he tried to help put them at ease by explicitly noting the difficulty of writing about film.

Lynn, the business and technical writing instructor, was going on her fifth year of teaching at the time of the study. Like Rick, she was a dedicated teacher who had been named to the university's list of excellent instructors. Lynn had also completed a Master's degree which included significant coursework in composition theory, including a course entitled *Responding to Writing: Research, Theory, and Practice* that she found very influential. This course, Lynn said, helped her to become a much better teacher ((add quote elaborating on this)), and combined with the other composition theory courses she had taken, helped her to gain a solid theoretical background in teaching writing. This background was complemented by Lynn's caring attitude towards her students—an attitude that was clear in the incredible amounts of time and effort that she put into responding to her students' writing and designing her lesson plans and assignments.

Data Analysis

The techniques of prolonged engagement, persistent observation, and triangulation were used to produce credible analyses (Lincoln & Guba, 1985). A grounded theory approach (Glaser & Strauss, 1967) was used to explore the patterns that emerged from the data and to test these patterns against more data.

A particularly complex issue in the data analysis was how to assess which model of communication seemed to inform people's practice. The model of communication relied on by a person in a given situation is not necessarily readily apparent, although some (e.g., O'Keefe, 1988; O'Keefe, 1991) assume that communicative models can be inferred from the message design of what people would say in selected situations. Others (e.g., Bowden, 1993; Reddy, 1979) assume that we can determine people's implicit models of communication through the metaphors used to describe language. Reddy, for instance, notes that the meta-language we have for speaking about communication is dominated by metaphors of the English language as a conduit. Characterizing language as a pipe through which ideas and feelings can be sent, Reddy suggests that the conduit metaphor is typified in examples such as "Whenever you have a good *idea* practice *capturing it in words*," "You have to *put* each *concept into words* very carefully," and "Try to *pack* more *thoughts into* fewer *words*" (p. 167; emphasis original).

While Reddy suggests that we can determine which models of communication undergird our practice based on our predominant metaphors of language, and while O'Keefe suggests that we can make this determination based on an analysis of what people say in selected situations, the approach taken here involves triangulation of a variety of data. Particularly important, I believe, is to analyze not only the oral or written utterances made in a particular situation but also the meta-commentary, or comments about their comments, that people make. In analyzing teacher response to student writing and transcripts of interviews, whole-class discussions, and student-teacher conversations, I inferred that people were relying on a transmission model of communication when their comments and meta-comments suggested that at least one of the following applied:

- They expected their interlocutors to receive all of their intended meanings.

- They felt frustrated and blamed others for not complying with their suggestions rather than considering the possibility that others had divergent representations of what their suggestions meant. Blaming others for non-compliance without first checking for divergent representations suggests the assumption that one's interlocutors not only should have acted on the suggestions but that they necessarily understood them in the way they were intended.

- They were aware that they and their interlocutors had divergent representations of what something meant but did not seek to account for this divergence, assuming that it was due to a "faulty receiver" rather than different contexts. This is similar to the point above but does not necessarily involve frustration or blame; one might, for example, calmly assume that interlocutors did not "understand" because they were not smart enough.

- They assumed that everyone would have the same interpretation of a given text. (To assume that everyone will interpret a text the same way is to assume that the unique contexts people bring to and construct out of an interaction do not affect their interpretations.)

- They expressed absolute certainty in their interpretations (often despite apparent lack of support for those interpretations) in cases where other people would both see the need to gather supporting evidence and see the interpretation as such rather than a definitive statement of fact.

- Their interpretations were inflexible and stable over time, even when they came into contact with information that undermined these interpretations. Becoming aware of new contexts or new information tends not to make any difference to those relying on a transmission model, since meaning is not seen as contingent on context.

While the above list was used as a guide in determining whether a transmission model was relied on in a given instance, it is important to acknowledge that such an exercise calls for interpretive judgments rather than recognition of unequivocal facts. It is, for example, difficult to distinguish between a sophisticated transmission model, which assumes a high possibility of some sort of "interference" in the transmission, and a post-transmission model, which assumes that since context shapes interpretation of meaning, and since no two people share exact sets of contexts, intended meanings do not map neatly onto received meanings.[2] Either model, for instance, may lead people to check their understandings through a variety of metacommunicative strategies (e.g., paraphrasing a student's words and asking if the paraphrase was adequate, asking students how they would implement a particular writing strategy to see if information about that strategy had been adequately communicated, etc.). While a sophisticated transmission model and a post-transmission model may be difficult to differentiate in this respect, I inferred that, in cases where the teachers shifted out of a simple transmission model, the model they shifted into was in the post-transmission family. This inference was made on the basis of the teachers' references to the role of context in shaping interpretation and their implicit assumptions about whether interpretive difference was an annoyance to be gotten rid of or a normal phenomenon.

However, less important than determining which model was relied on in any given instance—and less important than neatly delineating the boundaries of each model—is the recognition that people may rely on different communicative models in different situations.

Exploring the Teachers' Shifts Between Conflicting Models of Communication

Using the approach just outlined, I examined the teachers' implicit assumptions about communication with a particular focus on the extent to which they relied on transmission vs. post-transmission models. Noteworthy was that, contrary to previous assumptions that people's models of communication are stable (e.g., O'Keefe, 1988; O'Keefe, 1991), the teachers' models were dynamic, shifting from situation to situation. The following section explores this dynamism, focusing on the influences that triggered shifts between models. For both Rick and Lynn, transmission models seemed to be triggered by the following set of influences: the arena of discourse in question (related to the teachers' training), the perceived difficulty of the tasks students were asked to perform, and perceptions of student effort and competence—most notably whether teachers had a deficit model of students. ("Deficit model" here refers to the assumption that students' failure to meet expectations stems from a personal deficiency rather than factors such as unrealistic expectations, failure to communicate expectations, and other more important responsibilities that the student must fulfill.) Deficit models, transmission models, perceptions of task difficulty, and arenas of discourse interacted in patterned and interpenetrating ways; one shift, for example, in assumption of task difficulty could affect other parts of the system such as deficit models and communicative models. Perhaps most striking was that transmission models and deficit models seemed to be mutually enabling.

Accounting for Rick's Shifts

For both instructors, the most salient trigger into or out of a transmission model was the arena of discourse in question, and this trigger was closely linked to the training that both teachers had received. As Lynn did when engaging in activities in which she had been trained, Rick tended to rely on post-transmission models when discussing film, his area of training. However, when assigning and responding to student writing, he often (not always) shifted into a transmission model. This resonates with O'Connor's (1995) finding that literature teachers read student papers with interpretive schema that diverged sharply from the schema that structured their readings of literary works. When the teachers he studied read student papers, they did so in a "text response persona" that was consonant with a transmission model, while their readings of literary texts were informed by more recent literary theories consonant with post-transmission models.

It is unsurprising that Rick, like the literature instructors in O'Connor's study, relied on post-transmission models when interpreting texts within his area of scholarly expertise, for he was trained to do so. He illustrated this reliance on post-transmission models both in class discussion and in our interviews. In our last discourse-based interview, for instance, when we were discussing a particular student's paper, he prefaced a comment on how the student misread a film

by acknowledging the normality of different interpretations of a film: "Interpreting films is, you're always thinking, 'Well, this is debatable, and my interpretation vs. another interpretation.'" Rick's belief in the normality of different interpretations also came across both implicitly and explicitly in class discussions. On the second day of class, for instance, he told students that the meaning of a film is "open-ended and growing." He went on to encourage them to develop interpretations of films by accounting for the effects of a film, and he specifically referred to a film's "effect on me" rather than just the film's effect in general. This message was reinforced by a general discussion pattern in which he solicited students' interpretations of particular clips and encouraged them to support these interpretations with evidence rather than labeling them as "right" or "wrong."

Moving from conceptualizing meaning-making in film to conceptualizing it in students' discourse and his own pedagogical discourse, however, often triggered a shift into a transmission model. Within the pedagogical arena of discourse, Rick's communicative model seemed to depend on his perceptions of students' competence and his perceptions of the difficulty of the task students were undertaking. His default communicative model within pedagogical discourse seemed to be a transmission model; he shifted into a post-transmission model only when he perceived a student to be exceptional or when he perceived the task undertaken by a student to be especially difficult.

When students weren't exceptional and the task was not perceived to be difficult, Rick generally assumed that the intended meaning of both the assignment and his response to the assignment was conveyed to students. This phenomenon was already apparent by the third day of class, which covered both auteurism and some aspects of the first writing assignment. After class, Rick told me that he wasn't sure how class had gone. Asked why he thought that, he replied:

> It's hard to tell because I, you know . . . it's hard to tell, I don't know what—I would think something would stick, you know, I blasted through some things, auteurism, uh, maybe some of that'll stick. *Obviously that stuff on the paper [will stick], I think*. We addressed, you know, some specific questions, nuts and bolts kind of details, *got a lot of that stuff out of the way*. So, yes, I think that probably went well.

In this and other excerpts of transcribed data, key phrases suggesting communicative models are italicized (and in some cases the influences triggering these models are also italicized); this use of italics should help readers focus on key aspects of the excerpt that will be analyzed. In cases where the speaker has emphasized a word or phrase, all caps are used.

In this case, the idea that hopefully "something would stick" is key, and it recurred frequently in the after-class discussions I had with Rick; when considering class discussion of course content, such as auteurism, he seemed to assume a "messy" version of a transmission model, implying that information overload, or perhaps the lack of elaboration on this information, led to interference in the transmission. In contrast, a shift into a simple transmission model was consistently triggered by moving from the realm of course content to that of assignments; when considering class discussion of the paper, for instance, Rick believed it to be "obvious" that that

information would "stick." His assumption that "a lot of that stuff" about the paper was now "out of the way" further suggests a transmission model; if they'd discussed it once, he implied, there was no need to discuss it again since the information had been transmitted. These assumptions stand in striking contrast to Rick's assumptions about meaning-making within film studies, for never, in this arena of discourse in which he had been so well trained, did he shift into a transmission model.

While shifts into particular arenas of discourse were often characterized by shifts into transmission models (in Lynn's as well as Rick's case), a look at the overall activity system suggests that other factors also influenced the instructors' communicative models. Here we can see the complexity of the ways these factors interacted to enable transmission models, for it was not always transitions into pedagogical arenas of discourse alone that triggered shifts into transmission models; it was often, for both instructors, the way that arenas of discourse interacted with the teachers' perceptions of student effort and competence. Rick tended, for instance, to rely on a post-transmission model with the student he perceived to be most competent and—often but not always—on transmission models with other students.

More specifically, for Rick (and, I'll later suggest, for others as well), transmission models often went hand-in-hand with perceptions of students as deficient; the two models seemed to be mutually enabling. Rick assumed, for instance, that students who wrote unsatisfactory papers had not listened in class or read the written description of the assignment; for him, the student as "faulty receiver"—a deficit model—was an explanation for the problem of weak papers. The deep entrenchment of this assumption became apparent when a student called to Rick's attention evidence to the contrary—evidence that much of the problem lay not in the student as "faulty receiver" but in a contradiction between Rick's private criteria and his written description of what students were to do. The student, Joel, had met with Rick after class to discuss the first draft of his first paper—a draft that, Rick told him, contained too much description and no argument. The student, however, had deliberately tried to structure the paper around Rick's written description of the assignment, which read in its entirety:

> For one of the following: *Vertigo*, *Jaws*, *Rush*, *Alien*, *Reality Bites*, or *The Player*, do an essay of 500 words (two typed pages) in which you (1) precisely describe the graphic design of the film's title (opening credits) sequence and the events of its first story sequence, and (2) indicate how the story sequence, in its visual style and storytelling features, introduces some of the principal concerns which will figure in the film. Devote approximately equal space to each of the two topics. Type or computer print (double spaced) the paper and hand it in with this sheet on Thursday, Sept. 14. Most of the films should be available in the Undergraduate Media Center, and the rest at Rentertainment, Blockbuster, and other video stores around town.

Joel, who had as requested "precisely describe[d]" *The Player's* opening sequence, ended up with a description that was relatively long—not surprising since the assignment specified that students should devote as much space to the description as to the second part of the assignment. When Rick told Joel that the description was not only too long but that it needed to be "yoked" or "tied to" an "argument" or "thesis," Joel replied with an implication that this was not specified in the

assignment: "I read the handout." Rick then replied that Joel just needed to "give a QUICK summary, maybe one or two sentences"—advice that, seemingly unbeknownst to Rick, appeared to contradict the assignment's guideline to "devote approximately equal space" to description and analysis.

That Rick's written description had not succeeded in communicating his criteria is not surprising or unusual. Indeed, much research on writing in the disciplines has suggested that professors' criteria are largely implicit and often go unarticulated (e.g., Bartholomae, 1986; Herrington, 1992; Prior, 1991; Walvoord and McCarthy, 1990). It is also not surprising that Joel got a mixed message about how long his description should be; teachers frequently give students such mixed messages (e.g., Sommers, 1982; Freedman, 1987; Walvoord and McCarthy, 1990). Mixed messages and uncommunicated criteria are normal; after all, intended meanings are no more easily transmitted from a piece of paper to a reader than they are from Rick's, or anyone's, mind to a piece of paper. (This is not to say the criteria could not have been more successfully communicated; certainly this would have been possible.)

More interesting than the uncommunicated criteria is the fact that, even after Joel suggested to Rick that the writing prompt had not communicated Rick's intended meaning ("I read the handout"), so powerful was the transmission model that Rick nonetheless continued to hold students responsible for his intended meaning. Similarly, and not coincidentally, so powerful was the deficit model that this too persisted, again despite the contradictory evidence of Joel's extra time and effort. In the interview in which we discussed the first paper, for instance, Rick looked through a stack of graded papers, drew aside some "Cs"—including Joel's revision—and said:

> The "Cs" and below, those are people that I usually, if I say "rewrite" or it's below a "C", it's I mean it's somebody that's betrayed just hardly any effort or time or totally bungled it or didn't get the ideas, I mean just didn't figure,
> *didn't even pay attention to the assignment, you know, the basic structure of the assignment.*

It is striking that Rick said this *after* Joel had initiated a meeting and showed him an "unacceptable" draft while also telling him that he'd read the assignment. We might think that Joel's initiative in seeking feedback, combined with his statement that he'd read the assignment, would have prevented Rick from assuming that students like Joel "didn't even pay attention to the assignment." My point here is not to criticize Rick—who uttered a hundred comments illustrating his dedication as a teacher for every one like that above—but rather to suggest that transmission and deficit models are so resilient that even highly trained experts like Rick can shift into them.

The mutually-enabling nature of transmission and deficit models makes sense, for if one expects that meaning should be transmitted but sees that it wasn't, one way to explain the lack of transmission is to blame the receivers—to think that they are somehow deficient. Thus, as we saw for Rick—and as I've seen with numerous colleagues throughout my teaching career—poor student papers can be accounted for by assuming that students "betrayed . . . hardly any effort or time," or a host of other instantiations of the deficit model. Rick illustrated this mutually

enabling interaction between transmission and deficit models not only when considering his writing assignments but also when considering his responses to student writing. He generally assumed, for instance, that the intended meaning of his comments would be transmitted and that, if it wasn't, it was because of a deficiency in the student. He once said of a student revision, for instance, "This pisses me off." This utterance seems to stem from blame—from deficit and transmission models which assume that the student should have not only understood but also acted on all the suggestions Rick had made on the previous draft.

Similar assumptions came to light in one of our discourse-based interviews when Rick generalized about his response to a student's paper: "I think it makes sense to the student, if they take the time to read the stuff." A transmission model is suggested by the assumption that his responses should "make sense to the student," and a deficit model is suggested in the assumption that, if the responses don't make sense, it's because students did not "take the time" that, by implication, they should have taken. Of course, it is sometimes true that students do not take the time to read teacher responses (often because previous responses made them feel denigrated and discouraged). However, as we know from a rich literature on teacher response, students and teachers often have divergent interpretations of teacher response—not through any fault of the student, but because communication doesn't work that way; intended meanings are not automatically transmitted. To assume that they are demands an alternative explanation when one finds out that they have not been—and that alternative explanation is often, as we saw with Rick, an assumption that the student is deficient.

Conversely, Rick's rare shifts into a post-transmission model within the arena of pedagogical discourse seemed to be triggered by views of a student as extremely competent. Rick was particularly impressed by a sophomore named Jason:

> I mean, here's a kid that borrows books from you, comes to your office and talks about papers, and returns books that he borrows from you, and [laughs] you know, drops, drops more ideas in, in one page than m-, than some kids do all semester long, counting in-class comments, so— Um, y'know, what's, what's his background? Uh, how, how was he brought up? What's his gene code? How, what, how, you know, how come he, he puts me to shame when I was an undergraduate?

It is possible that this view of Jason as exceptional helped enable Rick to adopt a post-transmission model when reading Jason's papers. For instance, in response to Jason's first paper, on the film *Reservoir Dogs*, he wrote:

> It is a pleasure to critique an essay that begins at a level of analysis and writing already beyond what most will ever accomplish in this class. One can, though, judge something at the level it aspires to, which is what I hope to do in the following. . . . *With your essay, I could never decide how much the gay subtext of Dogs was a clear (but hidden) aspect of the film that any viewer might understand/experience, and how much was a "reading against the grain."* [He goes on to explain this term and contrast it with a Freudian repression model.] . . . . Part of the solution would be to tell readers up front if you are developing a Freudian repression model, or if you think *Dogs* is a

> mischievous attempt by Tarantino to undercut the hyper-masculine/homophobic gangster/crime genre, or if you are reading against the grain, or if it's a bit of all three.

When he read other students' papers, Rick seemed to assume that students' intended meanings were unproblematically transmitted to him; here, however, he explicitly notes that he doesn't know what Jason's intentions were. Although it is difficult to demonstrate, I believe this atypical assumption that he did not have access to Jason's intended meaning can be traced to the very sophisticated nature of Jason's text and to his belief that Jason "puts [him] to shame when [he] was an undergraduate." Although Rick himself believed that there was nothing in *Reservoir Dogs* to suggest an undercutting of the hyper-masculine gangster genre, he successfully avoided imposing his interpretation of the film onto Jason's paper—something he did not succeed in doing with other students—perhaps because he saw Jason as being able to "out-interpret" him. At the very least, his belief that Jason was as competent as he was, if not more so, may have enabled his assumption that Jason might have a different—and valid—interpretation of a film. While the data quoted here do not demonstrate a solid relationship between Rick's reliance on a particular model of communication and his assumptions about Jason's competence, it suggests the possibility of such a relationship—especially given that it is part of a larger pattern that characterized not only Rick's reading of student texts but also his assumptions about how students read his responses.

When conceptualizing how students read his responses, Rick's shifts out of a transmission model were again triggered by Jason. In contrast to statements such as "I think it makes sense to the student, if they take the time to read the stuff" stands Rick's comment on his response to Jason's third paper: "[The response is] fuzzy. . . . hopefully a stimulating, uh, you know, footnote to his paper, or something that maybe opens up, uh, you know, extends his thesis a little bit further." The shift out of a transmission model is suggested by his description of the response as "fuzzy" and by his assumption, implied by the words "hopefully" and "maybe," that he couldn't predict the effect his response would have. His reliance on a post-transmission model with Jason was further suggested by his appreciation of revisions that frequently did not address his comments on the original draft. In contrast to the previously-discussed student revision that "piss[ed] [him] off," Jason's revisions did not seem to bother Rick a bit; he spoke very positively of them and never commented on the numerous suggestions that went unaddressed.

Rick's high opinion of Jason, of course, did not trigger the shifts into a post-transmission model in a vacuum, for interacting with his assessment of Jason's talent was the nature of Jason's texts and the nature of his responses to them. Given that Rick thought Jason to be one of the very best undergraduates he had ever taught, it is not surprising that his papers were very impressive, both in the ideas presented and in his control of language. These papers elicited from Rick a different type of response—a response that, rather than imparting an expert view of what exactly a paper needed in order to be improved, sought to provide food for thought from the stance of a colleague who realized that his ideas may or may not be accepted. Thus when Rick reveals a shift into a post-transmission model by saying that his response was "fuzzy" and would "maybe" extend Jason's thesis a bit further, it is important to realize that the shift into a post-transmission

model was triggered not just by a single factor but by the *interaction* among Jason's texts, the nature of Rick's responses, and, perhaps most saliently, Rick's perceptions of Jason's competence (as influenced not only by Jason's papers but also by his visits to Rick's office and his borrowing and returning of Rick's books).

Another important influence that triggered shifts between transmission and post-transmission models was the teacher's perception of task difficulty. As we will see Lynn doing too, Rick tended to shift into a post-transmission model when he saw the task undertaken by students as difficult. A case in point is the task of formal analysis, an endeavor that Rick repeatedly referred to as very challenging. Discussing his response to a student whom he had told to do more formal analysis, Rick's language implies a post-transmission model:

> I end up saying the same things to students . . . more formal analysis, and
> I'm just wondering if this isn't some sort of mad quest I'm on, or something.
> Uh, 'cause it is that, I mean, it's, it's one of those things, it's, talk is cheap.
> It's easy to say, "Do it, and, uh, and make it matter. Make it worth
> something," but, uh, I don't know.

A shift out of a transmission model (or at least out of a simple transmission model) is suggested by Rick's view that "talk is cheap" and that he may be on a "mad quest" when he tells students to do more formal analysis. It is easy to understand Rick's point here, for when the task is difficult, it is logical to assume that intended meaning won't necessarily be transmitted; the more difficult the task, the less likely it is that someone will be able to easily follow directions. The problem here is that, as we know, many tasks perceived as easy by the teacher are in fact very difficult for students (witness Joel's attempt to fulfill Rick's expectations in the first paper).

The teachers' perceptions of task difficulty may go hand-in-hand with their assumptions about student competence, for when teachers recognize how difficult a task is, they are probably less likely to judge a student as deficient for not initially succeeding at the task. This potential interrelationship between perceptions of task difficulty and perceptions of student competence echoes the interrelationship we saw between deficit and transmission models. Understanding these interrelationships, and the importance of influences such as the teacher's training and arena of discourse, will ultimately help us gain insight into how we can address the problem of transmission models (in cases where we deem them a problem, which will probably not be every case). This understanding will be further enriched by discussing Lynn's case, which illustrates many of the same patterns we've just seen with Rick.

Accounting for Lynn's Shifts

As was the case with Rick, Lynn's shifts in and out of a transmission model were triggered by a complex of interrelated factors, including the arena of discourse in question, perceptions of student competence and effort—including deficit models of students—and perceptions of task difficulty. Especially salient in Lynn's case was the availability of alternative explanations to account for her students' actions and interpretations; this availability, I believe, played a key role in enabling particular communicative models. Interacting with these factors was Lynn's training.

As was the case with Rick, Lynn had been trained to view certain types of discourse within a post-transmission framework, and she was thus more likely to use this framework in conjunction with these particular types of discourse.

Just as Rick's training in film contributed to his shifts into a post-transmission model in the arena of film interpretation, Lynn's training in response to student writing seemed to have triggered similar shifts for her, for she assumed the possibility of different interpretations when considering both students' readings of her responses and her readings of students' texts. Not coincidentally, both of these areas were addressed in the course Lynn had taken in the research, theory, and practice of response to student writing. Largely because of this course, Lynn was very aware that responding to student writing within a transmission model was problematic. Moreover, for another graduate course in composition theory, she had done naturalistic research examining one instructor's responses to his students' writing, and she was struck by the divergence between what the instructor intended to convey and his students' interpretations of his responses. This awareness of divergent interpretation in this arena of discourse was very evident in both Lynn's practice and the ways that she talked about her practice. In describing her response practice, for instance, she said:

> . . . sometimes *I'm trying to emphasize that ME as a reader felt this way. Like I'm not the universal reader* um, but you know, it did make me feel this way . . . . it also sort of highlights that this, this is ME. And one thing *I don't want them to think that like I know all the answers. You know, I've had people argue over a grade and I've changed my mind.*

Rather than assuming that language is a conduit allowing the same meaning to be transmitted to all readers, Lynn not only recognizes the possibility that a different reader would have a different interpretation but is willing to seriously consider these different interpretations, even sometimes changing grades.

The influence of Lynn's training, and the way it shaped Lynn's practice within this arena of discourse, was also apparent when I asked her what qualities she thought were necessary to be a good respondent to student writing. She replied that a key factor was being a good reader. Elaborating on this, she said:

> I guess I feel like in part that means, you know, sometimes you give an assignment and you just get stuck in the way it wants to look, you know, you've got your little four part model, better look like that. You know, you just see if it matches and you X off the parts that don't match. *I guess I've tried to become like a little more open to other ways of doing things or if I see something that first strikes me as odd to keep my mind [open]. Okay, you've taught this assignment twice before, you're stuck on your model. You know, where is this person coming from?*

Here a post-transmission model is suggested by Lynn's efforts to be "open" to "where is this person coming from"—to imagine other interpretations of the student's writing. As with the previous quote, we see an important outcome of a post-transmission model: the willingness to change one's mind. This is suggested by Lynn's statement that she will keep her mind open if she

sees something that "first strikes [her] as odd." (Recall that two of the criteria I used to assess reliance on a transmission model included "absolute certainly in . . . interpretations" and interpretations that are "inflexible and stable over time," especially despite disconfirming evidence.)

Lynn's reliance on a post-transmission model within the arena of discourse of response was also apparent in her view of a professor in her department who did not seem to be aware that there might be different interpretations of student writing. Bringing him up in one of our interviews, she said, "I think like professors, like Smith with his 31 grades, who has the GALL to think that he is that kind of objective reader, you know, that is really nervy." For Lynn, this professor's "31 grades" (his habit of giving a paper, say, an 86.5%) seemed to imply his belief that he was an objective reader, that there was indeed a unequivocal difference between an 86% and an 86.5% and that he was a qualified judge of that difference because he had access to what the paper really meant. So strong was Lynn's commitment to recognizing readers' subjectivities that she was visibly annoyed by this professor's attitude.

Within the arena of discourse of response, Lynn's reliance on a post-transmission model was apparent not only in her metacommentary in interviews but also in many of her actual responses to students' writing. Her written responses were rife with such phrases as "If I understood what you meant . . ." and "Does this make sense?," which she often asked of her own responses as a way of encouraging students to let her know if they felt confused by what she'd written. Not only did she usually not assume she understood students' writing and they her responses, but, as these excerpts of responses illustrate, she made explicit her assumption that transfer of meaning was not something to be taken for granted. Her oral responses, given in class and in office hours, likewise made use of such phrases and additionally took advantage of the back and forth nature of the interaction to explicitly check her understanding of her students as well as their understanding of her.

Lynn herself attributed this response style, as well as her flexibility in reading student writing, largely to the training she'd had in the research, theory, and practice of response to student writing. This course had changed her practice so much, she noted, that her course evaluations became significantly better—and I believe this significant improvement happened because she became a better teacher, not because she had suddenly become even more charismatic and caring. (Any of these factors, in my experience analyzing both course evaluations and observing those same instructors teach, can account for very good evaluations.) Observing Lynn teach for a whole semester, interviewing her students several times, and reading all her responses to student writing confirmed my sense that much of her excellence stemmed largely from general reliance on post-transmission models, which in turn stemmed largely from the course in response.

While Lynn usually relied on a post-transmission model—and while she always seemed to rely on this model within the arena of response—she did shift into transmission models in other arenas of discourse. The most salient arenas in which Lynn sometimes relied on a transmission model were class discussions of the assigned readings and her own classroom discourse on the writing assignments. While these arenas alone didn't trigger a transmission model, they did when

interacting with particular assumptions about student competence, especially (but not only) deficit models of students.

A transmission model was sometimes cued, for instance, when a particular point had been discussed in class but wasn't apparent in a student's paper *and* when Lynn had a deficit model of a particular student. (When she liked students and perceived them to be dedicated, she tended not to rely on a transmission model in this arena of discourse.) Of all her students, Max was the one who triggered the most significant deficit model. A senior rhetoric major who was staying up late most nights working on a play, Max had been very late to class several times, and Lynn questioned his respect for her. His name came up when I asked Lynn how, out of all the possible issues in a student paper to comment on, she selected the ones that she did. She replied((After mentioning the higher vs. lower order distinction, she went on to say)) in part:

> If it's something that we just covered in class . . . you know, I may or may not comment on it. It depends on the other comments um but *if we covered it in class then, you know, I feel like you are responsible for it. I am gonna say something if it, you know, if it didn't happen. 'Cause sometimes I get a little irritated when somebody's like apparently been zoning out. Max has not gotten on my good side this semester* [laughs]. He did something, you know, in the introduction. It was very, like, writer-oriented . . . "I really learned a lot" [quoting Max's introduction]. *You know, I'll like definitely comment on something like that if it's just something that's been real directly addressed. Um, I feel like I really can't let that go.*

Thus while Lynn typically did not assume that she understood students' papers or they her responses, she sometimes did assume that students understood—or should have understood— what was said in class (cf. her assumption that if Max had not been "zoning out" he would have understood). Not only was meaning supposed to be transmitted from Lynn's mouth to Max's head, but it was then apparently supposed to be transmitted from Max's head to his paper. Along with this transmission model, a deficit model is suggested by Lynn's statement that she gets "a little irritated when somebody's like apparently been zoning out," for she had no evidence that Max was "zoning out"; she was merely making an inference (suggested by her word "apparently"), assuming the worst. Although my field notes do not note how attentive each particular student was on each day, Max was generally a diligent note-taker who seemed to be very attentive.

The interrelationship between deficit and transmission models within this arena of discourse is further illustrated by Lynn's reaction to Tom, a senior in civil engineering who appeared not to have put much time into his information interview report. Alluding to the classroom discourse on the writing assignment, Lynn said of Tom's report:

> *I'm not sayin' it's always wrong but it WAS explicitly what we talked about in class*. . . . I don't mean to stick too much to my own model, but. . . . that kind of discourse is not usually effective with anyone but your parents and maybe you know an admissions essay or maybe a thank you letter to somebody. . . . *I mean it did happen all the way throughout [Tom's memo] but it bugged me in the first paragraph because that's the only part of the*

> *example that we got to look at [in class]. Um, he just didn't put enough time*
> *into it is my impression. . . . The grammar stuff was distracting.*

Like Max but unlike other students in the class who didn't trigger a deficit model, Tom was held accountable for not receiving the information transmitted in the class discussion of the writing assignment. That he should have received the transmission (a "messy" transmission model) was suggested not just by Lynn's comments above, but also by his low grade on the assignment. Finding an appropriate measure of accountability, of course, is a gray area; while teachers shouldn't say, "Well, I can't expect the intended meaning of the assignment to be transmitted, so everyone gets an 'A,'" neither can we say, "None of the students in the class fulfilled the assignment so they all fail." What is striking here is less that Tom was held accountable than that other students (as we'll see later) weren't. As with Max, this differential treatment seems to have been triggered largely by a deficit model of Tom, suggested by Lynn's comments that "he just didn't put enough time into it" and that the "grammar stuff was distracting." These comments suggest that the grammatical problems betrayed a lack of time and effort—a deficit assumption that, as with Max, presumed the worst about the student. While I do not know how much time Tom put into the assignment, he did mention that he came from a high school in the rural Midwest—one that did not, he felt, prepare him to succeed in college.

Lynn's shifts into a transmission model, then, were sometimes triggered by a combination of deficit assumptions and whether or not a particular topic had been previously discussed. Previous discussions of a topic alone were not enough to trigger the model, nor did certain students always trigger the model. Particular students seemed to trigger the model only when something had been discussed in class that their writing did not seem to reflect *and* when Lynn had a deficit model of them. ((here cite PP--both 91 and book.)) ((Also quote her actual responses to Mike, Tim, and Matt--here? later?))

As in Rick's case, deficit and transmission models seem to be mutually enabling, with one difference. With Rick and Joel (as well as other students in Rick's class who triggered a deficit model), a transmission model seemed to enable a deficit model rather than the other way around. Rick thought badly of Joel and the other "C" students because he expected the language of the assignment to have been transmitted to them; it was only when he saw that they hadn't fulfilled his idea of the assignment—when he saw that his meaning hadn't been communicated—that he adopted a deficit model. While a transmission model seemed to trigger a deficit model for Rick, a deficit model seemed to trigger a transmission model for Lynn; the deficit model, I believe, was primary in her case. Because of Max's consistent lateness, for instance, Lynn had been irritated at him and tended to assume the worst of him from the beginning of the semester. It was largely her pre-existing irritation with him, I believe, that prompted her to hold him accountable with a transmission model. Similarly, with Tom the deficit model also seems to have been primary, as suggested by the differential treatment that he received; seemingly diligent students, for example, were not held to the transmission model, even when they, like Tom and Max, did not follow Lynn's oral advice.

This differential treatment is illustrated by the case of Mick, a junior in electrical engineering. In this and other cases, Lynn liked the student and relied on a post-transmission model. That Mick, unlike Max and Tom, was not held accountable despite not following Lynn's oral guidelines is illustrated in an interview with Lynn:

> I always like Mick's stuff too. Seems like he really interviewed somebody impressive. I still don't totally understand what DSP [a term in Mick's report] is. *I asked him to like clear that up a little bit in office hours and it didn't get a lot clearer. Um, but that may be just me.*

While Max and Tom were expected to understand, retain, and act on what Lynn said, Mick was not. We see a post-transmission model not only in Mick's not being held accountable, but also in Lynn's thought that "it may be just me"—that another reader might not have a problem with the explanation of DSP. That this post-transmission model stems at least in part from Lynn's prior perception of Max's competence, as opposed to the quality of his current work, is suggested by her statement that she "always like[s] Mick's stuff." In addition, it was clear from other interviews and from Lynn's personal interaction with Max that she liked not only "Mick's stuff" but also Mick himself. It is easy to see why; in addition to being very personable, Mick took the initiative to speak often in class and to see Lynn often in her office hours. The contrast to the cases of Tom and Max is striking, and this contrast is not atypical; there were at least two other students besides Max whom Lynn liked and did not hold accountable with a transmission model, despite work that didn't follow the guidelines discussed in class.

In Lynn's case as well as Rick's, it was not only the teacher's perception of student competence and effort that triggered a transmission model but also the teacher's perception of task difficulty. And again as with Rick, these two influences were interrelated. At several points throughout the semester, for instance, Lynn assumed that if the reading was short and relatively easy and that if students were silent or seemed confused, it meant they had not done the reading; she seemed to assume, in other words, that if they'd done the reading, its meaning would have been transmitted to them and they would have been able to discuss it. Of course failure to do the reading sometimes *is* why students are silent or confused, but Lynn typically assumed that this was *the* explanation rather than a possible explanation. During the second week of the semester, for instance, the class was discussing an assigned reading that I had also done and that I had found confusing. Lynn, describing how she felt about class that day, said:

> Then I felt like when I asked some of these questions today, I think it was Don, I asked, "Well, what do you think? Do you like what Kurt . . . said?" He said, "Well, I'm confused." You know, I felt like I was lookin' around and seein' people not really clear. *I think they would have been clear if they'd done the reading.* . . . You know, I know the reading doesn't all flow, but at the same time, *some of the reading is three pages long, you know, from tech writing textbooks, they're easy. Or it's from Locker. It's just not that confusing compared to the other stuff they have to read.*

In assuming that students had not done the reading (cf. Lynn's statement "I think they would have been clear if they'd done the reading"), Lynn was assuming the worst—arguably a deficit

model. This assumption, along with Lynn's perception that the readings were "easy," seemed to trigger a transmission model. This makes sense, given that the more accessible something seems, the more likely people are to feel that they have understood it, and the shorter it is, the easier it is for some people to process it. "Easy," though, was from Lynn's point of view, not mine or Don's. Don, an electrical engineering major, was probably not used to reading the technical writing textbooks that Lynn referred to, and he may well have found the reading as confusing as I'd found it.

That teacher perception of task difficulty played a key role in enabling a transmission model was further confirmed by another typical case of an "easy" reading. Significantly, this particular reading had been assigned for a Thursday, but since class time had run out, Lynn and her students were discussing it on the following Tuesday. An after-class interview suggested that Lynn's reliance on a transmission model was again triggered in part by the students' silence (and a possible deficit model) combined with the short length of the reading:

Lynn:	They didn't read. Nobody remembered what a mirror question is, and I'm assuming that nobody read it originally. It's like two pages. Um, this is just not as good of a class as I had last fall. . . . I wasn't giving as much work [then]; I think people were reading, but I wasn't giving as much work. . . .
Kathy:	So you're kind of getting the impression that, what gives you the impression that they're not reading?
Lynn:	They're not answering, that when I said OK go through and find the information, nobody seemed like they had read that. Of course they're not gonna remember all of it, it's five pages long. A good deal of it's background, though, that *if they read it once, I feel like they would know, they wouldn't be going back to look at the first page again.* Um, it was just silent for ten minutes while people were reading.

Here we can see the interaction among a transmission model, a deficit model ("this is just not as good of a class as I had last fall"), and the teacher's perception of task difficulty, which seems to be a primary driver in this situation. Not coincidentally, in both this and the previous case in which Lynn expressed an (arguably) deficit frustration with students' silence and apparent failure to read, she mentions the short page length of the assignment ("some of the reading is three pages long" and "[i]t's like two pages"). She seems to assume that, largely because of this short length—because of an easy task—students who had done the reading would not only understand it but also remember the key points. Indeed it is likely that if the students had done the reading, and if it had been discussed on the Thursday it was due, students would have been less silent. However, the delay in the discussion until the following Tuesday is an alternative explanation for why students could not discuss the reading. I suspect that I, for instance, like Lynn's students, would be unable to comment on a mirror question after a five-day delay. Still another alternative explanation, of course, is that students did the reading and remembered their understanding of it but were not confident enough in this understanding to participate in the discussion. Less important than identifying the "right" explanation for students' silence—or any such problem—is an awareness that such alternative explanations exist.

That Lynn's own perception of task difficulty shaped whether or not she shifted into a transmission model was further suggested just two days later, when Lynn did find the assigned reading difficult. She and I talked about this reading and the class discussion of it:

Kathy: That was just interesting, you know, that whole discussion of what the hell did [the author] MEAN.

Lynn: Yeah, yeah, I mean it didn't say EITHER people could do this or they could do that.

Kathy: Uh-huh.

Lynn: Um, it was unclear to me. I read the thing four, you know, many times actually. I knew that wasn't [clear]; that's why I picked that sentence [to discuss in class]. I know that that wasn't clear to them, that it couldn't be clear to them. . . . In fact when we were talking about it, I didn't care that much what they, you know, eventually decided, you know, it's still a little confusing.

Kathy: So you didn't care what they decided it meant?

Lynn: I care, you know, they took it apart but *it's hard to tell what they're saying, so somebody may argue it a little bit different.* As long as they work through it and sort of do that process. . . . You know, yeah, I will go through [their writing assignments] and make sure they have the recommendations that are actually in the article, that are relevant, but on the other hand you know that maybe somebody else has a conception, you know, this reader or the situation is, maybe, you know, some detail, something being irrelevant, you know, *they just have a different picture, you can never give somebody a complete scenario. Different assumptions or whatever*.

Here Lynn has shifted out of a transmission model; her difficulty with the reading seems to trigger her assumption that her students will interpret the article differently—that "you can never give somebody a complete scenario"—and that this is normal.

As the cases of Rick and Lynn suggest, then, teachers' reliance on transmission models are often accompanied by concomitant theories, however buried and unarticulated, about students. If we assume that a given meaning should have been transmitted to a student, we often develop a concomitant theory about why this transfer did not occur; sometimes this theory may be a deficit model, sometimes not. We saw, for instance, how Lynn theorized that students must be too busy to do the extra level of reading that she had added during the semester of the study. She also frequently referred to her students as "overloaded." In one interview, she revealed yet another theory about her students that worked hand in hand with her reliance on a transmission model. She noted that for her to lecture about the reading would be "sort of wasting time" since her students were so smart. She explained:

I mean, they've already proven that they can read a standard textbook. At least, you know, even the ones who seem like they're not as on the ball as other people, you know, they're at a pretty high level.

The assumption here is that the students' "high level" enables a transmission of meaning to occur. This goes hand in hand with the assumption that, if they didn't seem to understand the topic covered by the book, they must not have read, for if they would have read, they would have understood. Along these lines, it is not a coincidence that Lynn judged Max, one of the specific students whom she had held to the transmission model when she assumed he'd been "zoning out," to be one of the best writers in the class. While Lynn's reliance on a transmission model and her concomitant theories of why students were supposedly not reading sometimes assumes the best about her students (e.g., "They were overloaded"), it is noteworthy that other teachers' theories, like some of Lynn's other theories, do not always see students in such a light ((cites)).

((confirms (Chin's and Holland and Reeves') impt pt. that our interp. of meaning shaped not just by context but by our *interp*. of context. Impt. to see our interp. as such, to interpret our interpretations (Berthoff). Make this pt. here, or maybe later. Probably later.))

It is key to realize that a transmission model was not triggered by a stable set of factors but rather that such factors combined in different configurations to trigger the model in different situations. Both Rick's and Lynn's shifts into this model seemed to be influenced by a combination of their training, the arena of discourse in question, theories about students as groups and as individuals, and the perceived difficulty of the tasks performed by students. Some of these influences constituted available alternative explanations to account for students' actions and interpretations—explanations that helped enable transmission models. All of these influences formed a complex system in which one shift in, for instance, a theory about a student could then affect the whole system of interlinked assumptions and implicit models. While the complex of influences that triggered the two teachers' shifts into a given model of communication may be unique to them, understanding something about this complex will help us know where to start looking when we consider other people's models of communication. Equally important, our look at Rick's and Lynn's shifts illustrates the complexity of why we rely on a given model in a given instance. Recognizing and respecting this complexity is an important step in being able to reflect on—and thus gain more control over—the models of communication that shape how we communicate with each other.

Accounting for the Resilience of Transmission Models

The previous discussions of Rick and Lynn have illustrated, I hope, not only the influences that triggered shifts into transmission models but also the resilience of such models. This resilience is suggested by the fact that even Rick and Lynn—both of whom have been trained to recognize the problematic nature of transmission models—nonetheless consistently shifted into these models. I believe that many of us also shift into these models. I constantly notice myself and my colleagues making such shifts, and whenever I present data from this research at conferences, people in the audience tell me they realize that they too shift in and out of transmission models. Why, we might ask, is this model of communication—which we know is not robust—so resilient? While the previous section accounted for reliance on transmission models on a micro-

level, this section will account for this reliance on a macro-level, examining some of the broader sociocultural contexts that contribute to the tenacity of these models. Although not every factor outlined will shape each instance in which the model is operant, complex interactions of some of the factors should account for much of the resilience of transmission models.

Part of the explanation for the resilience of transmission models is Reddy's (1979) point that the conduit metaphor (as he refers to this model of communication) is a key semantic structure in the English language and thus leads us to believe and act as if the metaphor were true, as if language really were a conduit. This is an important point, although the causality here may not be one-way—in other words, the predominance of conduit metaphors and our tendency to think of language as a conduit may be mutually enabling. The sheer number of conduit metaphors certainly is great enough to be significant; in addition to the examples of conduit metaphors previously cited, Reddy points to over a hundred other examples of how the conduit metaphor describes communication as "the physical transfer of thoughts and feelings" (p. 167), and he notes that at least 70% of the "metalingual apparatus of the English language" is "directly, visibly, and graphically based on the conduit metaphor" (p. 177). This is significant given Eubanks' (2001) reminder that "In chorus, metaphor researchers have admonished us that metaphor is not mere decoration but the very essence of much human cognition" (p. 112). Certainly the mutually enabling relationship between language and thought provides us with a partial account of why transmission models are so resilient.

Just as fundamental to this account is that transmission models often do bear a gross resemblance to the way communication works; the conduit metaphor, like all metaphors, is grounded in some degree of reality. If, for instance, I tell my partner to pick up a paper on the way home from work, he does; if my mother tells me to bring my camera to the family reunion, I bring it. Likewise, if a teacher tells a class that papers are due on a given day, most students will indeed turn in their papers on that day. And, if a few students don't turn in their papers, they usually give reasons for not doing so, thus suggesting that they too knew they were supposed to—that the teacher's meaning had been transmitted to them even if they were unable to act on it. In many arenas of everyday life, then, enough of our intended meanings are transmitted in order for us to get what we want. We're surrounded with what seems to be evidence that the transmission model works.

Not only, in many arenas, do we get what we want by asking for it, but we are likely to assume that the fact that we got it means that our intended meanings were transmitted. Taylor (1992) speculates that we rely on the problematic assumption that mutual understanding is empirically verifiable. In other words, if we *act* like we understand each other, we take this as evidence that we *do* understand each other. For instance, I told the coordinator of a teaching program that I would no longer be able to teach for that program and explained why not, and she replied that she understood and took my name off the list of teachers for the next year; she acted as if she understood my intended meaning, so I was surprised to hear another teacher paraphrase the coordinator's explanation of why I could no longer teach for that program. It was not at all what I had meant to communicate, yet I assumed I had communicated my intended meaning since she acted as if I had. Had I not happened to run into the other teacher, and had we not happened to

talk about that issue, I would have continued to believe that I had communicated my intended meaning. More often than not, though, we don't happen to talk to someone who happened to talk to the person we originally talked to about the very issue we talked about, so it is easy for us to assume that we have transmitted our intended meaning based on the fact that people act as if we have.

The resilience of transmission models can also be accounted for by our tendency to make sense of the world by reducing complex data and overgeneralizing. Since it is not unreasonable, for instance, to expect that our intended meaning is adequately transmitted when we tell students to turn in their papers on the requested day, we may overgeneralize to more complex situations. Thus a teacher might assume that a class of first-semester students will receive the intended meaning of "be sure to support your claims" in the same way that they receive the intended meaning of "turn in your papers on October 1"—even though concepts such as "support" and "claim" are complex and variable in ways that concepts such as "turn in" and "October 1" aren't. Even for people who are aware of the problems inherent in a transmission model, the complexity of everyday life, with all its required tasks, does not always leave us room to analyze each situation individually in terms of its being adequately covered by a transmission model.

Still another reason transmission models are so resilient may be the pervasiveness of deficit models, for as suggested earlier, the two models can be mutually enabling. Deficit models are deeply entrenched not only on a micro-social level, as we saw with Rick and Lynn, but also on a macro-social level. Hull, Rose, Fraser, and Castellano (1991) write:

> For almost two centuries the dominant way to think about underachieving students has been to focus on defects in intellect or character or differences in culture or situation that lead to failure, and to locate the causes within the mind and language of the individual. We are primed by this history, by our backgrounds and our educations, to speak of students as deficient . . . (p. 315)

As illustrated by the discussion of Rick and Lynn, we are more likely to see students as deficient when we hold simple transmission models; such models lead us to expect meaning to be transmitted, so when meaning is *not* transferred, a handy explanation is a faulty receiver, a deficient student. Recall, for instance, Rick's assumption that "C" students "didn't even pay attention to . . . the basic structure of the assignment" and Lynn's assumptions that her students didn't produce the oral and written discourse she wanted because they didn't do the reading, were "zoning out," or "didn't put enough time into it." This interrelationship between deficit and transmission models can also be seen with teachers other than Rick and Lynn; the analysis of Minick (1996) that appears later in this section, for instance, suggests among other things that the "deficit/transmission trap" is pervasive. Indeed, I often see myself starting to fall into this trap, and I frequently hear colleagues bemoaning how students "just don't listen." It is normal to feel frustrated when students' don't receive our "transmissions," and it is unfortunately all too easy to explain the problem by assuming a deficiency on the part of students. The historical entrenchment and easy availability of this explanation is unfortunate, not only because deficit models hurt people but also because they further perpetuate transmission models.

Transmission models are perpetuated not only through deficit models and the previously mentioned influences but also through our vested interest in their success. There are many ways in which life would be easier if these models did accurately describe how communication works. Reflecting back on her experience as a student, for instance, Wink (2000) notes that when she was grappling with the concept of critical pedagogy, she wished that this concept could have been transmitted from her professors' minds to her own:

> One of the frustrating aspects of the study of critical pedagogy is our tendency to want others to transmit their knowledge of what it means to us. "*Just tell us what it means*!" During my initial encounters with these concepts, I was exactly like this. I felt angry, alienated, and excluded from this new knowledge. Repeatedly, I went to my professors to implore them to "just explain it." (p. 36; italics original)

Not only would life often be easier if others' ideas could be transmitted to us, but it would also be easier if our own ideas could likewise be transmitted to others. We want to control the meanings that we convey to others. Rommetveit's (1988) personal reflections on his relationship to a transmission model, which he calls the "myth of literal meaning," provide a powerful illustration of this:

> My present phobia against writing, I think, is somehow profoundly related to my somewhat morbid and personal concern with the myth of literal meaning. I may perhaps, and to an extent I would not like to admit, myself have been enslaved by the myth ever since I entered the academic world. This enslavement had in my earlier and more optimistic days a magic effect which made me euphorically go on writing. What happened, I suppose, was that I attributed entirely unwarranted features of credibility and truth to my own feeble and not-fully-thought through ideas the moment I "saw" them materialized in print, in principle preserved for eternity. This magically derived mood, however, has faded away. I have instead felt more and more stunned by realizing that whatever goes to print is beyond the scope of my modification and repair. Potential readers may freely modify and even erase it without any more mercy than I show when reading texts of authors I do not know.

> My dilemma may hence perhaps be summarized as follows: I wish that what I write were written in a universally valid code, so explicitly and with such accuracy of expression that what is meant by it were, in principle, unequivocally and literally available to anyone. Something deep down inside me—the intellectualized lust for power, Derrida might say—thus wants the myth of literal meaning to come true in my own prose. (p. 35; emphasis added)

Rommetveit also notes that others have a vested interest in transmission models and that this model is pervasive, or in his words, "lived" by "enlightened lay[people]." Who wouldn't agree with Rommetveit that the fantasy of writing in a "universally valid code" is appealing—that having our intended meanings be "unequivocally and literally available to anyone" would be an advantage?

Indeed this advantage is often seized, unwittingly or otherwise, by people in power; certainly any account of the resilience of transmission models must recognize that high status—the ability to control people and situations—and the perpetuation of transmission models can be mutually enabling. Rommetveit explicitly notes, for instance, that priests, scientists, and textbook writers have a vested interest in transmission models. This makes sense, for such models say that there is one "obvious" interpretation—and those in power get to say what it is. Carey (1989) notes that "the centre of this idea of communication is the transmission of signals or messages over distance for the purposes of control" (p. 15). Transmission models, then, are so resilient in part because they allow people to control meaning, and thus may be used often by those who both want this control and have the power to exercise it.

This problematic control interacts not only with transmission models but also with deficit models; these influences can work in interpenetrating ways to further buttress transmission models. This interrelationship will be illustrated by analyses of Mehan's (1996) and Minick's (1996) work. Minick, who studied six elementary school classrooms, notes that the teachers he observed frequently used a transmission model, or as he calls it, "representational speech." Defining representational speech as "attempts to construct close relationships between what is meant and what is said, between what is made known through an utterance and what is explicitly represented in language" (p. 346), he argues that representational directives appeared as a "distinguishable speech genre" (p. 358) in all classrooms observed and that indeed "formal training in following [them] is a recognized part of the school curriculum, beginning with the introduction of what are commonly referred to as 'listening exercises' at the kindergarten level" (p. 358).

This genre of representational directives appeared, Minick found, only when the students' actions threatened to interfere with the teachers' plans—only when control was an issue. One teacher, for instance, wanted to end a discussion of the library books that the children had in front of them and begin work on a story in the basal readers that were under the children's chairs. She told her students, "Please put your books under your chair. And, we are going to read a story which you are going to enjoy" (p. 355). Some children responded by putting all of their books under their chairs, but one student, Todd, saw the teacher begin to look at her basal reader and, putting his library books under his chair, took out his own reader and began to look at it, just as the teacher was doing. A few other students, watching Todd, did the same. Minick notes that the teacher "did not object to the children's 'misinterpretation' of her utterance until it became apparent that their looking through their readers might interfere with her effort to review new vocabulary before beginning to read" (p. 357). Only when her plan was threatened did she shift into a transmission model by saying, "Todd, did Mrs. W. say 'Open your book to . . . ' Did she? No, she did not" (p. 356) and "Excuse me. I have not good listeners today" (p. 357). Deficit and transmission models are implied by the assumption that, because the children interpreted the teacher's utterance in a way she didn't intend, they were not "good listeners." It is significant that this transmission model was triggered, as Minick notes, by the teacher's need for control, for teachers and others in similar positions of authority often need control. Given this pervasive need for control, the resilience of transmission models is even easier to understand.

Just as the analysis of Minick's study suggests the interrelationship among transmission models, deficit models, and the need for control, so too can we see this interrelationship through an analysis of Mehan's (1996) case study, "Beneath the Skin and Between the Ears: A Case Study in the Politics of Representation." Mehan studied a meeting held to determine whether a child, Shane, should be labeled as LD. Shane, who was tested as having a verbal IQ of 115, was intimidated by many classroom tasks, although his actual performance of those tasks was fine. Among those present at the meeting to discuss Shane's case were the school psychologist, Shane's teacher, his mother, and the school principal. Although Mehan's focus is on the extent to which these participants locate the problem "beneath [Shane's] skin and between [his] ears," and although he doesn't mention the transmission model per se, his description suggests that the participants in the meeting were using such a model. Those listening to the psychologist, for instance, seemed to assume that her intended meaning should have been transmitted to them, for while the mother and teacher were asked to clarify what they meant, the psychologist was not asked to do so, despite the fact that she spoke in the highly technical terms of her field—terms that were almost certainly unfamiliar to the others. Not only did the other participants act as if the psychologist's intended meaning was, or should have been, transmitted to them, but they unquestioningly accepted her recommendation—which they had disagreed with going into the meeting—that Shane should be labeled as LD. Mehan writes:

> When technical language is used and embedded in the institutional trappings
> of the formal proceedings of a meeting, the grounds for negotiating meaning
> are removed from under the conversation. Because the speaker and hearers
> do not share the conventions of a common language, hearers do not have the
> expertise to question, or even to interrupt the speaker. To request a
> clarification of the psychologist, then, is to challenge the authority of a
> clinically certified expert. The other members of the committee are placed in
> the position of assuming the psychologist is speaking knowledgeably and the
> hearer does not have the competence to understand. (p. 259)

Reliance on a "messy" transmission model—the assumption that the psychologist's intended meanings would have been conveyed if not for the "faulty receivers"—is part of what enables her control of the situation, for it allows her analysis and recommendations to prevail. This transmission model is related not just to this need for control, but also to a deficit model (suggested in the assumption that "the hearer does not have the competence to understand"). Again, the interrelationship among deficit models, transmission models, and the need for control helps account for the resilience of transmission models, for the more pervasive one is, the more pervasive they all are.

Interacting with communicative models and the issue of control are ideologies of selfhood and task accomplishment. Discussing his fieldwork in Samoa, for instance, Duranti (1993) notes that Samoans do not generally expect speakers' intended meaning to be transmitted into the listeners' received meanings, and he argues that this model of communication is rooted in Samoans' view of self and task as jointly accomplished. If, in other words, tasks and selves are seen as joint accomplishments, then meaning is likely to be seen this way too. Control, I'll suggest, is also a factor here, for if tasks, selves, and meaning are seen as joint accomplishments, then no one

person has control—that, too, is distributed. Duranti contrasts this "joint accomplishment" view to a notion closely related to the transmission model, the Western "personalist" view of meaning outlined by Holquist. Note the interrelationship between a sense of individuality and models of meaning-making:

> [The "personalist"] view holds that "*I* [as speaker or writer] own meaning." A close bond is felt between the sense I have of myself as a unique being and the being of my language. Such a view, with its heavy investment in the personhood in individuals, is deeply implicated in the Western Humanist tradition. (Holquist, as cited in Duranti, 1993, p. 40)

Again, interacting with a transmission model here is the notion of control (suggested by the idea that the speaker or writer can "own" meaning) and a model of the self-as-individual. This relationship between local theories of selfhood, control, and models of communication is further confirmed by Duranti when he notes an exception to the Samoans' treatment of meaning as negotiated. He tells us that people of high status are seen as "owning" their own meaning and that their words are taken as the truth. Not coincidentally, these people are also allowed to be "more individualist" (p. 44). While most Samoans, for example, do not have exclusive access to household commodities, a high chief can own commodities just as, Duranti tells us, "he can also 'own' . . . the meaning of his own words and expect others to comply with his own interpretation" (p. 44). Again we see a mutually enabling relationship among a transmission model, control, and a local theory of selfhood. Given that Western cultures are so steeped in ideologies of individuality, it is no wonder that concomitant transmission models (and the control that they enable) are so pervasive.

Transmission models, then, are buttressed by a complex, dynamic, and interpenetrating host of influences. As we saw with our micro-social analysis of the cases of Rick and Lynn, particularly salient influences that can enable transmission models include the arena of discourse (related to the teachers' training), perceptions of task difficulty, and perceptions of student competence and effort (especially deficit models). The macro-social analysis also suggests that deficit models are key influences, along with the pervasiveness of the conduit metaphor in our metalingual apparatus, the real resemblance between transmission models and the way communication actually works, our tendency to reduce complex data and overgeneralize, assumptions about what counts as evidence that mutual understanding is empirically verifiable, our vested interest in being able to communicate our intended meanings, the power and control enabled by transmission models, and ideologies of individuality. Although this is surely an incomplete account of the resilience of transmission models, it nonetheless suggests why people—even teachers trained in post-transmission models—are likely to rely at times on a transmission model.

Looking Forward

Because our understanding of student-teacher communication, and communication in general, is impoverished without the notion of communicative models as a category of analysis, more research needs to be done in this area. We need to analyze the influences triggering reliance on

transmission models in a wider variety of contexts, beyond the two classrooms examined here. We should also explore more fully the sub-families of models within each larger family and interrogate boundaries between models. Not only will this interrogation help us to better delineate models (for instance, post-transmission vs. sophisticated transmission models), but it should also help us to recognize and examine fluidity across boundaries.

Even more important, we need to consider the implications of our ability to raise implicit models to conscious awareness and thus to gain more control over which models we draw on. As we saw, for instance, training helped Rick and Lynn avoid relying on a transmission model in many situations; indeed, they did not rely on this model within the arenas of discourse in which they were trained. Teacher training, then, could encourage teachers to self-monitor their models of communication within arenas such as the following: writing prompts; readings of student work; response to student writing; and classroom discussion, including but not limited to discussions of readings and assignments.

Teacher training could also help prospective teachers to better assess task difficulty. Given that several of the tasks Rick and Lynn assigned were more difficult than they realized, and given how these assumptions about task difficulty seemed to enable deficit models and transmission models, this training could be invaluable.

That training and conscious reflection can give us some control over which models we draw on raises the question of whether we should try to rely on a given model relatively consistently or whether shifts between models are useful. This is an important issue, for determining which model of communication is used in a given situation clearly has political implications. At the heart of the issue, as previously suggested, is who gets to control meaning. Consider, for instance, the study of the two college classrooms against the discussions of Mehan, Minick, and Duranti: when Rick and Lynn, like Mehan's psychologist, Minick's elementary school teachers, and Duranti's high chief, make use of a transmission model, it is their interpretation of utterances—not others' interpretations—that counts. Transmission models, it appears, can reflect and enable unequal relationships.

Our initial response to this political problem may be to wish that everyone would always draw on a post-transmission model—to wish that people did not privilege their own interpretations as the "real meaning." Indeed, this article has problematized reliance on transmission models because many of the instances in which Rick and Lynn relied on them had problematic outcomes. (Many of these instances and problematic outcomes are not discussed here; they will be elaborated in subsequent work). Many situations, however, do not necessarily warrant the rejection of transmission models. Recall for instance the "Honey, pick up a newspaper" and "papers are due October 1" scenarios; as previously mentioned, I can reasonably assume that, having uttered these statements, I will get what I ask for—or that if I don't, it is because someone forgot and not because there was a divergent interpretation of the utterance. While there may indeed be situationally insignificant divergences such as the word "newspaper" having a different connotation for my partner (maybe he finds most of the stories to be sensationalized while I find

them to be valuable), it is not unreasonable to assume a high degree of transmission of meaning here.

Indeed, there are situations where we should assume transmission of meaning—where people should be held accountable for having understood an utterance in the way it was intended. A case in point is the feminist motto "Which part of 'no' don't you understand?" Eubanks (2001) makes the important point that without the transmission model (or as he calls it, the conduit metaphor), "we have little basis for ethical objections to lying, concealment, failure to warn, failure to be responsive, and so on" (p. 99). We may find, paradoxically, that in some situations we feel a moral imperative to rely on a transmission model while in other situations we feel an equally strong imperative to reject this model. Looking forward, it will behoove us to think carefully about how to distinguish one situation from the other.

It will also behoove us to continue seeing people's implicit models of communication through the lens of activity theory, for this lens emphasizes that our models of communication don't exist in a vacuum but rather shape and are shaped by a complex system of interrelated micro-social and macro-social contexts. Using activity theory as a theoretical lens, moreover, should help us break out of one of the most pernicious outcomes of relying on transmission models: the tendency to assume that student texts convey clear transmissions of students' intentions and abilities. Prior (1998) astutely notes that often "Student texts are seen as crystallizations of students' intelligence, knowledge, skills, attitudes, and effort, magic mirrors teachers gaze into to discover who is the most literate on the roster" (p. 142). We tend to see student texts in this counterproductive way only when such texts are decontextualized—only when we act as if context doesn't shape meaning and thus as if students' texts clearly transmit to us their intentions and ability. More context-sensitive approaches such as activity theory motivate us, instead, to seek out more knowledge of context—knowledge both about what students intend to communicate as well as the logic that underlies these intentions.

Activity theory, in addition, helps us both to appreciate the significant influence of past history as well as to hope for future change. Recall Engeström's (1996) point that the disparate elements within activity systems can be understood in terms of historical layers and that these systems contain "sediments of earlier historical modes, as well as buds or shoots of its possible future" (p. 68). Certainly we see earlier historical modes when we note the role of a deficit model in enabling transmission models; recall for instance Hull, Rose, Fraser, and Castellano's (1991) observation that the deficit model has been the dominant way to think about underachieving students for almost two centuries. Moreover, as we saw with Minick's study and Rick and Lynn, teachers apply deficit models not only to underachieving students but to many other students as well; the historical entrenchment, then, is likely to be even broader than Hull, Rose, Fraser, and Castellano suggest. Like deficit models, transmission models have been dominant for centuries (cf. Carey, 1989; Longo, 2000). Moreover, we might infer from Minick's study that every one of us—for we have all been students—has intermittently but consistently been held to a transmission model. And given that not only the general population but more specifically all teachers have been students for many years, we can see how this historical entrenchment fosters a self-perpetuating phenomenon. Marshall and Smith (1997) write:

> . . . we have a substantial body of research that suggests that the teaching
> we witness will powerfully shape the teaching we practice. Dan Lortie in his
> 1975 study of teachers pointed to our "apprenticeship of observation": twenty
> or more years of watching teachers perform cannot help but influence new
> teachers as they make their way into the profession, and that influence will,
> almost by definition, pull instruction back in a conservative direction—to the
> way it was done before. The "voices of teachers past" inhabit us—and perhaps
> haunt us—as we find our own voice in the classroom and, in a Bahktinian
> sense, we may find ourselves speaking their words with our mouths,
> reproducing the speech genre that is instructional discourse each time we
> lead a discussion. (p. 264)

However, these "sediments of earlier historical modes" are being counter-balanced—and may eventually be overcome—by the "buds . . . of [a] possible future." Composition studies, for instance, has been amassing a rich and valuable literature problematizing the deficit model (e.g., Chin, 1994; Hull, 1999; Hull and Rose, 1990; Hull, Rose, Fraser, and Castellano, 1991; Porter, 2001; Shaughnessy, 1977, among others), and we will continue to pursue this important line of thought. We have also amassed a body of work problematizing transmission models (e.g., Bizzell, 1982; Bowden, 1993; Longo, 2000; Miller, 1979; Reddy, 1979). This work on transmission and deficit models, combined with the previously mentioned approaches in teacher training, has the potential to make a real difference—especially if we respect the resilience of what we are up against and redouble our efforts accordingly. Ultimately, many of us will strive for the active and continual maintenance of trust that it will take to counter deficit and transmission models, and we will learn to actively reflect on—and gain more control over—the models of communication that can so significantly affect students' learning and lives.

References

Bartholomae, D. (1986). Inventing the university. *Journal of Basic Writing, 5*, 4-23.

Bizzell, P. (1982). Cognition, convention, and certainty: What we need to know about writing. *Pre/Text, 3*, 213-243.

Bowden, D. (1993). The limits of containment: Text-as-container in composition studies. *College Composition and Communication, 44*, 346-379.

Carey, J. (1989). *Communication as culture*. New York: Routledge.

Chin, E. (1994). Redefining 'context' in research on writing. *Written Communication, 11*, 445-482.

Coupland, N., Wiemann, J. M., & Giles, H. (1991). Talk as 'problem' and communication as 'miscommunication': An integrative analysis. In N. Coupland, H. Giles, & J. M. Wiemann (Eds.), *"Miscommunication" and problematic talk* (pp. 1-17). Newbury Park, CA: Sage.

Duranti, A. (1993). Intentions, self, and responsibility: An essay in Samoan ethnopragmatics. In J. Hill & J. Irvine (Eds.), *Responsibility and evidence in oral discourse* (pp. 24-47). Cambridge: Cambridge University Press.

Engeström, Y. (1996). Developmental studies of work as a testbench of activity theory: The case of primary care medical practice. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 64-103). Cambridge: Cambridge University Press.

Eubanks, P. (2001). Understanding metaphors for writing: In defense of the conduit metaphor. *College Composition and Communication, 53*, 92-118.

Freedman, S. W. (1987). *Response to student writing* (Research Report No. 23). Urbana, IL: National Council of Teachers of English.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.

Goodwin, C., & Duranti, A. (1992). Rethinking context: an introduction. In A. Duranti & C. Goodwin (Eds.) , *Rethinking context: Language as an interactive phenomenon* (pp. 1-42). Cambridge: Cambridge University Press.

Gumperz, J. J. (1982). *Discourse strategies*. Cambridge: Cambridge University Press.

Herrington, A. J. (1992). Assignment and response: Teaching with writing across the disciplines. In S. P. Witte, N. Nakadate, & R. D. Cherry (Eds.), *A rhetoric of doing: Essays on written discourse in honor of James L. Kinneavey* (pp. 244-260). Carbondale: Southern Illinois University Press.

Hull, G. (1999). What's in a label: Complicating notions of the skills-poor worker. *Written Communication, 16*, 379-411.

Hull, G., & Rose, M. (1990). Toward a social-cognitive understanding of problematic reading and writing. In A. Lunsford, H. Moglen, and J. Slevin (Eds.), *The right to literacy* (pp. 235-244). New York: Modern Language Association.

Hull, G., Rose, M., Fraser, K., & Castellano, M. (1991). Remediation as social construct: Perspectives from analysis of classroom discourse. *College Composition and Communication, 42*, 299-329.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Longo, B. (2000). *Spurious coin: A history of science, management, and technical writing*. Albany: SUNY Press.

Marshall, J., & Smith, J. (1997). Teaching as we're taught: The university's role in the education of English teachers. *English Education, 29*, 246-268.

Mehan, H. (1996). Beneath the skin and between the ears: A case study in the politics of representation. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 241-268). Cambridge: Cambridge University Press.

Miller, C. (1979). A humanistic rationale for technical writing. *College English, 40*, 610-617.

Minick, N. (1996). Teacher's directives: The social construction of 'literal meanings' and 'real worlds' in classroom discourse. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 343-374). Cambridge: Cambridge University Press.

O'Connor, K. (1995). Literary interpretation and the student reader: What literature professors can learn from compositionists. Paper presented at the Conference on College Communication and Composition, Washington, DC.

O'Keefe, B. J. (1988). The logic of message design: Individual differences in reasoning about communication. *Communication Monographs, 55*, 80-103.

O'Keefe, B. J. (1991). Message design logic and the management of multiple goals. In K. Tracy (Ed.), *Understanding face-to-face interaction: Issues linking goals and discourse* (pp. 131-150). Hillsdale, NJ: Erlbaum.

Odell, L., Goswami, D., & Herrington, A. (1983). The discourse-based interview: A procedure for exploring the tacit knowledge of writers in non-academic settings. In P. Mosenthal, L. Tamor, & S. Walmsley (Eds.), *Research on writing: Principles and methods* (pp. 221-236). New York: Longman.

Porter, K. J. (2001). A pedagogy of charity: Donald Davidson and the student-negotiated composition classroom. *College Composition and Communication, 52*, 574-611.

Prior, P. (1991). Contextualizing writing and response in a graduate seminar. *Written Communication, 8*, 267-310.

Prior, P. (1998). *Writing/disciplinarity: A sociohistoric account of literate activity in the academy*. Mahwah: Lawrence Erlbaum.

Reddy, M. J. (1979). The conduit metaphor: A case of frame conflict in our language about language. In A. Ortony (Ed.), *Metaphor and thought* (pp. 164-201). Cambridge: Cambridge University Press.

Rommetveit, R. (1988). On literacy and the myth of literal meaning. In R. Saljo (Ed.), *The written world: Studies in literate thought and action* (pp. 13-40). Berlin: Springer-Verlag.

Shaughnessy, M. (1977). *Errors and expectations*. New York: Oxford University Press.

Sommers, N. (1982). Responding to student writing. *College Composition and Communication, 33*, 148-156.

Taylor, T. (1992). *Mutual misunderstanding*. Durham: Duke University Press.

Walvoord, B,. & McCarthy, L. (1990). *Thinking and writing in college: A naturalistic study of students in four disciplines*. Urbana, IL: National Council of Teachers of English.

Wink, J. (2000). *Critical pedagogy. Notes from the real world* (2nd ed.). New York: Longman.

Notes

[1] The author wishes to thank Rick, Lynn, and their students for participating in the research. Thanks also to Paul Prior, Greg Colomb, Gail Hawisher, Chuck Bazerman, and David Russell for their help with previous drafts of this manuscript.

[2] It might be argued that there is some overlap in these families of models insofar as a sophisticated transmission model might see context as the "interference."

What Is Not Institutionally Visible Does Not Count: The Problem of Making Activity Assessable, Accountable, and Plannable

Charles Bazerman

Department of Education
University of California, Santa Barbara
Santa Barbara, California 93106
bazerman@education.ucsb.edu
http://www.education.ucsb.edu/~bazerman/

Abstract

This hypertext examines from an activity theory perspective the vexed problem of assessment and its relation to planning, accountability, curriculum, and learning. Assessment although only part of the educational process has implications for almost all of education. Local, state, and federal policies that have put great weight and high stakes on a battery of assessment tools that stand outside the daily life of the classroom but are intended to hold classrooms, teachers, and schools accountable for results.

While situated evaluation is an aspect of most human practices, institution-wide testing creates substantial difficulties for the local practices of each class, and particularly creates tensions between student-centered classroom practice and subject-centered expectations. Such tensions have been a continuing puzzle for progressive education. Dewey and his followers regularly preferred to keep evaluation and decision-making local, but for various institutional reasons had to seek larger ways of assessing student achievement without ever being able to develop fully appropriate assessment tools. The teaching of writing has faced a similar dilemma, with standardized forms of writing assessment setting reductionist definitions and expectations of writing, and not directing students towards the highest levels of accomplishment. This study considers genre and activity analysis as the basis for defining and assessing writing tasks through analysis of materials collected from a complex sequence of social studies writing assignments on the Maya from a sixth grade class.

Contents

1. Overview

This hypertext is an attempt to understand from an activity theory perspective the vexed problem of assessment and its relation to planning, accountability, curriculum, and learning. Assessment has been continuingly problematic because, although it is only one part of the educational process, it has implications for almost all of education in the way it appears to pass judgment on students, teachers, classrooms, and institutions. These implications have been heightened by local, state, and federal policies that have put great weight and high stakes on a battery of assessment tools that stand outside the daily life of the classroom but are intended to hold classrooms, teachers, and schools accountable for results. Current policy initiatives elevate large scale testing into the dominant, if not sole tool, for gathering information and understanding schools.

This hypertext is also an experiment to see if activity theory may itself provide a tool for developing more challenging, situationally relevant, but generalizable and comparable broad-scale assessment. That is, I wish to explore whether the idea that all local activities are constructed out of typified elements, particularly genres, allows us to compare meaningful situated performances across many different settings. Genres and activity systems, I believe, can help guide us through the dilemmas of local learning and large-scale assessment, just as they guide us through the conundrum of living our improvised local lives with some sense of order, expectation, and relevant skill.

I am particularly interested here in writing as a site of assessment for a variety of knowledges and skills. Almost all assessment, particularly within schooling as in other bureaucratized institutions, requires some form of inscription—even if only a check mark on a form by an assessor watching a student accomplish a gymnastic task. But academic assessment typically involves the person being assessed to inscribe some choice—true-false, a filled-in bubble on a score sheet for multiple choice, or a more extensive and open statement. Of course the more one gives students space to express their thought and knowledge the more control students have control of the discursive space—that is they need to write more in a more open-ended format. This puts higher and more complex demands on their abilities to formulate a response within the situation and allows them to display more talents including those around complex decision-making about relevance of response, developing reasoned relationships among statements, and

selecting ideas and resources to represent in the text. However, as skills, decisions, and products displayed in open-ended tasks become more complex, so do the tasks of evaluating them.

I am also interested in how assessment enters into writing and the impact of assessment regimes on writing and writing education and the use of writing in all forms of education. How people are assessed, how writing instruction is assessed reflects what is valued and evaluated in the competence-- even when "the writing" itself is not putatively the thing expressed, but only "the knowledge" or "the thought" expressed in the writing. Indeed, in such cases where writing is removed from focal attention we have identified the hidden curriculum imperative of writing throughout the academy, across the curriculum.

If writing is indeed, as the articles in this collection all argue, a crucial site at which we construct ourselves and societies, the assessment of writing is the site at which we examine, reflect upon and evaluate who we are becoming as individuals and societies. As writing then serves as an account of who we are, it becomes the place at which individuals, groups and institutions become accountable to evaluation. This evaluation in turn constrains, directs, rewards and punishes particular lines of development, affecting our planning for who we become in our writing and who our students become within our curriculum.

Because issues of assessment are so complex and unsettled--with so much history, so many interested parties, and so many dimensions—I do not find myself able at this juncture to offer a coherent, linear analysis of the issues, problems, and solutions. I have tried to give some shape and substance into my inquiry by two sorts of research. First I follow the history of how Dewey and his followers (variously characterized as progressive or child-centered) dealt with assessment issues. Secondly, I present ethnographic data on a complex of activities in a fifth-grade classroom that reveal something about how the organization of tasks and assigned genres are related to the knowledge and skills displayed in various documents. These sites of inquiry have sharpened the issues, but neither provides the magic solution.

Yet I still feel that an activity approach offers significant help in understanding the issues and pointing to potential lines of solution. Consequently I am putting my thoughts together in a series of small essays or sorties into the issue in ways that are more or less loosely connected. They may be read sequentially, individually, or by following internal links.

Because this issue is clearly not at an end, I will also be including a forum for people to comment on aspects of my presentation and then to continue the discussion.

2. A Personal Preface

As a teacher and researcher of writing, I have long resisted devoting much time and attention to assessment. Assessment, as a separable concern apart from accomplishing an immediate task, has seemed to me to be peripheral to the main business of writing. The entire leverage for improvement, instruction, and purposeful, growth-inducing practice, seemed to me to lie in addressing a communicative task at hand. A person works hard at writing, developing practical

skills, in order to do those communicative things that writing does. Within motivating situations, accomplishing a locally relevant purpose becomes an immediate intrinsic reward. Ultimately the most powerful assessment is how well the writing has worked in the situation and the most important assessment is how one can make writing work better in the future.

Over the years I have held that in order to improve writing we need to understand in fact what writing does within the situations and interactions it functions within, and the means by which it accomplishes or fails to accomplish those tasks. This functional, pragmatic approach has guided my research, theory, and pedagogic practice. In providing guidance to students and feedback on their drafts and final copies, I focused on what students wanted to accomplish in situations and how texts could accomplish it rather than formal performance judged against a general, formal standard, or even a genre-based standard. Genre could provide parameters for defining the rhetorical problem and possible communicative solutions, but could not speak specifically to the effectiveness of any particular text.

Assessment, on the other hand, I understood as something apart from writing. In seeing them as distinct, I was following the pattern set in the literature, which defined assessment largely as an institutional issue (see, for example, Cooper & Odell, 1977; White, Lutz & Kamusikiri, 1997; Wolcott, 1998). Of course institutions had good institutional reasons for assessment, but I was happy to let others more bureaucratically minded worry about that--and I felt we should not let the field be driven by bureaucratic concerns. Given the important institutional roles of composition in higher education in the United States, I appreciated why so many in composition studies seemed concerned by assessment but was troubled that the amount of disciplinary attention it drew and certainly had no desire to contribute to it. I also understood how the testing that was in place had enormous consequences for students and curriculum, focusing the attention of both on testing demands. During my two decades at City University of New York I witnessed and viscerally felt the great strains the Writing Assessment Test (which served as both a placement exam and a requirement for upper division status) placed upon the basic and ESL writers in my classes. I also struggled with developing a curriculum for my own students and for the department that would meet the demands of this exam.

Another layer of my resistance to devoting much attention to assessment came from my own history as a student. Throughout my school career, from primary grade IQ tests through graduate school entry exams, I was very successful at standardized tests, especially the multiple-choice sort. I consistently got top scores, and on the bases of these scores won awards and entry into special programs, was admitted to elite educational institutions. My ability to do well at these tests and my consequent participation in elite programs became part of my identity and personal sense of self-worth, which included distinguishing myself from my classmates.

Gradually, however, I became aware that these tests were not measuring my real learning or accomplishment, and may have even been distracting my attention and commitment from more important forms of learning and accomplishment. As I matured, I began to realize that being better at tests was a pretty slim reed on which to build an identity and a life. While I was grateful for the opportunities success at tests brought me, I started to see that good test results hardly

made a difference in the meaning or value of my life. Further, it eventually penetrated my self-justifying haze that while my test results granted me privileges and experiences, they denied privileges and experiences to others who would have also benefited from the experiences. Then as a teacher I started to understand the self-fulfilling nature of expectations, tests, and experiences for my students. I found that students could perform far beyond previous expectations if you engaged them at a different level and provided pathways for growth.   Most assessment measures, however, simply reinforced the student's current position. Particularly for those testing poorly, assessment measures serve as blunt instruments of exclusion, keeping students from just those engaging experiences that might make learning meaningful.

I recognize, however, that we can never escape assessment, which is a central part of any reflective practice. Every time I write, revise, or just choose words, I assess the effectiveness of my emerging text. And every time I put comments on a student's paper, or give writing advice, or even discuss a student's possible choices in writing, I engage in assessment. Assessment is inherent in any performance, teaching, or learning task, because writer, teacher, and student are focused on improving knowledge, understanding and performance. Such situated assessment of performance in process is particularly strong in craft-like tasks like writing or music performance that allow for improvement and choice-making based on self-monitoring and reflection. Self-monitoring, reflection, and consequent modification of activity has been from the time of Vygotsky (1986) a key construct of many learning and performance theories (see, for example, Bruner, 1990; Schön, 1983; Giddens, 1984; Hillocks, 1995). As a result I have seen these literatures of assessment in performance as being of much greater interest and importance than the literature on institutional assessment. I have also found useful and interesting the literature developing tools for responding individually to student writing (see, for example, Anson, 1989; Lawson, Sterr & Winterowd, 1990; Straub, 2000) *(see section 7)*.

From the point of view of writing and the teaching of writing, I have seen for the most part little necessity for assessment beyond the actual performance of the learning tasks and production of the text objects. Writing leaves its own record of success and failure, competence demonstrated and things to be worked on. Further the teaching of writing through conferences, group discussion, teacher feedback, peer editing, revisions and other processes of current pedagogy provided so much situated and task-relevant assessment that there seemed little purpose for further formal assessment except for institutional accountability and placement. Even the standard university course assessment tools of mid-term and final exams seemed redundant or inappropriate when we had so many pieces of commented-on work throughout the term to track in great detail what the students have learned and accomplished. The practices now labeled performance assessment and portfolio assessment *(see section 6)* in educational textbooks on assessment have a long history in the teaching of writing. One can in fact plausibly argue that the current wide popularity of alternative assessment in education grew out of teaching of writing practices in the United States, particularly as disseminated by the regional and national writing projects over the last quarter-century.

In my teaching and writing for myself, accordingly, I have developed an increasingly strong sense of what I want my writing and my students' writing to accomplish. These expectations

provide the basis for practical, task-oriented assessment activated at every stage of the writing process--from early discussion of students' ideas about how to approach the assignment, through responses to drafts, to final comments on what has been achieved. These same expectations shape other directive comments supporting the assignment that are not in direct evaluation of or response to a student production. Together, comments and production-directed assessments in the midst of the writing process anticipate the emergence of writing that speaks forcefully to the task at hand. The aim of these proleptical comments is not to produce formal assessments of student work, but to help students develop their own internal standards and modes of self-assessment as part of skilled writing competence. I want them to develop their own critical "writer's eye" for their own work to make them stronger, more effective writers. As they develop a sharper eye for their own work, I can then increased the demands for even higher levels of performance, through my evaluating their emerging work against more subtle task-based criteria.

This kind of *in situ* evaluation, however, is labor-intensive individualized work, sensitive to the student's own level of understanding, the particulars of the task, and the approach the student has taken toward this particular writing problem. I am constantly trying to determine what the student is trying to do with their piece of writing, directing that approach to make it useful and appropriate for the task at hand, and then demanding they do it even more skillfully. And I must do this all within terms that speak to the student's current level of understanding and perception of writing.

 This individualized task-focused increasing level of demand, supplemented by tools to meet the demand, provides meaningful ways of increasing the level of challenge. Mass education and the institutional need to provide comparable evaluations of student work, however, are not easily reconciled with this kind of individualized, task oriented *in situ* development. Consequently, within institutional assessment it is often difficult to identify higher levels of accomplishment and challenge that are meaningful and motivating to students. The alternative is to fall back on atomized, alienating, disengaged formulations of the competence to be structured as curriculum and then to be assessed as atomized skills *(see section 3)*.

Because accountability to higher standards has traditionally meant an atomization of abstracted skills and formal appearances that are not sensitive to the expressive, creative, rhetorical, and/or intellectual workings of texts and writers, many experienced teachers of writing have similar qualms about grades and other institutionalized assessment (Allison, Bryant, & Hourigan, 1997; Zak & Weaver, 1998). Even when criteria are given some disciplinary or other situational specificity, such assessment criteria are often viewed as inimical to the student-centered classroom. By extension, assessment standards drawn from traditional disciplines are viewed as distancing and alienating to students trying to discover their own meanings in their writing that will have force and motivated purpose. Thus writing pedagogy since the 60's (see, for example, Rohman & Wliecke, 1964; Macrorie, 1968, 1970; Graves, 1978; Murray, 1968; Fulwiler, 1987) with some justification has reached back into what students have most at hand and about which they have the most developed stances—that is, their own histories, experiences, commitments, feelings, and self-defined issues. Such pedagogies teach students many things--but not

necessarily what students need at the university. By having students look inward to make the most of what they bring with them, these pedagogies provide less encouragement to look outward to what the university has to offer in the form of resources and scenes of new interaction. Even when such pedagogies bring the students into a vibrant life of writing, they can distance the students from the remarkable and highly motivated epistemic activity of the modern university.

The disciplinary and epistemic culture of modern universities does limit strongly the role of standardized assessment, as universities prize individual contribution and thought. Ideological commitment to individual student growth and the responsiveness of instructors to students whom they find have individual accomplishment or promise often softens the massification and standardization of even the most factory-like campuses and truly defines the culture of the more individualized campuses. Further, the American higher education system of majors and electives keeps most assessment local to grading for individual courses. Institution-wide assessments tend to be used only at the earlier curricular steps (for example placement exams or exit from required first-level courses) and are perceived as guaranteeing only minimal performance, well below the expectations and hopes for most students.

Since I have moved from an English department, where my attention was directed mostly at higher education and beyond, to an Education department, I have had to take more seriously the ways in which testing regimes impact elementary and secondary education. I can no longer remain obtuse about issues that the freedom, individuality, and faculty prerogative of university life have protected university teachers of writing from. Teachers and students in K-12 schooling are not nearly so well buffered against pressing demands for large-scale assessments. State and local governments that pay for education, the national government that has made educational competitiveness a priority, policy-makers at all levels, administrators who want to maximize teacher and student performance, and parents who want assurances about the accomplishment of their local schools and their own children—all are constantly at the classroom door asking for some accounting of achievement. Further, educational policy-makers and curricular designers need to assess the skills and knowledge of students in order to provide appropriate instruction, support, and challenges so that students may reach higher levels of more ambitious disciplined tasks. Policy-makers also need to be able to assess the effectiveness of forms of instruction and instructional tools to help make institutional choices that will affect the lives and educational experiences of many children *(see section 4)*.

So, I remain ambivalent about assessment, recognizing the imperatives and the dangers. I am wary about what they measure and what they encourage; at the same time I believe it is better to know something than nothing about what people achieve under what circumstances and with what supports. I remain troubled that the detailed *in situ* assessment that is part of intelligent action gets obscured in weak measures spread over large numbers removed from contexts of meaningful action.

As I have become engaged in this project I have become ever more aware of how much thought and experience of practitioners, policy-makers, and researchers have gone into the realms of

curriculum planning and assessment. I am humbled by the long commitment, energy, work practice that has entered into the accumulated wisdom, as well as the practical working out of the complexities of the world that have been factored into practice. And I hesitate about having the presumption to add anything useful to this discussion. My fragmentary comments here are only meant to explore whether my ambivalence, which perhaps reflects both sides of widely held divisions on the subject, might provide some different ways of looking at the issues and paths for solution. I also hope that the particular theoretical, methodological, and descriptive tools of genre and activity theory *(see section 9)* can provide some help in creating institutionally visible and credible ways of organizing and monitoring the inevitably individual process by which learning happens and people grow *(see section 12)*. In a democracy there is no satisfactory alternative than to make each person an intelligent articulate assessor of his or her life situation, an eloquent spokesperson for his or her interests, and an effective communicative actor to carry out a successful, contributing life. Any testing regime that undermines this goal of education--no matter how convenient in distinguishing the skilled from the unskilled and in providing accountable goals for achievement for students, teachers, and schools--undermines the intelligence and vitality of our democracy.

3. The Tension Between Student-Centered and Subject-Centered Curricula and Assessment

Traditional skills and knowledge have consistently posed a dilemma for progressive education *(see section 5)*. Within student-centered, inquiry-based, activity-oriented curricula, how can organized, disciplinary, and socially expected learning be planned, assessed and ensured?   This tension, present from the earliest days of Ella Flagg Young and John Dewey's experiments with activity-centered classrooms (Tanner, 1997) and William Heard Kilpatrick's (Kilpatrick, 1951; Tenenbaum, 1951) proposals for project-based curricula, has reemerged in every cycle of child-centered reform. Dewey frequently insisted on the importance of received knowledge and traditional disciplines being brought in relation to motivated student inquiry and life practice (from his early *The School and Society,* 1899*,* and *The Child and the Curriculum,* 1902*,* to *Experience in Education,* 1938). He regularly argued that traditional disciplines needed to be integrated into a progressive curriculum (see Russell, 1993). Despite his vociferous arguments on this score, child-centered educators have not found consistent and robust ways to plan, guarantee and display the achievement of traditional disciplinary competence, such that it has regularly remained a foregrounded goal in all schools that affiliate as progressive. Even more, the proponents of child-centered education have never been able to satisfy critics and policy-makers that disciplinary expectations will be consistently met in the child-centered school (see Tanner & Tanner's discussion of the Lincoln School, 1990). This unresolved tension has left child-centered education with little ammunition in the current climate of imposition of standards and testing to assure achievement in traditional areas. The alternative assessment movement *(see section 6)* has attempted to address this absence, but has not yet produced the kinds of data that have satisfied those insisting on widespread accountability for achievement in traditional areas of organized knowledge and skills, as expressed in direct testing of content knowledge.

Few parents, politicians, and educators on any side of any fence would deny the value of student motivation, engagement, and curiosity. Nor would many question the educational and motivational value of drawing on the materials of the daily life of children and adults in contemporary society. Nor would many oppose the desire for children to develop into competent citizens, contributors, and social beings in the world they will live in. On the other side of the ledger, few on either side would deny important value is to be found in the accumulated skill and knowledge developed over the millennia of recorded human experience. Nor would they deny that life in contemporary society requires familiarity with a wide range of knowledges, disciplines, and disciplined skills. Indeed, at the juncture of these two views, most parents, politicians, and educators do understand the function of schools to bring the engaged and motivated child into the world of skills, knowledge, and socially organized practices of our current economic, social, and cultural life.

The problem is how to bring these two sets of valued objectives together. The most direct way to ensure student engagement and inquiry is to follow student interests and projects, keeping the curriculum open to capitalize on impulses toward knowledge that teachers identify in the children and to increasingly make students responsible for their own learning and choice-making (as with Kilpatrick's project method). An interest in the resources and accumulated wisdom of humankind might be assumed to follow, perhaps as made relevant and available by the teacher and others who understand the location, value and importance of such cultural resources. After all, these resources, knowledge, ways of creating, practices, facts, and other components of cultural knowledge were developed in response to the processes and challenges of life. Not only is this cultural knowledge useful but it has created the current organization, conditions, and practices of contemporary life. This cultural knowledge is embodied and assumed in the built physical, social and symbolic environment. So to be caught up into any real project will inevitably engage you with the world and the traditions by which we have come to cope with and shape that world.

This has indeed been the position of many involved in progressive education and project-based curricula over the years (see Katz & Chard, 2000; Collings, 1931; McMurry, 1920; Passe, 1996; Erickson, 1995; Rance, 1968; Webster & Smith 1927). However, this individualized inquiry into and discovery of the world puts large burdens on the teacher. The teacher must be in touch with the dynamics of each student's or group's inquiry, knowledgeable in the many domains students might find useful, and resourceful in finding the supports students might need. The teacher must be able to persuade students that they need to pursue these cultural resources and not simply reinvent wheels. To stretch students, teachers must also be persuasive in raising the bar of achievement beyond the spontaneous criteria of adequacy that children might develop on their own. Even if a teacher knew what was going on in each inquiry, could provide relevant resources, and could push students towards more ambitious and refined inquiries, there is no guarantee that students would gain comprehensive and orderly skills and knowledge in any domain. There is no certainty, therefore, that students will be prepared to pursue more advanced disciplinary studies. Indeed it may seem that such an inquiry-based approach keeps secrets from

students about the resources of specialized knowledge until students stumble into what disciplines have ready at hand.

On the other hand, it would seem that the most direct way to ensure that students learned the skills and knowledge we desire them to have is to instruct them directly and then explicitly examine them on that knowledge. A coherent academic curriculum designed by state or national experts in the desired areas of knowledge and practice would then form an orderly sequence for teaching, learning, and testing. Such curricula could provide guidance for teachers in defining what they need to teach and what resources are needed to support the learning. Relevant materials could then be provided systematically by textbooks, library resources, and institutionally provided resources. An orderly curriculum would then define increasingly higher levels of practice and evaluation as students, on the basis of foundational knowledge, are required to address more advanced and subtle materials and tasks. This reasoning characterizes the standards and testing movement: Only well articulated and disciplinarily rigorous standards and tests to measure achievement of those standards can increase the general level of achievement and can ensure that all schools will teach high level disciplinary knowledge and skills. Further only such clearly articulated and accountable performance will guarantee that all children will have access to desired knowledge and will provide equity of opportunity among schools despite economic and demographic variation. Further, some suggest only explicit standards and direct accountability will provide guidance to teachers who are not uniformly well versed in disciplinary knowledge and therefore cannot provide students the flexible, insightful entry into disciplinary required of successful student-based, project oriented teaching (see, for example, Ravitch, 1995; Stotsky, 2000).

A standards- and testing-based curriculum, however, puts high burdens on students for continuing attention, cooperation, and understanding of assigned material that may be far from their immediate interests or concerns. It is also then left up to individual students to see how this material applies to the varied situations that make the knowledge meaningful and valuable. Critics of standards- and testing-based education regularly point to the many students who do not find their way through the world of externally imposed tasks and tests, whether for reasons of personal difference, cultural and class mismatches, or particular life and family difficulties. Critics point to the difficulty of learning through a day of alienating activities with only shallow extrinsic reward of grades. Many students under such conditions may lose motivation and direction. Even students who do succeed in this world of requirements, may only develop a superficial understanding and rote practice, critics note. Only a lucky few may really find the intrinsic values and conceptual understandings that underlay our cultural legacy that makes it continuingly applicable to life. Further critics point out that extrinsic rewards distort learning and motivation, which then rapidly vanish once external rewards are removed.

In practice, schools are rarely so dichotomous that teachers and students are forced totally into one or another extreme position. Even in the current political enthusiasm for standards, tests, and regulation, while it puts severe pressure on students and teachers to perform well on externally imposed tasks, cannot stop children from expressing their enthusiasms and interests. Further, alert teachers cannot stop noticing and responding to students' expressions of interest,

bafflement, and lack of interest. Rather the tension continues, with individuals feeling the waves of school reform pushing one way or the other. Teachers, students, and schools seek solutions that accommodate to some degree the needs of teachers and students, the demands of organized knowledge and practice, and the realities of student motivation. Even the most traditional schools celebrate teachers renowned for their ability to reach out and motivate students. Even the most student-centered schools make some assessment of students' progress in traditional areas of knowledge and provide some structured planning for helping students who do not seem to be moving into areas of basic learning spontaneously.

An adequate consideration of assessment requires putting together--but also keeping distinct--planning and assessment. Tests influence the planning of educational activities as well as the orientation of teachers and students when in the psychological penumbra of the test—a phenomenon called assessment washback. This is viewed sometimes with delight and sometimes with horror, depending on one's view of the values and orientations embodied in the test. Assessment when used for formative purposes rather than evaluation and accountability, nonetheless still directs attention and curriculum, for formative assessment identifies specific areas of student accomplishment and skill, or lack thereof, to be worked on. If formative and evaluative assessments are so far from what teachers and other curricular experts think must be taught, then the tests appear irrelevant. The formative does not provide useful information for curricular planning, and the student learning within the planned curriculum may not be evidenced in the evaluative tests. The believers in the items measured in formative and evaluative assessment will view the curriculum as misguided and educationally irrelevant, while the people committed to the values of the curriculum will see the tests as an imposition or worse. This situation seems in many ways to characterize the conflicts currently in literacy education.

As is often noted those items most easily tested are not necessarily the most important or challenging educationally, nor do they provide the most motivating and engaging for learners. The process of testing often isolates and anatomizes skills, to provide comparable results across disparate situations and students. Testing of isolated anatomized skills also facilitates developing individualized profiles for each student and planning individualized support based on what they can and cannot display under testing conditions. But complex, high level accomplishments require both integration of multiple skills and some higher order creative, analytic, and synthetic skills that evaporate if disaggregated into atomized tasks. Motivated engagement and creative learning interaction with coparticipants that lead to complex and more advanced learning also are not supported by testing of isolated anatomized knowledge and skill. Thus regimes of testing tend to have a reductionist and debilitating effect on curriculum

For those who hold a strict behaviorist model of learning focused on specific skills motivated by extrinsic reward, atomized, abstracted assessment is not at all a problem. In fact, it is a significant part of the reward structure. And planning sequential introduction and rehearsal of anatomized parts and their sequential complex combination provides guidelines for planning. At the extreme one could see the benefit of this approach for such skills as typing or other tasks that would benefit from automaticity—spelling, math facts and simple operations, geographical and historical facts. But such specific knowledge elements only become meaningful and motivating

in the long term as part of a larger practice where knowledge and skill are used and valued. Even typing and spelling skills are only maintained at high levels when they are put to motivated use, whether to earn money or facilitate one's own writing. Continued learning and engagement with geographical and historical facts occur only within the process of understanding our world and engaging in compelling issues. These kinds of engagements draw on integration of knowledge with imagination, problem solving and purposeful thought. Ultimately learning even the most anatomizable and abstractable knowledge is facilitated by interesting, engaging activities.

From the point of view of a rich complex curriculum, other sorts of assessment may seem preferable for formative curricular planning purposes. Vygotsky's (1978) concept of the zone of proximal development suggests rather than assessing fully accomplished skills you may be better of assessing kinds of activities the student could participate in and learn from with appropriate support. Such assessment would identify those areas where they would know enough to keep engaged and to comprehend new material, but they would no know so much that all would be easy and familiar. In a well-identified zone of proximal development they would need to pay attention to and learn from teachers and other students who could guide them on what they needed to know. Similarly at the end of the learning episodes one could measure what students could do on their own and what more advanced learning activities they could now engage in with others. But zone of proximal development assessments have typically been individualized and approximate, based on a one-on-one encounter between the student and professional, resulting in a qualitative, descriptive account.   Not only is this a cost intensive process, it is ill suited to the constraints of large program assessment and curricular planning.

Even if the problem of assessing what students could participate in were solved, the question of what you want them to participate in to foster advanced learning looms.   What activities and environment will foster particular kinds of advanced learning? What kinds of advanced learning are you seeking that go beyond easily isolated, anatomized and quantified items that might appear on a standardized exam? What kinds of activities will direct students' attention and excite learning and practice of more advanced skills?

One apparent way out of this dilemma is to believe that once students get beyond the assessable basics, intrinsic task-based motivation will take over, making the tests a barely noticed, irrelevant institutional necessity. Unfortunately that does not appear to be the general case. Once students are caught up in the extrinsic rewards of testing and scores, it seems to have deep and continuing effects, distracting students from intrinsic rewards (Kohn, 1993), and defining the educational process by the extrinsic evaluative record one establishes. Grades appear to become even more important in higher education as students become institutionally savvy (Becker, 1968), despite the apparently greater opportunities for pursuing individual interests, career motivations, and direct engagement with actual social problems.

What is needed is some way to bring assessment together with situated engaging activities. We need assessment and planning tools that serve the needs of institutions as well as of individual learners, that do not put engaging learning experiences in struggle with low-meaning test situations. We need a strong tool for rich curricular planning that does not thin the educational

experience. Genre and activity theory, I will argue in later sections of this text can provide ways to identify the forms of advanced practice that require and put into practice specific domains of knowledge and skill at the same time as engaging students in challenging and rewarding projects and goals. These forms of practice will in turn provide a matrix upon which to assess learning.

4. Interactions, People, and Large Institutions: The Paradoxes of Assessment

In interaction people assess the skills and knowledge of their coparticipants so as to be able to communicate and carry out joint projects successfully (Clark, 1992). In individualized learning interactions the mentor regularly accommodates to the perceived knowledge of the learner and supports the learner at the same time as assessing reachable challenges. In order to provide the most relevant support for learners, teachers assess student knowledge and participation in a variety of informal and formal ways. On the fly as interactions unfold, teachers note child reactions, confusions, hesitancies, and quick responses. Sometimes assessments are more organized, perhaps using standardized tasks, though each degree of standardization necessarily obscures some awareness of the particulars of each child's understanding, structures of perception and thinking, and confusions. Further each degree of standardization, by defining tasks in ways that are uniform across situations, removes knowledge and skills from a local motivating task; consequently the focus, response, and motivation of the learner potentially becomes transformed and possibly vitiated. The response becomes a performance to cooperate in a testing situation, with no intrinsic reward for participating in the task itself.

In interaction there are also what we might call exit assessments—recognition that we have done all we can do and thus have no motive for continuing. This is typically a recognition that we have accomplished what we needed to together, or that a coparticipant understands the communication, or can and will do certain things. On the other hand, the recognition can be that the coparticipant is fixed on a course of action in which we cannot or do not wish to intervene further. In either case we find it no longer useful to worry about communicating a specific point or eliciting cooperation on a particular matter.   Nor do we then need consider whether our intentions or thoughts should be modified or abandoned given our coparticipant's alternative knowledge, perspective or understanding. That is, we no longer need to accommodate to find a meeting place for our ongoing interaction. We judge, for example, that our visitor understands the directions well enough to drive back to town. Alternatively we may assess that no matter how much we insist that their planned route is not possible, they will go their own way.

In teaching interactions, we assess when to continue or withdraw support, when to extend or cut off an assignment. We judge when more explanation would be extraneous, when we can leave the student alone to work on the problem, when we can confidently move on to the next topic, or when we should just leave off a subject for the day because we can get no further. In a class with many students, however, we have fewer interactions with each individual by which to measure each individual's understanding and particular trajectory of learning. In that case, generalized tools of assessment can help us to decide when the class as a whole does not need more time on

an activity or skill or topic. Further the generalized assessment might help us identify who might need continued individual support.   But of course generalized tools standardize what it is to be learned and, even more significantly, the trajectory of learning--what topics are best completed in what order.

Any educational experience that involves more than a few individuals--no matter what the educational goals—would need to confront group assessment issues to be able to organize the work of many people gathered together for the purposes of learning. Even if a classroom were to be organized around individualized learning, some standardized measure would typically be needed to keep account of individual student accomplishment and to identify appropriate next tasks for each student. In large individualized classes, in fact, the pressure for standardized accounting may be all the greater because the co-orientation effects of all interacting in a common group under the leadership of the teacher would be weaker. That is, each student would be going down his or her own path with less time orienting to the group and teacher. While the teacher might have more individualized time with each student than in a common lesson, each student would have less total time together with the teacher and classmates, engaged in common activities. Further, at each intermittent individualized meeting with each student the teacher must quickly orient to the student's current state of work and learning.

Thus assessment is closely tied to the organization, planning, and constant unfolding of activities and is not just an after-the-fact evaluation of student accomplishment which may have consequences for rewards and punishments. As long as assessment is carried out in a spontaneous, interactional mode--while having all the naturalness, motivation, and creativity of the interaction in process, it is organically integrated with the immediate motivated goals and activities at hand. Insofar as assessment becomes an activity in itself, becomes standardized to allow aggregation or comparison, or otherwise becomes perceivably separated from locally motivated activities, it loses the spontaneous and motivated engagement as well as local relevance. However, we do have good reasons to want to abstract and standardize assessment tasks and measures.

Among those good reasons are the very reasons schools were established and maintained. Spontaneous learning interaction inevitably happens every day as we meet the challenges of living in the world. All children, whether in or out of the school learn rapidly the practices of the communities they spend their time in. In some societies these spontaneous interactions then become more organized and focused in an individualized apprenticeship system. Some societies organize children's learning more formally, and more removed from daily life, in schools. Societies that organize schools and particularly require universal schooling, recognize that the community has certain historically emerged bodies of knowledge and practice that all participants in the society need and should have access to. The members of the society perceive these skills and knowledges are so important that they cannot be left to random interaction. The knowledges and practices for which schools are given the responsibility are typically perceived as complex and organized, such that random, spontaneous encounters will not provide one with a full, extensive and coherent enough familiarity with them to meet the needs of living in that society. Indeed, in modern globalized society, one must spend a large fraction of one's life in

orderly, somewhat sequential, institutionalized learning to be a competent practitioner in most of the crafts of life--especially the crafts which provide prestige, power, wealth, and socially valuable work. Schools, academies, universities, research institutions, textbooks, encyclopedias, handbooks, professional societies, scholarly journals, professions and professional accreditation are all parts of overlapping institutions, artifacts, and practices. In the middle of the 20th century in the United States, graduation from high school became a near universal necessity, and now substantial higher education appears to be prerequisite to an economically viable life. Graduate training is becoming an expected part of most professional or leadership careers. Careers built on extra-curricular crafts--such as sports, entertainment, and traffic in illicit goods--do provide attractive but risky alternatives. These alternatives, however, carry enormous weights of constant intrinsic assessment. The high risks are precisely because winners and losers, those judged to have talent, skill, or luck and those without, are so effectively and brutally distinguished.

Because today few reliable alternatives to schooling provide access to successful lives, we need to be able to make success in schooling accessible to everyone. It is imperative students encounter areas of complex knowledge and endeavor without getting in over their heads, going down a faulty path, having major gaps in knowledge, developing bad practices, winding up getting lost along the way, or losing motivation. We need to be able to understand what students can and can't do in those domains we deem necessary so as to facilitate continuing progress. We need to know where along these paths students are so that we can help them to comprehensive and skilled competence in many areas, many of which build on prior competences and knowledge. Then ultimately we need to know whether students have gained adequate competence in relevant areas for them to enter into careers and areas of practice that require specific high-level knowledges and skills. We need to be able to assess whether individuals are knowledgeable enough to be credentialed as teachers or doctors or accountants.

In addition to the assessments immediately applicable to individual and group learning, assessment of learning, teaching and other school activities are needed to organize large educational institutions. Systemic planning, allocation of resources, and adjustment of the system require means of monitoring what is going on in many sites. This need for aggregating information occurs at the level of school, district, state, and nation. Some policy planning even is aided by international information. The movement towards standardization, quantification, and testing for individual and institutional accountability has become ever more pressing as institutions and areas of planning have grown ever wider. As is well known, the needs of the military for both assignment of individuals and training provided the starting place for mass testing. Military training standards have often been the leader in curriculum standardization, because of the need for absolute reliability in specific forms of knowledge and practice, and the frequent reassignment of individuals that creates the need for replacements with appropriate competence to step immediately into work groups. Brecht's drama *Mann ist Mann* sharply and critically exposes the loss of identity and personal affiliation that is the ultimate consequence of full standardization and replaceability. Nonetheless, educational institutions have some need to assure the levels and particulars of learning as well as to provide appropriate learning situations for various students. To assure the level of education within states, states have moved toward

centralized curriculum planning and/ or standards, tied to specific subject performance and testing. In the post World War II era, the rapid increase of numbers of students in higher education and the increasing size of institutions has led to great reliance on standardized assessment measures for admissions and placement, to sort through students of varied educational experience within many different school systems. And in the last half-century, United Nations agencies and other international organizations concerned with development throughout the world, have led to an entirely new level of monitoring and assessment in order to help each nation improve its own educational system.

Those who provide the resources to maintain these systems do have a justifiable claim on knowing how well each part seems to be accomplishing its task, in order to monitor the flow of resources. Thus, although politics is often rightfully viewed as an imposition on educational practices, nonetheless assessment of educational practices seems to have an inevitable and warranted place within government and politics at all levels of jurisdiction. Even courts must have means to ensure the accomplishment of mandated governmental responsibilities toward education, equality of opportunity, and rectification of inequities.

Finally assessment has some justifiable role in assuring that people are working hard at the tasks the schools are dedicated to. High standards and expectations are important in setting and reaching institutional aims as well as individual goals. This desire to raise meaningful expectations and make visible how well teachers, principals as well as students are responding to them can justify substantial monitoring on the state and federal level. It is also a key rationale of the standards movement.

Unfortunately, these systems of monitoring seem regularly associated with competition and mistrust. Monitoring means someone is looking over your shoulder and that implies they don't trust you to do the right thing on your own. Assessment makes one person's or group's accomplishment, skill, or other characteristic visible to someone else, and that interest in viewing others work and characteristics almost always has a scent of mistrust. That scent of mistrust can become a very strong odor if there is any indication that people are being monitored because they are not toeing the line, achieving enough, working hard enough. Sometimes that mistrust is truly warranted as malfeasance, corruption, incompetence, discrimination, lack of ambition, or other dysfunctions have at times overtaken schools. Systems of assessment serve to expose deficit and assign blame for those deficits. If results do not meet expectation, it is easy to think there is someone or something at fault--someone is not doing their job, whether students, families, teachers, administrators, or the system. If there is major dysfunction such deficit needs to be exposed, but it is in the logic of assessment systems to generate the appearance of deficit even if there is no clear dysfunction, for someone or some school has to turn up at the bottom. Standardized assessment creates opportunities for comparison and unequal reward.   Doing well on an assessment is a way to earn respect, dispel distrust, and direct attention to those who do not do so well. The issues of distrust and competition can become all the greater when assessments are abstracted and quantized, and when the results are viewed from a great distance institutional and or geographic distance, as in a state legislature far from the individual students, teachers, and classrooms.

Because assessments often grow in climates of distrust and competition and then support increasingly distrustful, competitive atmospheres, they are likely to tear at the fabric of the local motivated activity, spontaneous inquiry, and personal knowledge building. Standardization and abstraction of assessment seem incongruent with the personally engaged interaction within which people learn at a high level, the processes by which individuals become competent, respected, knowledgeable, participating members of communities. The abstractions of school, especially the larger institutional abstractions, though paradoxically part of the underlying need for schooling and part of the history of growth and massification of schooling, remove us from the processes by which individuals are engaged and learn.

Dewey among others counseled sensitivity towards the way individuals act and develop within social interactions and settings. He also, however, strongly believed in the value of the accumulated wisdom and experience of the community in providing tools for addressing the practical problems of living and in creating a rich environment and resource for each individual's development. He also understood that students were not individuals but members of immediate and larger communities in which they developed identities and toward which they learned responsibilities and made contributions. Since he and his followers have been central to the development of American progressive, child-centered education, they sit right in the middle of the paradoxes of assessment. Their struggles with assessment, which I will explore in the next section, can help us frame the problem of what we need to demand from assessment so it will truly serve education and not undermine it.

5. Dewey and His Colleagues Confront Assessment

John Dewey, from his earliest publications on education, understood that disciplinary knowledge was not an imposition on the child, but the very means of participating in society, and even more the vehicle of personal development. In the 1899 lectures on the University Elementary School that were to be published as *School and Society*, he notes "under present conditions, all activity, to be successful, has to be directed somewhere and somehow by the scientific expert—it is a case of applied science" (1900, p. 23). This disciplined application within the occupations of life

> supplies the child with a genuine motive; it gives him an experience at first hand; it brings him into contact with realities. It does all this, but in addition it is liberalized throughout by translation into its historic and social values and scientific equivalencies. With the growth of the child's mind in power and knowledge it ceases to be a pleasant occupation merely and becomes more and more a medium, an instrument, an organ of understanding—and is thereby transformed. (p. 22)

By providing the means of expanded understanding, disciplinary and disciplined knowledge becomes incorporated into who the child becomes, what the child can think about, what problems the child can work on, what roles and opportunities in life the child can take on.

Within the University School the curriculum was built around this intersection of the child's interests and the way organized knowledge can serve those issues—brought together around

specific real or realistic problems. Thus child development was structured within the motivational force of projects and problems and within the intellectual resources of organized knowledge brought to bear on each of the activities. Given the democratic and participatory principles of its founding, the organization and practices of the school depended very much on both the staff and children who came together during the school's brief life from 1896 until 1904. Ella Flagg Young, an experienced teacher who was Supervisor of Instruction, has been particularly recognized by Dewey and others as a leading light in the practical development of the school curriculum. Laurel Tanner's history of the school, based on the archives of the school, reveals for example that lesson plans and reports were written from the double perspectives of "the Child's Standpoint" and "the Teacher's Standpoint." (1997, p. 47). This encouraged all lessons to be thought of as meaningful from the student's point of view as well as to engage substantive disciplinary learning from the teacher's point of view. Actual historical and current problems, such as water management for Chicago or agricultural production or the manufacturing of textiles, gave shape ambition and shape to motivating challenges.

The school favored an integrated approach to knowledge brought to bear on problems. French, for example, was taught in the context of cooking and mathematics in relation to textile manufactures (pp. 76-77). Nonetheless, disciplinary knowledges were such a significant part of the problem solutions and development of students and faculty that Dewey soon insisted the school adopt a departmental form of organization (p. 98). Yet it was in practice, and not the abstract knowledge of disciplines, that assessment of learning and ideas would come, as would the pressure for disciplinary learning and disciplining of development. Dewey praised the concreteness ideas gained from embodiment and testing in practice. Students working on Chicago water management would not be assessed by a test of skills displayed, but by a comparison of the class's solutions to those historically adopted by the city. The results of their mathematics would be in the success of their calculations to carry forward their experiments in manufacturing.

Within the University Elementary School, accountability, planning, and assessment of success remained local, within each classroom. Planning and evaluation of results ultimately rested on the individual teacher, although there was constant group consultation and support. The greatest force for assessment was the internal dynamics of the projects students engaged in. Did they know, learn enough to make the projects succeed? Were the practical problems solved? And did the teacher see any immediate opportunities to expand the learning appropriately? The learned knowledge was aggregated and accounted in the lesson plans, but there was no external measure placed on the learning.

This local system was based on trust, intensive consultation, and collaboration within the school, flexibility in the curriculum, and resourcefulness of the teachers. It also depended on the protection of the university, the status of the school's experimental nature under university supervision, and its voluntary student population drawn largely from university-affiliated families. It was not held accountable to public financing and policy, responsibilities to a larger system, or inspection by various concerned public groups. Further it thrived over a century ago, before the weight of specific college preparation and career credentialing became so well-

defined, compulsory, and discipline-based. While the curricular planning and assessment procedures at the University School seem to present an ideal for one side of the equation, they did not deal with the whole picture which any school must now necessarily address.

The idea of discipline being natural to activities and projects was elaborated in George Coe's small volume on *Law and Freedom in the School*. To counter the standard view that law stands in opposition to will and freely chosen purposes, Coe argues that projects are in fact the law of nature, the way we organize our ambitions and activities, and that further they are naturally disciplining. Projects force us to confront the realities of nature and thereby discipline our understanding and ambitions. Additionally, teachers gain real authority by submitting to the demands of the project alongside the students. Finally projects provide the motive and means for self-government and the development of a sense of moral law.

While Coe again expresses the faith that engagement with the real challenges of projects will provide criteria of success, naturally disciplining processes, and motive to engage seriously with all forms of useful human knowledge, he provides no concrete mechanisms. Further, discipline is treated so intrinsically that any external inspection or reporting invite the undesired dynamics of compulsion. Externally established demand runs counter to the organic discipline at the heart of his account.

In placing all discipline and drive for knowledge within the organic dynamics of confronting reality, Coe is consistent with the great champion of the project method, William Heard Kilpatrick. In the writings of Kilpatrick and his followers there is little concrete way to confirm or monitor student learning beyond description of the specifics of each idiosyncratically chosen and uniquely pursued project. Nor is there much in the way of general guidance in planning project learning activities beyond description of exemplar projects.

One striking exception is Ellsworth Collings's experiment aimed at proving the value of the project method. In 1924 Collings published a four-year study of a one-teacher rural elementary school in McDonald County Missouri, organized on the project method. Two other neighboring schools with similar characteristics in the same county, but retaining a traditional curriculum, were used as controls for the assessment measures. The three schools had between 29 and 41 students of mixed ages from 5 years to 16 years and mixed grades from first through eighth. Students in the experimental and control schools had similar prior education, attainment, socio-economic and ethnic background. All three districts had similar economic resources. The experimental school's enrollment exceeded the enrollment of the other two schools by 10 and 12, and so an assistant teacher was added midway in the first year of the experiment. The experimental school also had greater opportunities for community and parental involvement, along with substantial initial parental resistance to the experiment.

By the end of four years, by the standard testing measures of the time, the children in the experimental schools showed 38.1% greater gain over the children in control schools on tests of common facts and skills. Further, the children in experimental schools showed 10.8% greater gain than that expected according to national standards. The students of the experimental school

showed even more dramatic improvement than the control schools in measures of attitude toward school and education and in measures of ordinary life conduct. There were similar comparative successes in changes of parental attitudes (as measured by such criteria as visits to school, using school facilities and voting positively on education related issues) and children's participation in community life (as measured by such criteria as reading newspapers and participating in sports and agricultural clubs).

This experiment provided an overall proof of the project concept, using traditional testing measures imposed external to the curriculum. Students with the project curriculum did better than students in a traditional curriculum on tests that more directly matched the rote recitation curricula of the control schools. There were no specific links between the tests and the project curriculum, so one could make no particular judgments about how students were succeeding within the curriculum. These tests provided no particular guidance for students or instructors in the project school as to how they should proceed or how the specifics of the projects succeeded. So while this experiment did seem to support the project method, it did so entirely on the turf of traditional schooling. It developed no appropriate assessment methods to guide project based schooling and learning.

The lack of appropriate evaluation tools dogged progressive school experiments throughout the first half of the century. The Lincoln School, attached to Columbia Teacher's College, illustrates the dilemma. Although founded in 1917, as of 1934 it still did not have assessment tools that would demonstrate the particular benefits of its innovative curriculum, according to two of its curriculum leaders, although the students did well on standardized tests based on traditional curricula. (Tanner & Tanner, 1990, p. 170). In 1940, the school again reported, "We still face the problem of building evaluation instruments appropriate to our changing curriculum" (Tanner & Tanner, 1990, p. 171). The next year, unable to demonstrate its particular merit, the Lincoln School was merged with the more traditional Horace Mann School.

The Eight-Year Study, which ran from 1932 to 1940 to examine the effects of encouraging experimentation in the high school curriculum, also confronted the problems of lack of adequate assessment tools (Aikin 1942). The study identified 30 schools committed to creating innovative curricula and received assurances from major universities that applicants from these schools would be eligible for admission even though they had not completed the standard admissions requirements. With that license, the 30 schools tried a variety of educational experiments, which were then assessed (Giles, McCutchen & Zechiel 1942; Progressive 1943). The final report of this study identified success by a set of general measures for the students who continued on to college, including college GPA. They found that, overall, students from experimental schools did slightly better than those from traditional schools on all measures, and those from the most experimental schools did substantially better. But again these assessments were measuring the same terrain as those devised for traditional curricula, and all were on measures removed from *in situ* performance and activities of students within the experimental curricula.

Within the Eight-Year Study there was some interest in developing new measures that would reflect the special concerns of the schools and the study. Several new tests were developed to

assess students' development in reasoning, social sensitivity, personal and social adjustment, personal interests, and appreciation of art (Smith et al., 1942). Many of these were short-answer psychometric instruments on to identify individual characteristics rather than situated use of knowledge and learning. For more advanced scientific and logical reasoning, however, there was an attempt to measure knowledge in practice. In the first experiments students were asked to write responses to novel problem situations that could be solved using particular "principles which the teachers had selected as important for their students to apply." (p. 81) These problems were of a general sort, removed from the classroom or practical activity, but still they were designed to invoke the kind of reasoning engaged in regular subject matter learning. The papers produced, however, were not easy to evaluate in a consistent manner, in large part because so many different sources of potential error, which would indicate different reasoning difficulties. Also it was hard to distinguish what was adequate evidence. Further, it was hard to distinguish problems of expression or even problems of handwriting from problems of reasoning.

In successive iterations the test became increasingly based on short response, increasingly controlled within complex multiple-choice schemes. And the problems became increasingly abstract and atomized logical puzzles. The test became removed from actual reasoning about subject matter using subject matter content, and turned into an elaborate set of unusual puzzles with an unusual scheme of short answers. Even though these tests began to approximate standard psychometric tests, they were never successfully used to establish characteristics of students, let alone to evaluate relative accomplishment or distinguish between the value of various alternative pedagogic practices or reform models. Nor could they identify the special kind of skills learned within each academic domain. While the alternative assessment efforts are described in great detail in a separate volume, they played little role in the summary volume describing the accomplishments of schools and students in the Eight-Year Study (Aikin 1942).

With no articulated way to gain a planning and assessment link between project based activities and traditional disciplinary knowledge beyond the use of standardized tests that played by the rules of the traditional curricula, there was little glue to hold the disciplinary knowledge firmly attached to the progressive curriculum. So it regularly slipped off. That is, traditional subject matter was tested on assumptions based on traditional pedagogy, and so reinforced that pedagogy as the proper vehicle for subject matter teaching. Student-centered pedagogy pursued its own path with no particular accountability to traditional subject learning. Late in his career Dewey regularly had to speak to his own followers about the necessity of maintaining strong disciplinary knowledge within progressive education (see, for example, his late essay *Experience and Education,* 1938). Progressive education since then has regularly been tarred with the brush of absence of standards and formal learning. Progressive, child-centered education is regularly cast as the romantic enemy of high quality schools with rigorous, accountable, assessed schooling. Child-centered education is regularly seen as giving way to children's undisciplined world in sore need of the basics of disciplined knowledge that school has to offer.

Neither Dewey nor we can solve this dilemma of student and subject by insisting that teachers bring to bear disciplinary learning and by hoping that students interests will lead them into the paths of desired knowledge. While we may firmly believe that true, deep, and disciplined

learning comes only from personal engagement in serious problems, unless we can find a way to harness this idea to orderly learning and institutional imperatives for planning and accountability, it is very difficult to make this insight the basis of widespread schooling. This dilemma needs to be solved if we are to create a robust, pervasive orientation towards learners' understandings and motivations in our schools at all levels. Even if we are successful in fostering the individual talents of teachers so that they can regularly improvise ways of holding student and subject together, no institution can rely on genius every day by all participants. We need ways to identify regularizable goals, institutionally supportable activities with appropriate finite resources, strong tools for recognizing higher standards for teaching and learning, and convenient instruments for monitoring results.

6. The Dilemma of Assessment as Seen in the Teaching of Writing

The teaching of writing has posed the tensions in assessment quite strikingly in the last several decades. Traditional expectations for writing were writ rather large (though not universally) in primary, secondary and university curricula at mid-century. Correctness and good form in handwriting, spelling, morphology, and syntax dominated curricula and textbooks, with some secondary interest in some formal features of paragraph and short essay organization: topic sentences, the four modes of paragraph organization, the five paragraph essay, the use of examples. Indeed in higher education students' inability to produce these formal features was frequently the criterion by which students were assigned explicit writing instruction, as assessed through either a short answer exam or a short writing sample read for correctness. Demonstrated ability to write without errors would mark the end of a student's writing obligation.

> This is not to say that writing wasn't an interesting and challenging part of courses in all subject areas. Some instructors created interesting writing tasks as part of students' engagement with their subject matters. As well, some instructors provided wise guidance in how students might successfully address writing tasks. But interesting and challenging aspects of writing pedagogy were unregulated, unmonitored, never guaranteed, and not even widely discussed and supported—so that they were not generally understood as essential to learning to write. Further, writing instruction, such as it was, was hidden within the more general language arts and English curriculum of K-12 schooling and was rarely the primary focus of university courses beyond introductory levels, except for creative writing. Only by the luck of the draw would one find strong and challenging writing experiences and instruction. Insofar as university students were aware of the writing challenge of particular courses, they were at least as likely to avoid such courses as to seek the focused demand.

The lack of well-defined curricula in writing at all levels (as well as of curricula that recognize the particular challenges of writing in different disciplinary, professional, or public domains) can be attributed in part to a general perception that writing was an unsituated, universal competence. If you could spell according to convention, choose words within the dominant formal dialect, parse sentences and write parsible sentences, create topic sentences and outlines, and so on, you

could write. The variations that appeared in practice (what made one text different from another) were treated largely as matters of talent, even genius (Palmquist & Young, 1992). If, on the other hand, we understand writing to be an individual act responsive to particular situations, many aspects of writing would vary according to situation, writer's communicative impulse, writer's thought, subject, and task. Only a few basic shared elements would be regularly and recognizably present in all kinds of writing, and even these would be open to situational and rhetorical variation—such as the strategic use of unexpected word order and violations of syntactic completion. Nonetheless by studying the regularities and patterns of situations, tasks, and situationally related forms, we could give some guidance useful for students who regularly face specific kinds of writing challenges. It was, however, only a few basic aspects of writing that had been given regular attention in writing instruction, and not the skills of situational response that gave meaning and motive and challenge to writing.

Further, without writing tasks being embedded within complex interactional and intertextual situations, it was difficult to define meaningful challenging assignments within writing courses. Language challenges come from the complex demands evolved over a communal discussion over time. In courses that treat writing as an undifferentiated universal skill, assignments tend to be the beginning of a discussion rather than an intermediate point in an unfolding, motivated interaction. That is, writing assignments and tasks typically ask students to take up new topics and themes, supported by perhaps a couple of readings and some class discussion. A sequence of assignments leading up to a term paper can offer a bit more embedded and coherent experience, but still such assignments often mark only a student's first foray into an area and a debate. These "conversation starters" are very different than continuing turns in an ongoing exchange of legal briefs or advancing a line of research one has been reading on, thinking about, and working on for months or years. Conversation starters, while having their own sets of uncertainties and challenges, appropriately stay simple and unspecialized in their statements, having few assumptions and few prior issues to address. Five or 20 turns into a debate, however, issues have emerged, words have taken on particular weights; resources and assumptions have emerged; complexity, qualification, and concession become necessary; prior speakers must be respected; each participant has committed him or herself to particular stances and roles, and many other challenging complications must be attended to. Thus challenging writing assignments are both particular and embedded within domains of inquiry, deliberation, controversy, or other evolved intertextual fields, such as occur in the disciplines or professions, or as part of informed, structured controversies. For such reasons the most challenging writing assignments typically emerge within the context of disciplinary coursework. In subject-matter writing one would have to sort out issues of constitutional law, or develop theoretical implications of a sociological study, or interpret the works of a novelist in relation to the political climate and cultural marketplace of the author's time.

Assessment of writing skill was consistent with the generalized view of writing as the production of correct forms. Tests of spelling, grammatical correctness, and proper usage, often in multiple choice format were widely used for placement, diagnosis, and exit. When actual writing samples were used they typically asked for statements on subjects students had thought little about, had

few particular intellectual resources for, had not engaged in a long disciplinary discussion about, and would not continue in dialogue over. Thus student essays were framed as early turns in a conversation that they would not continue and had no substantive stake in. Further these essays were often graded for correctness, with specific points deducted for specific kinds of errors. Producing correct sentences was more an imperative than writing something interesting, important, or situationally relevant and effective. Even when graded holistically the criteria for assigning grades were based on general skills such as use of topic sentences, organization, and patterns of error and correctness. Term papers and essay exams for subject-area courses might give a bit more of an experience of an embedded writing task, but the writing aspects of these assignments were rarely placed in the foreground granted to the disciplinary subject matter of the tasks.

More interesting and challenging parts of writing were generally hidden under such vague terms as "aptness of expression," "imagination," "quality of thought," "disciplinary thinking," and "critical and analytical ability." These mysteries were typically associated with individual talent and aptitude for particular areas of inquiry. While such talents might be spotted and nurtured by instructors of courses that contained substantive discussion of intellectual matters, they were not the appropriate topic of writing instruction and not plausible matters for standardized testing. The most one could do in a standard testing situation (which nonetheless provided whole text responses) was to recognize the unstandard essay that somehow exceeded the standard competences to be displayed. The prompts aimed at eliciting standard competences, however, would not necessarily create many opportunities for interesting answers that would display unstandard competence. Scripts identifying students with special talents might have no curricular consequences except exemption, so that students could do without writing instruction and move on to "more advanced substantive courses." Here we have a double obscuring of advanced skill. Even when advanced skill is recognized under romantic notions of talent, little is done for the students with it. And even less is done for those identified as without talent, because talent is treated as unattainable by the ordinary student. This double obscuring keeps writing pedagogy distant from making explicable and attainable the more advanced reaches of writing skill.

With only a few basic elements of writing open for discussion and instruction, the technical vocabulary of writing assessment and teaching remained small and impoverished with respect to the full domain of choices and attention of skilled writers. The one available technical vocabulary of any sophistication that opened up any situational thought about writing was the rhetorical vocabulary, which started to gain favor as teaching of writing became more professionalized in the 70's and 80's. This vocabulary, while most useful to domains of argument, nonetheless, offered one way to think about writing tasks. Assessments, however, have done little to incorporate even this level of technical evaluation. While this may bespeak the difficulty of building any more advanced consideration into writing assessments where individual judgment leads to nonstandard behaviors, it also bespeaks the resistance of standardized testing of writing to reach toward any significant challenge and situated thinking.

The introduction of more advanced concepts into writing instruction and an increased level of professionalization of writing instructors at all levels lead one to hope for a raising of

writing engagement and challenge. Such improvement will only gain institutional robustness, however, when built into the schemes of requirements, expectations, assessments, and accountability that organize and hold together educational institutions. For that, then we need to develop ways of assigning, assessing, and expecting advanced accomplishment on more than an individual basis. For that we need regularizable ways of prompting performances, describing what needs to be accomplished, and technically identifying levels of performance, even as we recognize that what counts as advanced competence is variable according to circumstance, discipline or other social organizational setting, and individuality of writing choices.

Developments within writing pedagogy and theory complicate the problem of identifying advanced competence even more. Writing research, theory, and pedagogy in the last quarter century have directed attention toward the situation of the writer, toward the internal and group processes by which writing is accomplished, and toward the conditions that foster or discourage expression and communication. Such approaches have defined the dominant progressive pedagogies and understandings of writing within both K-12 and higher education. While such approaches to writing have brought human motive and meaning-making to the previously dominant approach of conventional propriety, they have turned attention away from the what is accomplished on the written page and how writers' choices may affect audiences and mediate interactions. Classical rhetoric, as mentioned previously, has offered the most widespread approach to writers' choices, but has not yet emerged into much of an institutional presence in assessment or curricular planning—beyond the presence of a few concepts like audience and persuasion into some standards and assessment rubrics.

If rhetoric were to gain general acceptance as an approach to writing it might provide some means of assessment and curricular planning based on the situated production of texts that speak strategically and persuasively to some rhetoric-appropriate tasks. Rubrics for holistic scoring can be developed around students' abilities to use rhetorical concepts to shape their texts. While this might be a large step forward, it would still not be adequate to the task at hand and might lead to mismatches between skill and assessment measures. As I have argued elsewhere (Bazerman, 2000; Bazerman & Russell, 1994) rhetoric has a limited model of the functions of writing, the social interactions it can mediate, the concepts useful to strategically shape and interpret texts, and formal textual realizations that would accomplish valued work. Rhetoric, as it has emerged historically, is directed towards high stakes agonistic public performances (primarily spoken) having to do with policy choices, the adjudication of disputes, and the forging of communal values. Such discourses are important, particularly to democratic political participation and deliberation, but the uses, forms, situations, and purposes of writing extend far beyond those that rhetoric was developed for, not least because of the complex forms of textually mediated social organization developed in the modern world. Does rhetoric give adequately full guidance for the drafting of contracts, or the design of application forms, or the production of effective history textbooks? Many of our most sophisticated, complex, and socially important forms of writing are not easily or usefully characterized in terms drawn only from rhetorical theory. Effective writers of theoretical physics articles, international economic policy analyses, information systems

planning documents, medical reports, or social and cultural criticism need to know a great deal more about writing than what rhetoric can tell them

Further, social science has given us new tools of research and theory through which to view how and what people write with what effect. Our understanding of writing can be greatly enriched if we step beyond traditional rhetorical approaches. For example, consider how the limitations of gathering information about audience response and attitudes has lead to rhetoric's analysis of audience being based on the rhetor's projection of audience prior to a single moment of delivery rather than a long term analysis of the interaction of rhetor and audiences (see Blakeslee, 2000). The essays in this current collection and related previous articles have been developing an alternative way at looking at the production of writing, the form and function of the texts produced, and the mediating role texts have in socially organized activity systems. As I will elaborate in another section of this hypertext *(see section 9),* I believe these genre and activity based approaches can help us shape challenging, motivated writing curricular and tasks that provide enough reliability of expectation to develop sequence and assessment.

Sequence and assessment are extremely important in writing instruction to support writers' developing the high levels of focused skill necessary to be effective to contemporary complex literate forms of activity. As those who have become skilled in writing know, it takes many years and many challenges, and that only prepares any one writer for a limited range of genres. A lawyer who has devoted many years to writing effective criminal briefs is not necessarily an effective writer of social policy or news stories, let alone an effective writer of novels or of psychological research. Yet our tools for curriculum and assessment barely cover the earliest stages of writing, so it remains hard to distinguish higher order skills or to articulate appropriate curricula beyond doing a lot of writing and providing opportunity for peer and expert critique. In higher education the burden of identifying more advanced accomplishment most frequently occurs within advanced disciplinary courses, and then in graduate education. This may well be appropriate, for advanced discursive challenges occur only within motivated advanced activities embedded within ongoing sequences of directed interaction and tasks. Further, only disciplinary experts may have the expertise to recognize effective writing in their fields, even if they lack a technical vocabulary to identify what makes that writing effective. Only in exceptional cases do the disciplinary experts have a substantial vocabulary for dealing with writing beyond the layperson's comments on correctness. But lacking technical vocabulary, the instructor may attribute effective writing to disciplinary skill or intellectual talent apart from writing, with the consequence that the student's attention will not be directed toward improving writing and no specific writing support will be offered.

To make my point a bit more sharply, let me compare the case of advanced writing instruction to the case of advanced mathematics instruction. There are many fields that require advanced mathematical expression and calculation, just as there are many fields that require advanced writing skills. It is usually quite evident, however, which specific mathematical skills are necessary to carry on certain branches of physics, or economics, or city planning projections. No credible argument or analysis could be made in such areas unless one can handle the relevant tools. These skills are so identifiable, students are advised to take specific sequences of courses

to prepare them for the mathematical needs of particular professions. One's knowledge of each mathematical domain can be specifically assessed as well as specific needs for further mathematics education. The application of these tools to domain specific tasks as well may lead to courses like calculus for engineers. The fact that such courses are easily definable suggests how well articulated the advanced skills and their application to tasks are. The cutting edge of research or design may require developing new mathematical tools, but even this will be built on a complex defined substrate of specific forms of mathematics.

Writing curriculum to a much greater degree than the mathematics curriculum remains largely unarticulated, with an advanced course being much like a previous course with perhaps somewhat different readings and assignments. The separation of upper-division writing courses into discipline specific practices is certainly an improvement, but these are not guided by some widely shared principles that articulate the difference among what is to be taught and how in these differentiate courses. Nor is there much in the way of guideposts for writing in graduate studies, although a few courses have developed on some campuses. The widely adopted workshop model, which does provide useful opportunities for exchanging craft knowledge, does not dictate any particular analytical or conceptual tools for the improvement of writing practice. Nor does the workshop model define any particular targets for writing accomplishment or criteria for evaluation except what emerge spontaneously from the workshop group, based on their experiences.

Unless we can articulate better what we are looking for, find ways to elicit it in conditions that make these more advanced aspects of writing necessary and meaningful, and point out to students what they need to work on, writing education will find it hard to move beyond rudimentary approaches to the subject.

7. Alternative Assessment

The concerns I raise here about assessment are hardly new—

- the abstraction of assessment from local meaningful activity,

- the separation of competence from situated practice,

- the atomization of knowledge within assessment instruments,

- the lack of cognitive ambitiousness and challenge of standardized tests,

- the skewing of motivation within testing situations,

- the distrust and competitiveness behind testing and accountability schemes,

- the effect of testing on the curriculum.

Many have discussed these concerns, and many have developed modes of assessment that overcome parts of these difficulties. Many of these evaluation procedures have come to be

known as performance assessment or alternative assessment. They have especially flourished in the last two decades, but the Eight-Year Study in the 30's also developed assessment tools to fit more closely with non-traditional curricula. Both that earlier and current alternative assessments have addressed testing issues of cognitive ambition, atomization of knowledge, lack of relation to actual tasks, and motivation.

Some forms of alternative assessment aim at psychometrically identifying the non-cognitive aspects of learning, such as motivation, attitude toward the material, engagement, anxiety and apprehension, and so on. Recently such tests have been of interest to those who want to evaluate individual personality so as to estimate who should be selected for various challenges. Accordingly, organizations like the Educational Testing Service that attempt to predict outcomes for individuals to improve selection for advanced education have taken an interest in such assessment. These are of great interest and utility in understanding individual student's approach to and participation in various educational tasks and the effects of various curricular and classroom arrangements on students modes of participation. Nonetheless, this form of alternative assessment still does not get at the assessment of the use of knowledge, skill, and understanding within situated activities. If we are to understand learning we have to be able to take its temperature where it is happening.

Performance assessment more directly aims at capturing student knowledge, thought, and learning in the course of accomplishing tasks. Performance assessment has come to mean testing which requires a more open-ended and longer response from the person being tested—something more than a multiple choice answer.   In mathematics or mathematical sciences this might mean student-produced short answers or full sets of calculations. In other domains it might mean an extended written response. These are in fact the traditional form of examinations, class assignments, and homework. Insofar as school itself is a situated practice these long-standing assignments are as situated as they can be and as motivated as students are motivated for school. The ambition, analytic depth, standards for expression and coherence, are as great as the teachers and students can organize locally within the institutional and social setting of the school. The demands are as high and focused as the teacher can articulate and bring the students along with, and are precisely tied to the educational interaction of the classroom. The particular tools and criteria are as individualized, focused, and motivating as the teacher can make them with the students and local conditions in mind, within the degrees of flexibility allowed by the local institution.   Gains to be made at this level are gains to be made directly in the classroom, in conjunction with curricular design and immediate interaction with students, as well as the flexible reshaping of assignments and activities to meet the students and stretch them from where they are in that class, in that subject, at that point in time.   The *in situ* assessment of performance serves most directly to guide the work of teacher and student.

While performance assessment has always been a de facto practice in class, considering it as an organized area for study and development can lead to improved practice and tools. As an organized area of study and tool development, in fact, performance assessment has been directed largely toward formative assessment—that is, assessment done at the beginning of an educational sequence to help direct classroom activities as well as individual attention. The more

tightly these assessments are tied to ensuing work and the criteria by which that ensuing work will be judged, the more useful the assessment is for orienting both student and teacher to the task at hand.

Performance assessment has recently gained some support (Herman, 1997; Henderson & Karr-Kidwell, 1998; Meadows & Karr-Kidwell, 2001). It is now being applied more widely in evaluative assessments, including even large-scale assessment programs despite the difficulties of designing tasks, the time required for grading, the difficulties in comparability of scoring, and the overall cost. Among the benefits associated with using performance assessment is that they encourage curricula and educational programs directed towards learning based open activities rather than production of short answers for standard psychometric exams. The SAT I already includes some open non-multiple choice responses and will soon include open-response writing tasks <http://fyi.cnn.com/2002/fyi/teachers.ednews/03/25/sat.overhaul.ap/index.html>. The most ambitious implemented use of performance assessment has been the use of portfolios for statewide writing assessment in Kentucky since the mid-1990's.

Portfolios are an extension of performance assessment, aggregating the actual documents created across a period rather than just the numerical residue of a grade. The portfolio allows for full inspection by both teacher and student of all or selected performances, to be commented on, reflected upon by peers, students and teachers in highly individualized ways that are sensitive to and draw upon the local circumstances of production and use—that is the assignments are seen in the context of the remembered, shared experience of the class. The individuality of the student, the students' engagement with the material, learning challenges and trajectories, and the particular accomplishments are made more accessible and assessable within the rich set of artifacts collected in the folio and read within the context of the events that produced the work. Portfolios are of interest precisely because they allow a richer, more individual set of resources for individual reflection, evaluation of accomplishment, and assessment of skills. The literature on portfolios is now extensive; for example, one bibliography runs over 100 pages, and the literature continues to grow (Northwest, 1996).

Because complex performances seem to offer richer, more multi-dimensional, more cognitively ambitious and potentially more coherent and less atomized snapshots of student skills and knowledge, it would seem a good idea to use them for other assessment purposes that reached beyond the local classroom. And indeed, the teaching of writing has won over the last several decades substantial battles in using written essays for a number of assessment, entrance, placement, and exit purposes where others would wish to use cheaper, less time-consuming machine-gradable exams. In almost all major university systems where there is a choice for placement within the writing sequence, a written essay is used, and where there are exams for exiting courses, advancing to upper division, or graduating, they are almost always in the form of essays. College admissions researchers, using data from California, are also finding that writing exams (as for example the SAT II writing exam) are among the best predictors of general college success, exceeded only by high school GPA (Geiser & Studley, 2001).

However, insofar as writing assignments and other extended performances and their collections in portfolios become removed from the contexts which give them meaning and interactional value, they begin to suffer the thinning effects of other forms of decontextualized assessment. The questions have to be broad and unspecific enough to be equally intelligible and motivating for all the tested population, without advantaging any group (except those of course who have the specific skills being tested for). But these questions must do this without the context and unfolding dynamic of the interactions and relations of the classroom or other activity system. That is, these questions are conversation initiators among strangers with whom one has absolutely no stake or need to communicate beyond the evaluative function of the test. (This problem of course was one of the underlying problematics of Britton's study *The Development of Writing Abilities*, where it was found that most secondary writing in this study of British secondary education only adopted the limited author-audience relation of student to examiner. Much of composition pedagogy since then has been directed at enriching that relation either by enacting richer student-teacher relations or finding broader audiences in classroom peers or other groups outside of the class.) Further, with such broad, institutional populations to test, it is difficult to calibrate the level of ambition of the questions to elicit any but the most basic skills displays. Such decontextualized writing exams typically serve minimal placement and exit purposes only and are rarely presumed to give opportunity to display higher order accomplishment. Indeed, savvy test takers avoid more creative or ambitious responses to the tests that might not be understood by cold readers who share no context. That is, the test becomes the context and the discourse is precisely limited by the perceived aims of the test.

Further problems with decreasing the sensitivity and challenge of written tests come from grading procedures. In order to provide consistency of grades across readers and across contexts of reading, general practice now involves the creation of rubrics of ideal types to which readers would be normed through training sections. These rubrics are based on a few general characterizations, which are organized into a small number of levels, typically four to six. Typical is the 4-point scale from the California Grade 4 and 7 Writing Standards Test which is part of the STAR-9 testing program *(see California Rubrics)*.

While these scales usually are to characterize the total quality of the essay, they can be more specialized to focus on one or a limited number of traits of interest, such as thematic organization and coherence, spelling accuracy, or sentence fluency. The California Standards Test Scoring Rubric for Grades 4 and 7 in addition to general criteria for writing includes focused criteria for narrative, summary, response to literature, and persuasive tasks. The use of these rubrics with appropriate training of the readers can lead to acceptable reliability of scores across readers (Wolcott, 1998, but see Scharton, 1996 for a critique of over-concern for reliability.)   Rubrics, nonetheless, provide only a crude sorting of the essays and do not identify the particular learning or knowledge displayed in the complex competence of writing. For example, the grade 7 persuasion task criteria have only the following very general characterizations.

- authoritatively defends a position with precise and relevant evidence and convincingly addresses the readers' concerns, biases and expectations.

- generally defends a position with relevant evidence and addresses the reader's concerns, biases, and expectations.

- defends a position with little, if any evidence and may address the reader's concerns, bases, and expectations.

- fails to defend a position with any evidence and fails to address the reader's concerns, biases, and expectations.

Even more seriously, they homogenize the variety of approaches a student could take to the writing prompt, which must be characterized as fitting in one or another of the ideal types. What if a student addresses the persuasive task by framing an extended analogy that taps the common experiences of the audiences, as in the biblical parables? Or presents a compelling vision to evoke a values commitment, as in King's "I Have a Dream" speech? These would fall almost entirely outside the rubrics.   Further these ideal types are characterized by formal features of the text, rather than the effectiveness of the text for the situation that prompts it. Rather the context becomes only the test-taking situation where one necessarily wants to produce the formal features identified by the rubrics. Thus exam-savvy students would necessarily adopt a claim and empirical evidence form, punctuated by concessions or counter-arguments to deal with standard points of contention, even if that would not be the most rhetorically effective strategy for the task at hand. Teaching to the exam leads instructors to teach writing as producing a formal product as described by the rubrics. This is in tension with a pedagogy that looks toward student participation in compelling rhetorical situations as the best way to elicit, practice, develop complex and rhetorically powerful choice-making. Where these rubrics define writing competence in generalized, unsituated terms, they trivialize the task of writing, rein in communicative ambition, and even remove the communicative impulse.

Portfolios of material produced *in situ* across the year within real learning tasks and then collected for an overall assessment provide one means for overcoming the artifice and lack of motivated ambition of out-of-context exams. Insofar as they remain embedded within a continuing set of educational interactions they can offer powerful tools of mutual review of development and accomplishment. But they can present similar problems of abstraction if the concern is not personal assessment and individuality but comparability and certification of a level of cognitive, disciplinary, or rhetorical competence. Although the component texts carried forward may have had strong rhetorical force in previous circumstances, they lose that context.

That context does stay in one sense insofar as the achievement of the paper was a consequence of the nature of the dialogue and expectation in the class. If the course content, presentation and discussion posed interesting questions that motivated students to want to pursue questions in disciplinary depth, and provided access and tools of access to resources, and kept raising the stakes of what would be acceptable, persuasive arguments, then the paper would reflect that knowledge. That is, the paper is an artifact of the entire activity system of the class and not just the individual merit of the student. And the writing of the paper, the learning experience, the amount the student is stretched, has to solve new problems, confront new materials, articulate

ideas with greater precision is precisely a result of this *in situ* process. It is this experience, honing of thought, knowledge, writing skill, commitment to particular ideas, sense of high level communication that the student brings forward through including the resultant paper in the portfolio. The paper, once removed from that classroom dialogue, loses the vitality (that is, the concrete life) it had there, but contains the residue markings of that dialogue. It is those residue marks of thought, learning, and skill that need to be captured if we want to know what the student learned and can now do. If the writing is truly for an audience and set of activities beyond the classroom, then the writing will gain its life within those broader circumstances. In that case the external audience can be deeply motivating. If the writing, on the other hand, finds its life only in the communicative world of the classroom, the outsider's assessor's eye may have a chilling effect on that dialogue; at the very least the local texts will need a reinvigoration to make them meaningful outside that context.

The pieces in a portfolio were once meaningful *in situ* work, but now in the portfolio students need to create a new testing context out of them. This may be done by renarrativizing—either to establish the former conditions of production or to highlight skills displayed in each. In both cases the texts become examples to be read in relation to the new narrative context. The writer might create a narrative of growth, of a line of thought, of personal awareness and self-formation or of technical skill. In this case the earlier texts are examples of lack of development rather than positive indications of skill; only the latter items exhibit learning and accomplishment. A recent dissertation by Anthony Scott at the University of Louisville has demonstrated that this renarrativizing of portfolios through cover letters directed toward the examiner has already begun in the Kentucky statewide portfolio assessment system (2002).

In most cases of evaluating portfolios, given the heterogeneity of texts and situations that generate the texts, it becomes hard to identify what we should look for in common across the texts beyond formal correctness. If we create general rubrics we can easily lose the particular character and meaning of the texts, what they significantly do in their original or even new portfolio context, and thus the principles upon which the texts are constructed. We lose the very idea and shape of the text around which all the other features are arrayed.   And once again we lose sensitivity to higher level achievement, and thus remove the motive for students to display themselves at their most engaged. One way to capitalize on renarrativization is to define the criteria for the evaluation of portfolios around growth and thoughtful use of specific disciplinary knowledge, particular cognitive skills, depth of reasoning and creative/extensive use of resources. The genres and activities to be presented in the portfolio would be coordinated with those goals, and the student statements and selection of samples will be directly to create narratives of these disciplinary, higher order reasoning practices that the students have developed.

Greater comparability in portfolio samples and in the situations that produce them can also be obtained by identifying more closely the genres to be produced and the activity systems the genres these come out of. Those genres and activity systems may then be aligned with the typical genres and activity structures of schooling at the appropriate grade levels. The identification of broadly defined genres to be included within portfolios is already a practice in some cases. For

example, the Kentucky Writing Assessment specifies that at grades 4, 7, and 12, portfolios include samples of reflective writing (in the form of a letter to the reviewer), personal expressive writing (in the form of a personal narrative, memoir, or personal essay), literary writing (in the form of a short story, poem, or script) and transactive writing (to be selected from a variety of forms) (Kentucky, 2001).   Perhaps we can make some gain in the situated meaning and complexity of performance tasks by seeking comparability not in the final text but in the situation and activity system that produce the text. As I will examine in the next several sections, within organized cultural practices, shared cultural understandings can lead to a set of broad expectations that will lead to similar behavior that might be comparable across situations.

8. The Need for a New Approach to Assessment

Each of the previous sections of this hypertext has in its own way been articulating the need for new tools to assess motivated situated activity. Such tools could locate specific skills within more advanced and challenging performances, elicit specific more advanced performances within assessment tasks, and articulate with more challenging curricula. Such tools would help teachers plan and direct projects so that desired areas of instruction and learning will be activated in ways relevant and challenging to students within meaningful situations. Such tools would help teachers see more quickly and fully the opportunities for supporting traditional skills as they appear in emerging activities and introducing new kinds and levels of skills needed for successful completion of meaningful tasks. Finally such tools would help teachers recognize and assess students' engagement with mandated or desired areas of organized curriculum.

While I have suggested that alternative performance-based assessments have been going in the right direction, they still lack sufficient definition and regularity to serve institutional needs and to create as high a level of focused challenge as they might. The lack of a robust solution of this dilemma--serving institutional needs as well as teaching and learning needs--provides credibility for the recurring calls towards direct skills and subject matter instruction, to be monitored by standardized examinations. We see exactly those issues arise in the current climate of standards and accountability through testing.

A recent volume on assessment from the National Research Council, *Knowing What Students Know: The Science and Design of Educational Assessment*, presents the current impasse strikingly. The volume prepared by the NRC Committee on the Foundations of Assessment through a lengthy consultative process with leading educational researchers aims to review the current state of the art of educational assessment.   Early in chapter 3 of this volume, four perspectives are identified as representing current thinking and research on learning. The report identifies the four perspectives as differential (individual differences that affect learning), the behaviorist, the cognitive, and the situative (which the report identifies with sociocultural theory and research).   This last perspective most closely corresponds to the activity perspective taken in this essay and other essays in this collection. Concerning this perspective the report states:

> Most current testing practices are not a good match with a situative perspective….From a situative perspective, there is no reason to expect that

> people's performance in the abstract testing situation adequately reflects how well they would participate in organized, cumulative activities that may hold greater meaning for them. (2001, p. 64)

A one-and-a-half page discussion of the perspective is followed by a one-page discussion of the points of convergence of the four perspectives. In this section the value of the situative approach is identified by such general classroom-focused statements as

> the social practices of learning emphasized by the situative approach are important aspects of education." (p. 64)

> The situative perspectives can aid them[teachers] in organizing fruitful participatory activities and classroom discourses to support that learning. (p. 65)

> [Both cognitive and situative perspectives] imply that assessment practices need to move beyond the focus on individual skills and discrete bits of knowledge that characterizes the earlier associative and behavioral perspectives. They must expand to encompass issues involving the organization and processing of knowledge, including participatory practices that support knowing and understanding and the embedding of knowledge in social contexts. (p. 65)

By such language the report tends to reduce the situative approach to an issue of effective classroom technique, and gives only minor nods to its more thoroughgoing claims—that knowledge and thought are mobilized and organized purposefully in situations and are not usefully or measurably assembled except in such contexts. The volume never returns to the situative approach in the rest of its 350 pages, even though it lists the situative approach as one of the four major perspectives, and is the one that is most recent. In short, the volume offers no way to deliver on the claims of situatedness for assessment, and declares it relevant only as a classroom planning concern. That position might perhaps be acceptable if assessments and assessment-based decisions did not regularly influence, shape, and even regulate the practices of the classroom. As long as the latter is the case (and there are plausible institutional reasons for that being the case—*see section 4*), the socio-cultural perspectives must find some way to find a way into the assessment system.

Not only must the sociocultural or situative perspectives find some way in, they themselves may provide the means for creating a place for themselves within the world of assessment. In the remaining sections I will be exploring the ways in which an activity systems approach to genre may provide some useful tools for assessment and planning. In line with the approach of the other essays in this collection, I am suggesting that a genre and activity based approach can help us develop regularity, anticipatibility, and focused challenge within motivated real tasks. These assessable tasks will be continuous with the learning work of the classroom and will not need to take time out for isolated assessment tasks, nor will they create an imperative to create test preparation that takes time away from the situated learning of the classroom. The assessed tasks will be the comparable products of the ordinary work of an organized, motivated curriculum based at the intersection of student activity and subject-area knowledge and skill.

9. Genre and Activity Theory

In the earlier sections of this hypertext I have been employing an activity systems approach to understand where, how, and why we carry out assessment activities and to consider the particular forms through which we carry out these assessments. In the following sections I will use the same theoretical tools of activity and genre theory to analyze a specific set of activities in one classroom over a month-long social studies unit. This analysis is aimed at showing how particular forms of knowledge and thought are associated with and displayed within particular activities and the genres produced.

In the various chapters of this collection there are many representations and explications of activity theory and its relation to genre theory. Rather than repeat material elsewhere here and in numerous other publications (see especially Bazerman, 1994; Russell, 1997a, 1997b), I will simply highlight those aspects most relevant for the problem at hand.

Genres are typified forms of utterances recognized as useful in circumstances recognized as being of a certain type. We coordinate our speech acts with each other by acting in typical ways, ways easily recognized as accomplishing certain acts in certain circumstances. If we find a certain kind of utterance or text seems to work well in a situation and be understood in a certain way, when we see another similar situation we are likely to say or write something similar. If we start following communicative patterns that other people are familiar with, they may recognize more easily what we are saying and trying to accomplish. Then we can anticipate better what their reactions will be if we followed these standardized, recognizable forms. These patterns are mutually reinforcing. Recognizable, self-reinforcing forms of communication emerge as genres (Miller, 1984).

 As typified responses, genres also serve to further typify motives, actions, and circumstances. They become the regularized bits of systems of interactions, out of which the entire system takes on increasingly recognizable and anticipatible sequences of action. As the form of action they also become the shape our motives take on as they become realized in action.

This process of moving to standardized forms of recognizable and easily understood utterance and action is called **typification** (Schutz & Luckmann, 1973). Thus in some professions if we wish to seek a position we need to prepare a resume or curriculum vitae to list all the relevant facts and professional accomplishments of our life and to highlight our desirable qualities for the potential performer.   A standard format direct us to present certain information, such as address, education and prior experience. The standard format also directs us how to present that information. Following the standard format, as well, helps the employer find and interpret the information. Further there are standard differences in format for different professions. In academic employment, publications and research take a central role, while in business listing responsibilities in each prior position and listing of specific training and skills are often important. Of course, even within the standard forms people try to express their particular characteristics and make their resume distinctive and memorable, so as to stand out from the others. Yet as soon as someone invents a new element or format

that seems to work, it is likely to be picked up by others and become fairly standard within that field. Such, for example, is the newly established practice on resumes for a number of professions of listing computer programs one is familiar with.

Genres typify many things beyond textual form. They are part of the way that humans give shape to social activity. When you are at a football game and recognize that the crowd is taking up a chant for your team, as you join in you are being drawn into the spectacle and emotions of the community athletic event. As you read and are convinced by the political pamphlet of a candidate for Congress, you are being drawn into a world of politics and citizenship. As you learn to read and use research articles of your field, you are drawn into a professional way of being and work.

Through the typification of forms, participation in social and cultural activities itself becomes typified as do the larger systems. That is, the textual forms mediate our relationship with others who are part of the activity, thereby giving regularity to our form of participation, our relations to others, and our contribution to the entire object-orientation of the activity system. Thus a letter to a newspaper editor is not only a recognizable form, but it is tied up with many other forms, such as newspaper editorials, news stories, political speeches, campaign documents, newspaper subscriptions, and many other elements of the journalistic and public spheres, out of which those spheres are constituted.

Those spheres of activity, or **activity systems**, having then been constituted, the genres then form modes of participation and motives for formulating one's participation. That is, one sees a way of participating through the letter to the editor, and one then is so moved to write the letter. While one's general communicative impulse is shaped by the generic form and motive of the letter to the editor, the specific form, content, and aims of the letter are responsive to the current situation and its placement within a history of similar recurrent situations. Further, by writing and submitting a letter we take on specific relations to the editor and author of the story we are commenting on; and if our letter becomes published we taken on an identity and relationship to the community served by the newspaper. Finally, we have carried forward the public discussion of some issue of community concern and have helped maintain the forums of public deliberation and contention.

In engaging in the communicative relations of a genre we typically need to deploy certain specifics of knowledge and thought associated with that genre. Each genre has its pattern of information displayed as well as agents and activities displayed. Bakhtin calls this informational and actional landscape of a genre its **chronotope**—or time-space (1981). Just as fairy tales are set long ago and far away in a land populated with princes who do great deeds, maidens who find themselves in distress and witches who are up to no good, so do stock reports visit accounting rooms where profits and losses are counted up and marketplaces where customers are eager for goods and services and corporations are clever at anticipating those desires. The typified informational landscape and action of every genre establishes expectations of knowledge and thought that each text in that genre must fulfill if it is to be effective in its work.

A **Genre Set** is the collection of types of texts someone in a particular role is likely to produce (Devitt, 1991). In cataloging all the genres someone in a professional role is likely to speak and write, you are identifying a large part of their work. If you identify all the forms of writing a student must engage in to study, to communicate with the teacher and classmates, and to submit for dialogue and evaluation, you have defined the competences, challenges, and opportunities for learning offered by that course.

A **Genre System** is comprised of the several genre sets of people working together in an organized way, plus the patterned relations in the production, flow, and use of these documents (Bazerman, 1994). A genre system captures the regular sequences of how one genre follows on another in the typical communication flows of a group of people. The genre set written by a teacher of a particular course might consist of a syllabus, assignment sheets, personal notes on readings, notes for giving lectures and lesson plans for other kinds of classes, exam questions, e-mail announcements to the class, replies to individual student queries and comments, comments and grades on student papers, and grade sheets at the end of the term. Students in the same course would have a somewhat different genre set: notes of what was said in lectures and class, notes on reading, clarifications on assignment sheets and syllabus, e-mail queries and comments to the professor and/or classmates, notes on library and data research for assignments, rough drafts and final copies of assignments, exam answers, letters requesting a change of grade. However, these two sets of genres are intimately related and flow in predictable sequences and time patterns. The instructor is expected to distribute the syllabi on the first day and assignment sheets throughout the term. Students then ask questions about the expectation in class or over e-mail, and then write clarifications on the assignment sheets.   The assignment sheets in turn guide student work in collecting data, visiting the library, and developing their assignments. The pace of their work picks up as the assignment deadline approaches. Once assignments are handed in, the professor comments on and grades them. Similarly the instructor prepares, then delivers lectures and classes. Students are expected to take notes on readings beforehand and then on what the instructor says in class; then they study those notes on class and readings before the various quizzes and exams. Typically the instructor looks at the lectures and assigned readings in order to write questions for quizzes and exams. The students then take the exam and the teacher grades them. At the end of the term the instructor calculates by some formula the sum of all the grades to produce the content of the grade sheet, which is submitted to the registrar to enter into an institutional system of genres.

This **system of genres** is also part of the **system of activity** of the class. In defining the system of genres people engage in, you also identify a framework which organizes their work, attention, and accomplishment. In some situations spoken genres dominate, but as you move up the educational ladder and into the professional world, the system of written genres become especially important. In some activities physical aspects take on a highly visible and central role, and the spoken and written genres are peripheral or supportive rather than central. Playing basketball may be mostly about moves and ball handling, but there are rules, strategies, cheers, league organization, and newspaper reporting which engage spoken and written genres.   In knowledge-based fields, such as medicine, and especially fields where the primary product is

making and distributions of symbols, such as journalism, then the activity system is centrally organized around written documents.

Considering the activity system in addition to the genre system puts a focus on what people are doing and how texts help people do it, rather than on texts as ends in themselves. In educational settings, activity puts the focus on questions such as how students build concepts and knowledge through solving problems, how instructional activities make knowledge and opportunities for learning available, how instructors support and structure learning, and how and for what purposes student abilities are assessed.

For the purposes of assessment and planning, a genre and activity system analysis identifies the character of performance situations. It identifies the typical forms performance takes within those situations, the kind of work associated with those forms and performances, and how those forms of participation are linked to other resources and participants within activities.   It also identifies the kinds of knowledge expected and the kinds of uses and manipulations that information is to be put through. Genre and activity analysis allows us to see and evaluate the performance within greater contexts at the same time as it allows us to understand the contexts evoked by assigned forms and the appropriate resources, coparticipants and activity goals that would evoke robust performances. It allows us to anticipate the performance expectations of particular forms within regularized settings, and create some comparability among assessment and performance settings.   In short, genre and activity systems analyses give us ways of considering the important particularities of learning and assessment situations without seeing all situations as being so particular as to be incommensurable and idiosyncratic.

The genres students are requested to write establish expectations and the level of challenge students will have to meet to realize the demand of the genre. Each genre, to be well performed, requires the use and display of specific kinds of knowledge, specific kinds of understanding and operations applied to that knowledge, and specific kinds of intellectual skills. That is, each genre carries with it implicit challenges and implicit criteria of assessment. Making explicit the challenges and specific criteria of each writing task and the genre it is to be realized in provides the means for in situ assessment integrated the larger systems of learning activity. We may not need to isolate assessment activities from the on-going work of education. In fact, understanding genres may allow us to make comparable or even repeatable assessment activities without creating stand-alone assessment activities that have no motive beyond assessment.

This integration of standardized assessment (standard in the sense of meeting particular standards and in the sense of being common across settings) with teaching and learning situations allows richer, more motivated, more multi-resourced challenges to be placed before the students. We can then assess more complex, difficult work within richer production environments.

Benefits may also flow towards planning as well as assessment, for through an analysis of genre and activity systems we can more explicitly project where sequences of assignments will take students. We can see what knowledges students will have to become more familiar with, how they will have to represent that knowledge, and what kinds of thinking students will have to do to

appropriately complete the tasks. We can see, from the holistic perspective of meaningful learning tasks, the particular disciplines of information and thought tasks and sequences of tasks will draw students into. We can provide anticipatible pathways into received organized domains of disciplinary knowledge even as we allow students to follow the logic of their inquiry. The dynamics of the genres and activity systems will direct them towards particular kinds of available resources implied within the typifications of those forms of action. Standards based planning and testing need not atomize learning environments so as to produce atomized success on atomized tests.

Finally, extended sequences of activity may be more motivating for students as well as make them more knowledgeable and practiced within the relevant domains. If we are skillful in identifying the areas and activities for the sequences of activities we can draw the students more deeply into series engagement with knowledge, thought, and knowledgeable practice. As a consequence the learning environments will be more exciting and rewarding. We will be testing students at the best, their most engaged, with their most heightened attention carrying the momentum of a sequence of motivated activity, rather than at their most disengaged skill and knowledge display elicited by isolated testing.

10. An Activity Analysis of Planning, Accountability, and Assessment of a Multi-disciplinary Project Based Learning Experience

The following case demonstrates the value of considering genre, genre sets, genre systems and activity systems in evaluating the learning potential and consequences of a set of classroom activities. I would like to thank Chris Carrera for his generosity in opening up his classroom, materials, and thought to ethnographic study and to Kambiz Ebraham for his help in collecting the ethnographic data. This example does not yet rise to a fully coherent example of local assessment following the principals I have been laying out, let alone the basis of large scale testing. However, it does make explicit the implications of the genres and activities planned and assigned by the teacher and the anticipatible uniformity of the challenges faced by the students, reflected in the orderliness of their productions. The variations of their productions are understandable and analyzable in relation to the typified expectations of the assignments that define the knowledge resources to be drawn on and the intellectual operations to be carried out.

Over a six week period during the late fall of 1998 in Mr. Carrera's sixth-grade class in a suburban California public elementary school, students engaged in a social studies learning unit on the Maya. According to state mandate (at that time and still in force) sixth year social studies should be directed toward World History and Geography: Ancient Civilizations. While the current standards (see California Grade Six History-Social Science standards) do not explicitly identify attention to the Maya as they do mandate attention to Ancient Middle Eastern, Greek, Roman, South Asian, and Chinese civilizations, they do mandate a preliminary unit on archeological studies. It is under this mandate and with this focus that the teacher developed and assigned the set of activities presented below.

In this class the unit on the Maya was to some degree integrated with simultaneous learning units in mathematics, language arts, and video production. As part of this unit they read and wrote a variety of texts. Among the texts they wrote were fill-ins on worksheets and outlines, notes on the readings, informational reports, quizzes, exams, collaboratively written video scripts about an expedition to the land of the Maya, drafts for several of these assignments, and final reflections on what they learned from the unit. These documents are the genre set of the student writing during this unit; they were collected in a file of the student work. Readings and resources included packets of information about the Maya, supplementary reference books, reference Web sites, each other's reports, and drafts of their mutually constructed projects and scripts. Students also created drawings of Mayan sports, maps of imagined Mayan cities, collaboratively built models of their imagined cities, board games about the Maya which incorporated words and text (produced in teams of two), and videos of their adventure stories (produced in teams of four or five). We can call these latter works an extended graphic genre set, though they were not collected and placed within the student work files. The fact that certain items were not included in the student files indicates a difference in the evaluation of these productions, with perhaps a difference in assumptions about the kind of work engaged in and the way knowledge is used.

In traditional terms the activity of this unit could simply be characterized as learning social studies facts and concepts with some reinforcing activities. This characterization is supported by the collection in the work files of the final reports, the worksheets, outlines, exams, and information sheets. The final reports of most students were collections of facts gleaned from handouts, textbooks, encyclopedias, and online reference materials, presented with only minimal organization and no transition between different topics and the fact sheets. Quizzes and exams equally show only the accumulation of fragmentary facts and ideas. Only a few students were able to achieve a level of articulated synthesis that gave a sense of totality of vision to their papers. On the other hand, students seemed to have understood the expectations of the genre of reports to require a collection of information.   One student, Maria, in the opening sentences of her report articulates precisely this understanding of what she has to do.

> Okay, before I pour all this information on you, let me introduce you to the Maya. They had six prosperous cities: Tulum, Chichen itza, Uxmal, Mayapan, Tikal, and Palenque. Got that? Great.
>
> Here comes the rest...
>
> They were the first people in the New World to have written records. They also had numbers. One was a dot. • Two was two dots.••

This goes on for about 500 words presenting information on chronicles, calendars, ball games, human sacrifice, geographic and historical extent, trading, and demise. Thus almost all the papers from the class were similar in content, organization, and diction, varying mostly in length and amount of information reported.

That students had such an understanding of the task and the genre is not surprising given that the original assignment packet for this unit described this assignment only as "three page typed

describing the Maya culture." This assignment was embedded within a much more elaborate set of activities, described below, but the specific genre of this assignment was very narrow. The narrow collection of information focus of this assignment was reinforced and supported by a number of other activities that occurred between the original assignment and the due date of the paper (December 4). First, with the assignment packet and in the days following, several handouts were distributed to the class photocopied from reference works covering history, calendar, religion, number system, sports, cities, sacrifice, geography, art and similar topics. Second, each week in class specific topics of the information were reviewed, with an informational quiz on Friday, as specified in the teacher's planning spreadsheet (see figure A). Third, on November 9, students had to fill out a pre-printed informational outline (see figure B) on the Maya civilization concerning The Land and Region; Classic Period; Maya Knowledge. Fourth, due November 30, just before the final reports, was a research chart to be filled out by students working in pairs, first by hand on the worksheet, and then transcribed on a spreadsheet. For five cities, each pair of students had to identify the location, record an important discovery, describe the region, and select an interesting cultural fact. Maria and Sau-lin completed just such a research chart (see Figure C).

Figure A

ROOM ONE
WEEKLY ASSIGNMENT
(11/16-11/20)

Good morning Wonder People,
    I hope you used this weekend to work on your Ancient Maya project. Today we will review your progress and begin to organize our Maya simulation activity. By the way, your ancient city models are some of the most creative works anyone could ask for.
    Since this is an early day week because of conferences, we will not have PE unless we are caught up on other assignments. Let's stay on top of things and have another happy productive week.

	NEWS 8:30-9:00	SSL 9:00-9:30	LANG ARTS 9:30-10:50	SOC SCI 11:10-12:00	MATH 12:00-12:35	HOMEWORK all day & night	Notes
Mon.	Today we will look at three stories from the newspaper.	new vocabulary and phrases,	journal writing, reader, creating with our imagination	Ancient Maya Culture: Classic Period. •Maya Cities	math drill, problem solving, measurement, Maya math	spelling, math: due Friday. SSL packet. Maya Project	
Tues.	you will use the food section from the paper for SSL	vocabulary phrases translations	read journal stories: edit and revise.	Maya: the people, the culture, the art: Classic Period	math drill, problem solving, measurement, Maya math	check your homework assignments	
Wed.	creating a news broadcast	review the food section from the paper for SSL					
Thurs.	art lesson w/ Ms. Clevenger	art lesson	illustrating your words	a videotape production: script, setting, props	math drills, (diaries)	packets due tomorrow. Read before going to sleep. Good night	
Fri.	week in review. news as journalism	weekly Spanish quiz, Simon dice,"..."	spelling test, review weeks work	Maya: the people, the culture, the art. QUIZ!!!	math quiz, activity time, check folder (diaries)	watch the news, read, & have fun with your friends and family	

Ancient Maya
Outline
November 9, 1998

You are to complete this outline with information from our Maya packet, classroom discussions, and research materials. Remember to keep the information brief and to the point.

I. Maya Civilization
    A. The Land and Region

        1. Harsh living conditions
        2. Jungle, rain forest
        3. Mountains.
        4. Mexican southeastern states, Yucatan Peninsula Guatemala, south Into Guatemala, northern Honduras

    B. Classic Period
        1. Beginnings of Mayan greatness 300 AD
        2. Flourished until 900 AD
        3. Schools
        4. Markets for trading goods Centers for practicing religion.

    C. Maya Knowledge
        1. Master astronomers
        2. " " mathematicians
        3. " " archretecture
        4. " " writing
            " time & calendars

Figure B

city name	city location	research information	region description	interesting facts
Uxmal	Northwestern part of the Mexican Yucatan.	The magnificent architecture here is adorned with many elaborate decorations and bright colors.	rugged terrain, and hot ground	The Magican's Pyramid has said to be built in one night.
Tikal	The middle of dense jungle, north of Guatemala.	This sprawling city consists of numerous residences, temples, pyramids, and ball courts.	viny, and very colorful	Played a soccer type game called Pok- a- tok.
Tulum	The coast of the Caribbean Sea.	Tulum prospers because it can acquire trade goods from the sea.	Water, coast, and very colorful.	Sacrificed humans to Gods
Chichen Itza	North- central part of the Mexican Yucatan.	Chichen Itza has grown to great wealth and power because of it's central among the Maya trade routs.	North-central rain forest.	Attempted to kill other cities
Palenque	East part of Mexico	Human sacrifices were located here.	Thick Mexican Jungle	They had special Ceremonies.

Figure C

The products represented in both figures *B* and *C* are mechanically organized sets of factual fragments, selected and transcribed from the distributed informational sheets. The further transcription of this material onto a spreadsheet practices technical skills, but also reinforces the idea that information (and research) consists of such fragments organized into formal categories. Thus it is not surprising that students understand the final research report as a collection of loosely organized facts. Such a task can practice useful grade appropriate skills of identifying and organizing information, but does not engage higher levels of synthesis, analysis, or discussion.

The apparently student-produced genres of outlines, worksheets, and quizzes are in fact collaboratively produced with the teacher in the specific sense that the words on the final page include words of both the teacher and the students. The teacher produces the topics, categories, and structure for the outline and chart and the questions for the quiz. He further produces the instructions on each of the assignment sheets. Also in the teacher's structuring of the intermediate informational assignments we can see the teacher's hand in the final reports. Thus these genres are strongly shaped by the teacher's decisions of what should be written and how. The students' recognition of the teacher's speech act of assignment shapes their further actions in fulfillment of the assignment, just as the teachers' further assignments are dependent on his recognition of the students' completion of prior acts. Each new student production is dependent on them having completed earlier acts, turning them into accomplished social facts that they could then rely on and build upon.

In two collaboratively produced teacher student genres, however, the teacher's decisions structure a very different kind of work for the students. First is the unit final exam, given on December 11, with three questions.

1. What qualities do you think gave strength to the Mayan Empire?

2. In what ways can trade between cities help to create good relationships?

3. Why do you think the Mayan Empire did not go on forever?

Each of the three questions requires students to think evaluatively, causally, and critically, and most of them did so. Maria provided one of the more elaborated set of answers, but not all that different from that of most of her classmates. In answer to question 1 she wrote,

I think that the accuracy in their calendars, their knowledge of the movements of the stars, their ability to create their own letters gave strength to the Mayan Empire. I also think that no matter what role you had, or what you did, you were important to the Mayan Empire, and that gave strength to the Mayan Empire.

How did such questions and answers count as an appropriate test of what the students had learned if the earlier activities were primarily transcription of fragmented information? And where did the students get the ideas and stance from which they could answer these questions?

Before we answer that let's examine another end of the sequence document, the "Final Thoughts" worksheet filled out two days before the final exam. The following example from Desmond covers typical themes.

Room One

Ancient Maya Civilization

Final Thoughts

Think about all that we did with this study of the Ancient Maya: the research report, art projects, model making, script writing for the plays, videos, videotaping, and group organization. Now share some of your final thoughts by responding to the questions below. Please be Specific. Thanks for doing a great job with your assignments.

1. What did you learn from our study?

I learned that the Maya were very Bright people because they had writing, langue, and calenders.

2. What did you like about our study?

> I liked making are clay mayan citys because I had a fun time working on in with my friends and I.
>
> 3. What would you like to change with what we did?
>
> I would like to change the Mayan city
>
> time to work on it, I would want more time to work on it. I think it would have been better if we had more time to work on it. But it still turned out good.
>
> 4. What would have made it better and more interesting?
>
> Are play would have been better if we had more cooperation.
>
> 5. How could we have improved our video productions?
>
> It would have been better if we were organzed.
>
> Include some of your personal thoughts below that may not be asked in the five questions.
>
> It was very fun.

Only the first question really evokes in Desmond (and most of the other students) any reference to the factual information, and even then the information is subordinated to an evaluative conclusion. All his remaining responses (as did the responses of most of his classmates) referred to the other activities of building models, the play production and videotaping. And key themes were working together, doing things better, and having fun--all issues of participation and engagement. Given the predominant flavor of the work we have examined so far, how did students glean such learning and develop such attitudes toward the unit?

The answers on the final exam and "Final Thoughts" reflect some class discussion about the factual material they were learning, but they also reflect the wider system of activity built into the unit. The unit was built around two sets of activities organized by the teacher—one individual, informational, and reporting; the other creative, inquiry-based, and collaborative. Each set had its own supportive and assigned genres that developed and rehearsed the assignments' orientation, creativity, and thought. The informational content was embedded within these activities that engaged the students and which they found fun. But even more these activities gave students the opportunity to think about and use the factual content, and thus to develop significant meanings from the content.

The activities were set in motion by the original assignment sheet at the beginning unit, which set out the following simulation frame:

> **Project:** You are a member of an ancient Maya people and you have been assigned the task of establishing a new site to design and build a great city.

> The name of the city will be chosen from one of the following: Tulum, Chichen Itza, Uxmal, Mayapan, Tikal, or Palenque. The task is to be done individually, but you may confer with others to get ideas or give suggestions. Good luck and begin immediately, because the king is not a patient man and needs the city built before invaders arrive.

The sheet goes on to specify three parts of the project: a "three page typed report on Mayan Culture, an illustration/graphic, and a blueprint of the Mayan City with everything labeled." A fourth final activity of group creation of a play with script and costumes and videotaping is mentioned. Each of these four parts was modified and elaborated in the ensuing six weeks.

The original situation frame of designing a new Mayan city gave motive and purpose to the informational and other activities of the first half of the unit. The factual information is necessary to understand what a Mayan city is and how you should design one to include its typical buildings, institutions, and places for its usual activities. That work became most fully and directly expressed in the map/design each produced, which then became the basis for a scale model.   Two additional art projects, however, reflected the same kind of civilization building thinking. One was a board game each had to design to reflect the daily life of residents of the city and the other was to act as the chief Maya artist commissioned to create a design that reflects the style of the culture. (Students were also learning to use graphic software as part of this assignment.) Finally there was a sequence of Mayan math exercises (from a prepared unit) that used standard word and logic problems incorporating objects and situations relevant to the Mayan agriculture, social structure, and culture, the problems also provided practice using the Mayan number system and calendar. These immersions in Mayan life through simulations did more than rehearse some factual material about the Maya, they drew sixth graders into thinking about the material and how the facts reflected a way of life. Such thinking could be displayed and assessed in response to the questions asked on the final exam and "final thoughts." Such thinking also provided the background for another level of activities in the second half of the unit.

The second half of the unit transformed the situational frame from design into inquiry and the mode of work from individual and collaborative. This was initiated by an assignment sheet handed out four weeks into the unit on November 20, just after the designs and scale models were finished. The assignment sheet informed the students that they were archeologists who had found an artifact with a map to an undiscovered Mayan City. They were to organize in teams to search for the city and its treasures; they would then script and produce a video documentary of their adventures. The assignment sheet provided space for the students to sketch out preliminary ideas about setting, characters, events, and story summary for the initial work sessions with the collaborative group (about five students in each group). Also provided was a follow-up framework for the script, in which the characters, setting for each scene, the props and costumes and the production team roles, and other notes were to be listed. These assignment sheets scaffolded the work of script writing and production for the students as they made decisions in filling out the blanks and then did the additional work implied in each of their answers.

The research chart discussed earlier finds its meaning within this archeological frame of action. The instructions for the chart describe it as a report from field archeologists back to their colleagues to let them know what has been found. So now the material is not just information to be tested on--it is something the students, in their simulated roles as archeologists, know to be shared with others. The knowledge they have found also becomes subject and material of their videos (which were also produced as live plays).

The scripts of the videotaped performances are pretty basic, involving archeologists walking through the city with local informants pointing out aspects of the culture. The plays tended to dwell on the ball game with a death penalty for losing and other moments of human sacrifice. Nonetheless, stories are larded with the facts and names that have cropped up in the various reading and writing genres throughout the unit, so that the students have learned to inhabit the informational space even while engaged in imaginative play. Looking at the limitations of the scripts, one could well understand why a number of students commented that the videos would have been much better if they had learned to work together and everyone learned to do their part. It also becomes evident that the teacher used the lesson of cooperation within successful civilizations to help students reflect on the difficulties of their own collaboration--and thus comments about cooperation being essential to Mayan success turn up as well on the final exam.

When we look at the total activity system of the classroom as students participated in each unit, and the kind of work and learning accomplished in the production of each of the teacher-directed genres, we can see that students were doing more than reproducing facts from handouts and books. They were thinking about the material and using the material to engage in other activities, which required understanding and elicited motivated engagement. These various activities were coordinated in a mutually supported sequential system that ended with classroom presentation of reports, airing of the videos produced by each of the several small groups, reflective observations on the activity, and analytical thought on the final exam. The activities each were centrally engaged with well-known, typified textual and graphic genres that afforded students anticipatible access to information, challenges and problem solving. Each activity also provided structured opportunities for learning. The end result included familiarity with some factual information about the Maya. The result, however, also included a sense of what Mayan life was like, an experience of being an inquirer into another culture, increased skill in synthesizing and presenting information, using knowledge creatively for imaginative productions, and a sense of the practical import of the information. There were also learning and practice of many computing and video media skills. The richness of the activities and the informational base drawn on combines with the regularities of the genres assigned to create engaging, informed work which is both plannable and assessable. The teacher through careful construction of activities and assignments could anticipate what kinds of intellectual challenges and knowledge resources students would address at each juncture. Further, each student production could be evaluated on the basis of how well it met the informational demands of the genre. While the assessment of the more complex collaborative assignments of the second half was more holistic than the examination and grading of the more factual first half material, the

kind of genre and activity analysis developed here provides means of developing more explicit criteria of assessment and specific guidelines for project development.

11. Discussion of the Case Study

What we see in this complex of classroom activities is of course an admirably well planned set of tasks orchestrated by a skilled teacher, engaging students in attractive projects, but also providing them the intellectual and factual tools to accomplish those tasks. The students' need for the information and engaged interest in the projects seem to have motivated greater familiarity and attention to the traditional materials. The traditional materials were assessable through standard information-recall testing and other knowledge display assignments such as the research paper. However, the motivated engagement of the project activities provided for a deeper understanding of the material, as students used factual material in their roles as designers and archeologists. This deeper understanding was to some degree assessed through questions calling forth such thought and was to some degree assessed through the holistic grading of the collaborative projects, but more explicit criteria and assessment practices can be developed through further description and understanding of the tasks students are asked to perform.

The genres of activities and display typically call forth the kinds of knowledge and skills we see practiced and displayed. It is the judicious selection, combination, and sequence that supports students in building knowledge, developing cognitive complexity, and becoming engaged in learning. The timing and selection of products and assessments--traditional and non-traditional--allow students to demonstrate knowledge of these materials, and allow the teacher to build on these skills in further lessons. Subsequently, Mr. Carrera introduced even more complex and advanced units on other ancient civilizations. The state-mandated curricular survey of cultural heritages is organized as parallel monthly tours of different civilizations, differing only in the factual particulars and historical themes, to be approached at the same level. However, because of the attention to deepening activities across the units, building on the skill sets, knowledge, and genred understandings presented in each unit, Mr. Carrera was able to lead students to more sophisticated activities and understandings over the course of the year. Students demonstrably were developing a deeper understanding of culture and society as they had to accomplish more and more complex tasks in each sequence of activities and sets of assigned genred performances.

The judicious selection of activities, artifacts, projects, resources, and media also allowed Mr. Carrera to create a highly integrated curriculum drawing together several traditional curriculum areas (language arts, mathematics and social studies) with new and highly motivating areas of media skills and media criticism. In so doing he started to develop in the students an understanding of the role of representation and knowledge making on the parts of cultural recorders such as archeologists, historians, film-makers, and even students writing fact-collecting research papers.

This curriculum was the result of many years of experience and development by Mr. Carrera. He has drawn on numerous materials and projects developed by other teachers, has located and used special resources--such as the educational support services of the local cable provider--and he

has developed a keen and complex way of integrating assignments. I do not claim that he needed anything like an explicit knowledge of genre and activity systems to do this. Yet he clearly has a practical knowledge of these things because he was able to manage them so well.

An activity and genre analysis helps unpack and describe his curricular plan and sequence of events. The analysis in characterizing the genres the students worked in and how they deployed factual material to accomplish those genres also identifies exactly what students are doing and what knowledge and thought they are displaying. It also identifies the appropriate implicit criteria by which each assignment might be assessed, given the logic of the genre and activity— that is, the identification of task appropriate skills and resources deployed in the completion of each of the genres suggests specifically what might appropriately be evaluated in each of the tasks. The genre and activity analysis provides a way of seeing the disciplinary and intellectual requirements of each task and suggests how assessment can be ordered and regularized in ways accountable to disciplinary knowledge and canons of intellectual accomplishment. Finally the analysis provides means for describing and translating the learning unit and its learning goals to other classrooms. Making the learning logic of the assignments and their sequence accessible, suggests the possibility of coordinating the work of different classrooms, and comparison of the accomplishments of students in these classrooms, although that goes beyond the scope of what was observed in this classroom. This comparability would depend on the degree that any instructional unit, developed within a particular situation, may be successfully implemented in multiple sites.

 As a researcher and member of a support collaborative, I at first had a hard time coming to understand all that Mr. Carrera and his students were doing. When beginning this field study, all I saw was a number of remarkable products. And even after numerous meetings and discussions, I was unable to get more than fragmentary pictures of what was going on. The curriculum seemed very much a personal accomplishment of the teacher, not through any secretive desire on the instructor's part but because none of the more familiar curriculum description tools allowed the drawing of the coordinated picture.

Only as I started to lay out the genre and activity analysis contained in the previous section did I gain an understanding of all that went into the curricular plan, the kinds of activities carried out by the students, and the kind of learning developed and displayed in each of the products and performances. Genre and activity analysis provides tools to unpack the complexities of situated learning, to plan and organize activities that incorporate spontaneous engagement with difficult challenges and rich resources. Yet these complex, engaged activities still produce anticipatible outcomes that can be assessed in an orderly way, that supports comparability across situations.

12. Importance of Issue and Implications of This Line of Solution

The stakes in assessment go far beyond best way of testing the knowledges of individuals. But even accurate individual assessment requires eliciting performance at the highest level of

engagement and accomplishment a student can produce. We would not measure the artistry of a Pavarotti or a Sting by asking them to sing an unadorned rendition of "Happy Birthday" in chorus. While some of the character of their voices might still sneak through, there would be much less to distinguish them from basically competent singers. Nor would they produce peak performances stretching their limits, challenged by interesting or difficult tasks. So why would we think that denuded basic tasks would give us a reasonable measure of what students can accomplish?

However, there are even more significant stakes—for what people are challenged with determines what they will be taught and what they will learn. If there were no Verdi arias or large popular music markets, would either singer have worked on their skills and pressed their creativity as they did, in the directions that they did? To address the demanding and intricate scenes of real performance and meaningful assessment for both, they have developed their talents in extraordinary ways. The reality of audience, the responsiveness to audience pleasure, the desire to make something beautiful for audience appreciation, the complex resources of the musical traditions being brought forward—these make musicians exceed themselves by learning their craft and putting together creative, exciting performances. Our scenes of assessment are what shape the learning. We all have heard of teaching to the test: Where the test is weak the teaching is weak, so it is important to have valuable tests to teach to. But there is an equally important phenomenon of learning to the test, to the scene of assessment. If the scene of assessment engages attention and calls on complex resources to produce exciting performances, students grow. If the test is humdrum, not only do teachers drum in the old hum, the students learn to hum along with barely half a mind.

On the other hand if life gets too interesting, how can motivated, creative performances be compared? Well, it is easier to compare the excellences of a Pavarotti to a Domingo than to an Elvis. Pavarotti and Domingo have learned to sing the same kinds of songs, based on the same discipline of voice training appropriate to their form of art. They have sung similar roles in similar operas in similar halls with similar audiences and audience expectations. Their performance worlds are very far from that of Elvis. This would be also in assessing aspirants to each of their arts. The young opera singer measures herself against her models and heroes and the young rocker to an entirely different set.   The genres they sing in and the nature of their activity provides guidance for comparability, assessment, modeling and aspiration. And the genres of performance provide guidelines for the training, practice, and planning of performance for each performer.

What can get tested in a reliable, specifiable way defines what people will teach. But what gets taught also depends on what is plannable. No matter how motivating, meaningful and mind expanding some experiences are, unless they can be anticipatably planned, they will remain unplanned, awaiting the spontaneous moment. And the spontaneous moment may find it hard to claim space within the planned curriculum. Unless we find ways to make interesting, meaningful, growth-inducing activity plannable, they will regularly lose out to the easily planned presentation and rehearsal of detached skill and information. Activity and genre theory offer tools for anticipating the learning consequences of offering particular tasks for student

engagement, for structuring assignments, for bringing together various elements within a classroom--books, lectures, group work. They allow us to view the classroom as a communicative system within which students face particular challenges with the support of structured resources to accomplish specifiable complex achievements. That structured space of challenge and achievement defines the zone of activity and development the students have the possibility of being engaged in. Such tools increase the likelihood that students will gain a comprehensive, disciplined, practiced skill in the traditional knowledges and arts of our society at the same time as they understand the value of those arts and knowledges for carrying out their own, motivating, personally meaningful activities.

A genre and activity analysis can also enable us to create more effective complex performance evaluations that are comparable across situations. These assessments can then also coordinate in more interesting ways with state-wide and other jurisdiction-wide standards, frameworks, and curricula. Industrial arts teachers have some understanding that to make a table specific operations will have to be worked on, certain skills employed, specific tools will have to be mastered, and even specific forms of cooperation will have to be worked out on a project team. In disciplinary subject matters we can perhaps also gain as realistic a sense of how projects can follow on each other and what challenges new projects will create for students. We may not need to leave more advanced forms of learning to the random fate of totally emergent projects or only to the art and experience of the teacher (as useful as that is) in responding to the opportunities of the moment, as useful as that may be. An activity and genre analysis can help us articulate the structures by which a skilled teacher creates clusters of activities that foster specifiable forms of learning. At the very least, this kind of analysis helps people think through what needs to be on hand to help students through the anticipatible courses of their activities. And then, at the end, activity and genre analysis will provide us a better and more specific view of what they have in fact done.

References

Aikin, W. M. (1942). *The story of the eight-year study. Adventure in American education* (Vol. 1). New York: Harper & Brothers.

Allison, Libby, Bryant, Lisbeth & Hourigan, M. (Eds.) (1997). *Grading in the post-process classroom*. Portsmouth NH: Boynton/Cook Heinemann.

Anson, C. (Ed.) 1989. *Writing and response*. Urbana IL: NCTE.

Bakhtin, M. (1981). *The dialogic imagination*. Austin TX: University of Texas Press.

Bazerman, C. (1994). Systems of genre and the enactment of social intentions. In A. Freedman and P. Medway. (Eds.), *Rethinking genre* (pp. 79-101). London: Taylor & Francis.

Bazerman, C. (2000). A rhetoric for literate society: The tension between expanding practices and restricted theories. In M. Goggin (Ed.), *Inventing a discipline* (pp. 5-28). Urbana IL: NCTE.

Bazerman, C. & Russell, D. (Eds.) (1994). *Landmark essays in writing across the curriculum*. Davis, CA: Hermagoras Press.

Becker, H. S., Geer, B. & Hughes, E.C. (1968). *Making the grade: The academic side of college life*. New York: Wiley

Blakeslee, A.M. (2000). *Interacting with audiences*. Mahwah NJ: Erlbaum.

Brecht, B., (1964). *Baal, A man's a man, and the elephant calf: Early plays*. New York: Grove Press.

Britton, J., et al. (1975). *The development of writing abilities (11-18)*. London: Macmillan.

Bruner, J. (1990). *Acts of meaning*. Cambridge: Harvard University Press.

California Department of Education Grade Six History-Social Science Content Standard. Retrieved July 20, 2002, from http://www.cde.ca.gov/standards/history/grade6.html

California Department of Education Grade California Writing Standards Test: Grade 4 and 7 Writing Rubric. Retrieved July 20, 2002, from http://www.cde.ca.gov/statetests/star/resources.html

Chamberlin, D., Chamberlin, E.S., Drought, N.E. and Scott, W.E. (1942). Did they succeed in college? Adventure in American Education (Vol. 4). New York: Harper & Brothers.

Clark, H.J. (1992). *Arenas of language use*. Chicago: University of Chicago Press.

Coe, G. (1924). *Law and freedom in the school*. Chicago: University of Chicago Press.

Collings, E. (1924). *An experiment with a project curriculum*. New York: Macmillan Co.

Collings, E. (1931). *Progressive teaching in secondary schools*. Indianapolis: Bobbs-Merrill.

Cooper, C. & Odell, L. (1977). *Evaluating writing: Describing, measuring, judging*. Buffalo NY: NCTE.

Devitt, A. (1991). Intertextuality in tax accounting: Generic, referential, and functional. In C. Bazerman & J. Paradis (Eds.), *Textual dynamics of the professions* (pp. 336-380). Madison WI: University of Wisconsin Press.

Dewey, J. (1900). *The school and society*. Chicago: University of Chicago Press.

Dewey, J. (1902). *The child and the curriculum*. Chicago: University of Chicago Press.

Dewey, J. (1938). *Experience and education*. New York: Macmillan.

Erickson, H.L. (1995). *Stirring the head, heart, and soul*. Thousand Oaks, CA: Corwin.

Fulwiler, T. (1987). *Teaching with writing*. Upper Montclair, N.J.: Boynton/Cook.

Geiser, S. & Studley, R. (2001). *UC and the SAT*. University of California Office of the President.

Giddens, A. (1984). *The constitution of society*. Berkeley: University of California Press.

Giles, H.H., McCutchen, S.P. & Zechiel, A.N. (1942). *Exploring the curriculum. Adventure in American education* (Vol. 2). New York: Harper & Brothers.

Graves, D. (1978). *Balance the basics: Let them write*. New York: Ford Foundation.

Henderson, P. & Karr-Kidwell, P.J. (1998). *Authentic assessment*. (ERIC Document Reproduction Service No. 418140)

Herman, J.L. (1997). *Large-scale assessment in support of school reform: Lessons in the search for alternative measures*. Center for the Study of Evaluation Standards and Student Testing. (ERIC Document Reproduction Service No. 435631)

Hillocks, G. (1995). *Teaching writing as reflective practice*. New York: Teacher's College Press.

Katz, L. & Chard, S. (2000). *Engaging children's minds: The project approach*. (2nd ed.) Stamford CT: Ablex.

Kentucky Department of Education. (n.d.) Writing Portfolio Assessment. Retrieved December 20, 2001, from http://www.kde.state.ky.us/capd/curric/portfolios/prtrq99.html

Kilpatrick, W.H. (1951). *Philosophy of education*. New York: Macmillan Co.

Kohn, A. (1993). *Punished by rewards: The trouble with gold stars, incentive plans, A's, praise, and other bribes*. Boston: Houghton Mifflin Co.

Lawson, B., Sterr, S. & Winterowd, R. (Eds.). (1990). *Encountering student texts*. Urbana IL: NCTE.

Meadows, S. & Karr-Kidwell, P.J. (2001) *The role of standardized tests as a means of assessment of young children*. (ERIC Document Reproduction Service No. 456-134)

Macrorie, K. (1968). *Writing to be read*. New York: Hayden Book Co.

Macrorie, K. (1970). *Telling writing*. New York: Hayden Book Co.

McMurry, C.A. (1920) *Teaching by projects: A basis for purposeful study*. New York: Macmillan.

Miller, Carolyn (1984). Genre as social action. *Quarterly Journal of Speech 70*, 151-167.

Murray, Donald M. (1968). A *writer teaches writing: A practical method of teaching composition*. Boston: Houghton Mifflin.

National Research Council. (2001). *Knowing what students know: The science and design of educational assessment*. Washington DC: National Academy Press.

Northwest Regional Educational Lab 1996 bibliography of assessment Alternatives: Portfolios. Portland (ERIC Document Reproduction Service No. 409371)

Palmquist, M. & Young, R. (1992). The notion of giftedness and student expectations about writing. *Written Communication 9*:1, 137-168.

Passe, J. (1996). When students choose content: A guide to increasing motivation, autonomy, and achievement. Thousand Oaks, CA: Corwin Press.

Progressive Education Association. (1943). *Thirty Schools Tell Their Story. Adventure in American Education* (Vol. 5). New York: Harper & Brothers.

Rance, P. (1968). *Teaching by topics*. London: Ward Lock Educational

Ravitch, D. (Ed). (1995). *Debating the future of American education: Do we need national standards and assessments?* Washington DC: Brookings Institute.

Rohman, D. G. & Wlecke, A.O. (1964). *Pre-writing the construction and application of models for concept formation in writing*. East Lansing MI: Michigan State University.

Russell, D.R. (1997a). Rethinking genre in school and society: An activity theory analysis. *Written Communication, 14*:1, 504-554.

Russell, D.R. (1997b). Writing and Genre in Higher Education and Workplaces. *Mind Culture and Activity, 4*:4, 224-237.

Russell, D.R. (1993). Vygotsky, Dewey, and exernalism: Beyond the student/ discipline dichotomy. *Journal of Advanced Composition, 13*.1, 173-198.

Scott, T.D. (2002). Dear *Reviewer: Reflective Writing as an Institutional Genre*. Doctoral dissertation, University of Louisville.

Scharton, M. (1996). The politics of validity in assessment of writing: Politics, policies, practices. In E. White, W. Lutz and S. Kamusikiri (Eds.), *Assessment of Writing: Politics, Policies, Practices* (pp. 53-75). New York: MLA.

Schön, D.A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.

Schutz, A. & Luckmann,T. (1973). *The structures of the life-world*. Evanston IL: Northwestern University Press.

Smith, E. R., Tyler, R. et al. (1942). *Appraising and recording student progress. Adventure in American education* (Vol. 3). New York: Harper & Brothers.

Stotsky, S. (Ed.). (2000). *What's at stake in the K-12 standards wars: A primer for educational policy makers*. New York: P. Lang.

Straub, R. (2000). *The practice of response: Strategies for commenting on student writing*. Cresskill, NJ: Hampton.

Tanner, D. & Tanner, L. (1990). *History of the school curriculum*. New York: Macmillan.

Tanner, L. (1997). *Dewey's laboratory school*. New York: Teacher's College Press.

Tenenbaum, S. (1951). *William Heard Kilpatrick, trail blazer in education*. New York: Harper & Brothers.

Vygotsky, L. (1978). *Mind in society*. Cambridge: Harvard University Press.

Vygotsky, L. (1986). *Thought and language*. Cambridge: MIT Press.

Webster, E.H. & Smith, D.V. (1927). *Teaching English in the junior high school*. Yonkers, NY: World Book Company.

White, E., Lutz, W. and Kamusikiri, S. (1996). *Assessment of writing: Politics, policies, practices*. New York: MLA.

Wolcott, W. (1998). *An overview of writing assessment*. Urbana IL: NCTE.

Zak, F. & Weaver, C. (Eds.). (1998). *The theory and practice of grading writing*. Albany: SUNY

Dissertation Writers' Negotiations with Competing Activity Systems

Dana Britt Lundell and Richard Beach

Department of Curriculum and Instruction
University of Minnesota
Minneapolis, MN 55455
lunde010@umn.edu
rbeach@umn.edu

Abstract

Previous research on dissertation writing fails to embed it within the context of different, and often competing institutional forces constituting the genre expectations associated with producing the dissertation. The purpose of this study was to examine the negotiations of dissertation writers in a large Midwestern research university across a range of different activity systems: the Graduate School, department, advisor, committee, employment, and potential job market as different "layered" (Prior, 1998) systems. Analysis of interview data of 11 writers indicated that writers perceived marked differences in the objects/outcomes, roles, norms, and genre tools to vary across these different systems. While the Graduate School and departments formulated one set of expectations, the advisor or committee articulated different expectations for completing the dissertation. Writers also experienced time conflicts between the demands of teaching and writing. And, they experienced conflicting outcomes for the dissertation related to writing for an advisor or committee as opposed to positioning themselves for the job market, creating ambiguity related to their dissertation audience. They also noted that the research university positions the dissertation genre as preparing students for positions in other research universities as opposed work in universities in which teaching is a priority.

A recent report on the state of graduate education in the United States by the Association of American Universities (1998) identifies several problems and recent reforms associated with this nation's Ph.D. programs. The report noted that from 1985 to 1995, the number of doctoral degrees awarded increased 25% from 31,297 to 1985 to 41,610 in 1995. The report notes that issues of advising, completion time, size of graduate programs, career advising and placements remain as challenges for graduate education. The report indicates that the Ph.D. phase is known to be rather lengthy, averaging seven years (p. 6), a figure that varies widely across departments. This figure generally increases significantly when education and humanities departments are the focus of concern. As time-to-degree completion rates have generally been documented as rising over the years, there has been some focus on gathering data and making recommendations to address issues of a tight job market, faculty advising, and financial support during graduate programs.

Graduate students' perceptions of their graduate school experiences paint a less-than-positive picture of their experience. A survey of doctoral students by the National Association of Graduate and Professional Students (2001) found that students in the humanities indicated low levels of satisfaction for information provided for prospective students, preparation for a broad

range of careers, teaching and T.A. preparation, professional development, career guidance and placement services, and controlling time to degree, results that suggest that graduate students in the humanities are still coping with a range of issues.

However, in these reports, there is little if any mention of the dissertation-writing phase itself, a process that can take students up to two or three years on average to complete (Association of American Universities, 1998, p. 6). Two studies indicate that about half of all doctoral students never complete their programs because they cannot complete the dissertation (Lovitts, 1996; Ogden, 1993); another study found that one in four students who are ABD—all but dissertation-- never complete the dissertation (Bowen & Rudenstine, 1992). Ogden (1993) noted that, while the time spent finishing program course requirements has not changed much over time, the major time increase has occurred in terms of the numbers of years completing the dissertation. In his 1993 analysis, only 22% of students took five years or less to complete the dissertation, while the majority took over seven years, particularly in the field of education. In contrast, in 1971, the median time to earn the degree in the humanities was 5.6 years (Ogden, 1993). In 1999, the median time was 8.9 years (Leatherman, 2001). The median number of years from the B.A. degree to completing the doctorate was 11.7 years and the median age of persons receiving the degree was 35.1 (Leatherman, 2001).

Some of this increase in completion time may be due to a shift in the function of the dissertation as an object-driven tool within the activity systems comprising graduate education, the subject of this report. While the purpose of the dissertation was originally meant to be a student's first scholarly publication and public display of scholarly ability, it has recently been perceived more in terms of functioning as part of graduate education's gate-keeping motive associated with a tight job market (Hinchey & Kimmel, 2000). It is assumed that by maintaining high standards of production for writing the dissertation, that only those candidates who can achieve these standards would be entering an over-crowded market. Recent debates about the uses of alternative, narrative/fictional genre, or digital forms of the dissertation have revolved around the issue of the academic integrity and rigor of alternative forms relative to maintaining this gate-keeping function for the dissertation genre, given the object of preserving selectivity and "high standards" in the tight-market profession (Duke & Beck, 1999).

To help with difficulties of completing the dissertation, students may turn to various "self-help" books (Bolker, 1998; Brause, 2000; Davis & Parker, 1979; Gardner & Beatty, 1980; Hawley, 1993; Long, Convey, & Chwalek, 1985; Mauch, & Birch, 1989; Meloy, 1994; Ogden, 1993; Phillips & Pugh, 1994; Preece, 1994; Rudestam & Newton, 1992; Sternberg, 1981). These books realistically and even pessimistically examine issues such as personal isolation, lack of financial and emotional support, writing and research difficulties, and low time-to-degree completion and graduation rates for Ph.D. students. However, their analysis of the experience employ discourses of therapy and popular psychology to portray the experience as a solitary, "survivalist" task. As one commentator noted, "In the final analysis, doctoral pursuit is a lonely quest of heart and head" (Hawley, 1993, p. 7). Others paint an even bleaker picture: "It is in the social sciences, education, humanities and letters disciplines that people have their lives disrupted and even sometimes permanently scarred by a dissertation-writing experience" (Sternberg, 1981, p. 1).

Similarly, much of the psychological research on graduate education adopts this individualistic framework by focusing on variables influencing measurable outcomes such as attrition rates and self-reported attitudes or experiences in Ph.D. programs (Cooke, Sims, & Peyrefitte, 1995; Kerlin, 1995), measures of individual student self-efficacy related to departmental relationships and institutional dynamics (Faghihi, Rakow, & Ethington, 1999), and theories of doctoral persistence (Tinto, 1993). This research also highlights individual students' financial and emotional support (Ehrenberg & Mavros, 1995), stress and anxiety patterns (Rocha-Singh, 1994), loneliness and isolation (Dooley-Dickey & Satcher, 1991; Germeroth, 1991), and personal barriers to dissertation writing (Green & Kluever, 1997; Sullivan, 1996). The analysis of one graduate student's ("Nate") enculturation focused on how he eventually acquired linguistic conventions of the dissertation that marked him as an "insider" within his profession (Berkenkotter, Huckin, & Ackerman, 1988). This study was later challenged for its overly dichotomized version of scholarly communities and their boundaries, with the critic seeing scholarly communities constructed by a more fluid and dynamic series of interactions negotiated by both individuals and institutions (Prendergast, 1997). For example, Nate's activities might be read as more of a layered process of social negotiations he makes within the academy, as well as a process of the academy initiating him into its intellectual territories (Prendergast, 1997).

An Activity Theory Analysis of Dissertation Writing

We propose an alternative perspective to understanding dissertation writing as constituted by students' participation in a complex maze of competing activity systems: the Graduate School, the department, advisors and committees, graduate student employment, and the job market, systems rife with conflicts, tensions, and contradictions. As Winsor (1999) notes, "current understandings of activity theory assume that tensions and discontinuities within any system are normal because complex organizations almost always encompass several subsidiary activity systems with different interests." (p. 201).

In his analyses of graduate students' academic socialization in research seminars, Paul Prior (1994, 1997, 1998) posits the idea of laminated or layered activity systems in which participants may assume multiple footings (Goffman, 1981) or stances as different systems move to the foreground or background:

These views suggest that multiple activity footings co-exist, are immanent, in any situation. When one activity system is foregrounded (e. g., school learning), other activity systems (e. g., of home, neighborhood, government, business) do not disappear. This kind of view also highlights *perspective*, the ways coparticipants in an activity and coordinate differently configured activity footings. (Prior, 1997, p. 277).

> For dissertation writers, the different systems of graduate schools, the department, advisors and committees, graduate student employment, and the job market are therefore not separate, autonomous systems, but are continually intersecting and overlapping each other. [1]

Each of these systems is driven by different objects and motives. Graduate schools and departments want students to complete degree programs in a timely manner and are continually creating policies designed to improve completion rate. At the same time, they perceive their role as upholding standards, resulting in various rules related to quality. Advisors and committee members want students to engage in research they deem as significant or groundbreaking within their respective disciplinary systems with the outcome of making a contribution to those systems. Students are often employed as T.A.s or research assistants within the university's employment system, work that provides them with invaluable teaching or research experience in preparation for future teaching or research in academia. And, the job market system, constituting by various recruitment and hiring practices, is seeking to find the best candidates to fill a limited number of positions, often with the hope of finding candidates who will later obtain tenure. In the job market system, the dissertation not only acts as a tool in training, it also acts as a tool in evaluation of competence and a tool in hiring (Duke & Beck, 1999; Goodchild, Green, Katz, & Kluever, 1997; LaPidus, 1997; Olson & Drew, 1998; Prendergast, 1997; Saks, 1996; Young, 1998).

These systems involve a rich interaction of the agents, tools, motives, and objects, shaped by different perspectives of students, administrators, advisors, committee members, employers, and publishers of academic journals, perspectives constituted by different discourses (Gee, 1996). These perspectives, as Engeström (1999) notes, are "rooted in different communities and practices that continue to coexist within one and the same collective activity system" (p. 382). The concept of perspectives "serves as a hedge against simplified views of context that ignore the unsettled and conflicted relations between different positions and actors" (p. 382). This raises the question for Engeström as to whether participants can share the same perspective of objects or motives in the same system when these participants may be aligned to different, competing systems. While administrators or advisors may have one perspective on the object of dissertation writing, students may have quite a different perspective given their alignment to specific advisors, their employment, or the job market.

Complicating this landscape is the fact that these systems are continually in flux as new forms of disciplinarity, genres, and research paradigms challenge and replace the old, only to be subject to new challenges. As Engeström (1987) notes:

> Old and new, regressive and expansive forms of the same activity exist simultaneously in the society. Children may play in a reproductive and repetitive manner, but they do also invent and construct new forms and structures of play, new tools and models for the play activity (p. 10). [Note: Page numbers are from the online version of Chapter 3: http://communication.ucsd.edu/MCA/Paper/Engestrom/expanding/ch3.htm]

Engeström's Model of Development: Identifying and Coping with Double Binds

Engeström's (1987) model of development is useful for understanding graduate students' development during their dissertation writing. Engeström draws on Gregory Bateson's (1972) model of three levels of learning. Learning I involves a behaviorist rote learning. Learning II entails a reflexive learning how to learn, particularly in response to contradictions and double blind situations. Learning III involves dealing with contradictions within situations in which learning habits do not always work, requiring the development of new, alternative habits and practices.

Engeström is particularly interested in the transitions between Learning II and Learning III. He notes that in Learning II the object of learning "is conceived of as a problem demanding specific efforts" (p. 3), a problem often involving contradictions in a system. Individual manifestations of Learning III are commonly called 'personal crises,' 'breaking away,' 'turning points,' or 'moments of revelation.'" (p. 5). In Learning III, the learner recognizes and addresses the problem based on the need to resolve the contradictions operating at Learning II, often through collective action. In doing so, the learner perceives the "object system...as containing the subject within it [creating] a search for a collective subject, capable of mastering the complexity of 'contexts of contexts,' i.e., of societal practices with highly developed division of labor as well as multi-level technological and symbolic mediations" (p. 4).

In Learning III, the subject gains an awareness of a practical mastery of whole systems of activity in terms of the past, the present, and the future. This awareness leads to a reworking and restructuring of activity through "learning by expanding" (p. 7) the old into the new. Creating new systems entails:

> mastery of double binds. Double binds may now be reformulated as a social, societally essential dilemma which cannot be resolved through separate individual actions alone—but in which joint co-operative actions can push a historically new form of activity into emergence (p. 8).

This focus on the tensions between the old and the new leads him to proffer a new definition of Vygotsky's zone of proximal development as "the distance between the present everyday actions of the individuals and the historically new form of the societal activity that can be collectively generated as a solution to the double bind potentially embedded in the everyday actions" (p. 10). Addressing the contradictions inherent in the "given new" activity systems lead to "the rise to actions anticipating the *created new* activity" (p. 16). Engeström cites the example of Huck Finn, who as a vagabond in a small, segregated town, is friends with both the middle-class Tom Sawyer, and also with the black slave Jim. He recognizes the contradiction here between "the private freedom of the individual vagabond and the public unfreedom prevailing in the vagabond's immediate culture context" (p. 11). In escaping on the raft with Jim, the honest Huck faces another contradiction between having to lie to those pursuing escaped slaves in order to protect Jim and his moral obligation to support Jim's attempt to become free, creating a double bind. Having agonized over this double bind, Huck creates new activities in experiences with

assisting the Grangerford daughter escape her family and, having assisted two crooks in stealing money, helping return the stolen money to the rightful owner. Engeström notes that through these actions, Huck is creating a new activity of "radical moral anarchism" involving "a deadly serious moral and existential struggle" (p. 14).

For Engeström, the construction of "created new" activity involves several phases. Initially, a person experiences a "need state" (p. 16) associated with competing object/motives involving the experience of contradictions in a system. For example, graduate students experience a tension between spending too much time on their teaching, time they would prefer to devote to writing their dissertation. However, if they are committed to teaching and a future career in teaching, they may also sense that by devoting more time to their research and dissertation, their teaching may suffer. This familiar contradiction for not only graduate students, but also faculty, leads to analysis, inner dialogue, and reflection associated with an awareness of the double bind.

This reflexive element is a central aspect of Engeström's concept of the double bind. Triggered by a set back, disturbance, or surprise, learners recognize, define, and reflect on the double bind in order to begin entertaining ways of coping with the double bind. At the graduate school level, Nancy Welch (1993) documented her own experience of coping with contradictions as a composition T.A. in an English Department training program designed to promote one particular ideological orientation towards composition instruction. Welch noted that she and the other graduate-student trainees had little choice but to adopt the ideological presuppositions inherent in the training program, which she eventually perceived as indoctrination. While other students resigned from the program, she stuck with it because she wanted to finish her degree, creating contradictions—does she remain in a program whose beliefs she rejects or lose the opportunity to complete her degree? Through reflection on the objects and motives shaping this activity, she eventually identified her own double bind. This created the need for her to experiment with new activities through creating a "contradictory unit of the given new and the created new" (p. 16). Welch ultimately withdrew from the program and, having recognized the value of an alternative form of teaching, transferred to another university in which she could teach according to that new activity.

Engeström's model of development serves to illuminate graduate students' development in learning to cope with the contradictions that arise between the competing objects and motives driving different systems related to dissertation writing. For example, graduate students are often faced with the contradiction between attempting to break new disciplinary or methodological ground in their research that may lead to creating new activities while at the same time adhering to current norms for validity of research methods operating within status quo activities. In facing these contradictions, students recognize that they are caught in a double bind, requiring the creation of new activities.

The Dissertation as Genre Social Action

Recent genre theory posits that genres are social actions or tools driven by participation with the objects/motives of activity systems (Bazerman, 1997; Bazerman & Prior, in press; Berkenkotter

& Huckin, 1995; Berkenkotter & Ravatos, 1997; Russell, 1997). Rather than simply studying the genre as a text or rhetorical form, defining genres as social action entails studying the various activities involved in navigating the competing systems associated with producing the dissertation. In mediating motive/agent relationships, the dissertation genre functions to display what Wenger (1998) defines as "dimensions of competence" reflected in a mutuality of engagement, accountability to an enterprise, ways of looking at the world, and negotiability of a repertoire. Through adopting certain "modes of belonging," participants establish agency within systems by being included in important events (Wenger, 1998).

Understanding the uses of genre tools entails perceiving how they afford or mediate systems; they "evoke the worlds to which they were relevant and position individuals with respect to those worlds" (Holland, Lachicotte, Skinner, & Cain, 2001, p. 63). Based on Paul Prior's (1997; 1998) concept of "*disciplinarity* as the ongoing, mediated constitution of a kind of sociomaterial network" (1997, p. 277), the dissertation genre can function as one type of tool "for displays of disciplinarity, and [for] mediating the (re)production of disciplinary communities of practice" (p. 277).

Analyzing the dissertation as genre social action within the activity of graduate students' development focuses on how graduate students identify and grapple with double binds created by the contradictions inherent in the different layered systems (Prior, 1998) of graduate school, advising, work, and professional development. As Winsor (1999) notes:

> Typical understandings of genre theory suggest that shaping influences flow in only one direction—from the social context to the text. In contrast, activity theory has the potential to help us stop thinking of context as a container in which text is subsequently produced. Rather, an activity system and the elements making it up (i.e., tools such as texts, actors, and the object at which they aim) can be seen as mutually constitutive and always in flux (as, indeed, are the elements themselves). (Winsor, 1999, p. 201).

In coping with the double binds associated with competing objects or motives, as Engeström's model suggest, students begin to envision new, alternative activities in systems as imagined "contexts of eventual use" (Witte, 1992). This includes ways to use the dissertation genre as tool to "position" themselves within these potential systems, positioning that entails active participation in presenting conference papers, networking with members of a field, publishing, and challenging status quo perspectives (Hinchey & Kimmel, 2000).

Graduate students' success in identifying and coping with double binds leading to new activity draws on prior experiences in old activities of students' previous graduate coursework and research projects. Based on research on graduate students' participation in graduate-level seminars, Prior (1998) identifies several modes of belonging exhibited by graduate students. In some cases, students are merely "passing" (p. 101) through their programs by completing assignments or engaging in "procedural display" (Bloome, Puro, & Theodorou, 1989, p. 266). Others display "deep participation" (p. 102) through participation with faculty or peers in collaborative research projects or writing, leading to a sense of agency, status, or being included

in important events (Wenger, 1998) as valued participants in graduate school. As Prior (1998) reports, in their "deep participation" with faculty and peers, students experience first hand many of the contradictions associated with conducting research within a range of competing activity systems. They witness faculty and peers coping with their own perceived double binds, leading, in some cases, to new forms of activity. Through recognizing the value of research, they also begin to value the need to break new ground in research, a valuing or "need state" (Engeström, 1993) that motivates them to want to cope with double-binds and to create new forms of activity.

Graduate Students' Perceptions of Dissertation Writing

The purpose of this study was to examine graduate students' experiences of writing their dissertations in terms of their participation in a range of competing activity systems at the University of Minnesota. The data presented in this report was part of the first author's dissertation study (Lundell, 1999); the second author served as the advisor of this dissertation. This research report examines part of the data in that study to address the following questions:

- What are the contradictions graduate students experience in their dissertation writing associated with various activity systems?

- In coping with these contradictions, what double binds do students identity and how do they use those double binds to create new activities?

The participants in this study, all represented by pseudonyms in this report, included eleven doctoral students engaged in writing their dissertations from five departments at the University of Minnesota. The University of Minnesota is one of the largest graduate schools in the country, ranking fourth in the number of degrees awarded (656) in 1999 (Leatherman, 2001).

The participants were four males and seven females from humanities and education departments, of which eight were Caucasian, two were international students (one from India, one from Africa), and one was bi-racial (Native American and Caucasian). Students in humanities programs were selected because the time-to-completion and attrition rates, particularly in the ABD phase, are so much higher for humanities students than for students in other majors (Lovitts, 2001; Ogden, 1993). It is also important to note that the study focused primarily on students' perspectives on their dissertation writing experience based on students' interview perceptions. It did not examine the writing itself nor did it ascertain perspectives of faculty, administrators, or employers. The fact that the study relies on students' perspectives is certainly a limitation of the study in that faculty, administrators', or employers' perspectives also shape the environment in which students perceive their experience.

The data collection phase of this study began in the summer of 1997 and continued through the winter quarter of 1998. Students were interviewed twice during this period. These in-depth interviews followed a semi-structured format, and the conversations reflected a phenomenological process and open-ended, interpretive method (Glesne & Peshkin, 1992; Van Manen, 1990). During the second interviews, participants discussed writing samples from their

dissertations (chapter, outline, or proposal). Transcriptions of the interviews resulted in 350 single-spaced, typed pages of textual data. Field notes and records based on Lundell's perceptions of participants' interviews and writing resulted in approximately 80 single-spaced pages. The interview data was coded using a computer software program employed to identify and sort references to specific topics and issues. To determine the overall frequency of coded categories, the percentage of conversational turns out of the total number of turns was then determined.

Competing Activity Systems of Dissertation Writers

The results of the interview data analysis indicated that, consistent with a genre-as-social-action perspective, the dissertation writing involved a whole series of social and political negotiations with the Graduate School and departmental rules, advisors, committee members, T.A. teaching demands, peers, families, and the potential job market. Focusing simply on textual or rhetorical aspects of dissertation writing does not capture the ways in which participation in these different systems served to constitute the challenges associated with dissertation writing as a genre of social action. To successfully complete their dissertation, participants needed to learn various practices for operating in these different systems. In some cases, the systems did not effectively socialize students to help them acquire practices necessary for successful completion of the dissertation. In other cases, students were successful because the systems provided explicit socialization of these practices, instances that suggest ways for improving the overall experience.

Based on the coding of the interview data, we organized the data into two broad theoretical categories: "Institutional/Cultural" and "Individual/Self." Items in the "Institutional/Cultural" category totaled 71.1% of the measured responses, and items on the "Individual/Self" side of the matrix represented 28.9% of the total. These participants' conversations about their dissertation weighed in most heavily on the broader, institutional issues and less on the individual contexts by a total of almost two to one.

At the "Institutional/Cultural" level, five topics emerged related to participants' descriptions of the activity systems or institutional shaping their experiences and identities: "Graduate School," "department," "advisor and committee," "graduate student employment," and "job market." At the "Individual/Self" level, five topics emerged: "attitudes," "peers and family," "writing process," "identity," and "advice." These topics refer to attitudes or activities impacting participants' more immediate personal lives, or which represent things they perceive as being within their own control or interpersonal realm of agency.

Because we are concerned more with the former category of the "Institutional/Cultural" as activity systems, and because this emerged as the more significant category in terms of participants' conversations in this study, this report focuses on these categories rather than the latter. (The reader is referred to Lundell (1999) for results related to the "Individual/Self" level.) In studying participants' perspectives on different systems, we focused on their perceptions of the objects/motives, rules, roles, and traditions constituting different systems. For each of the five layered systems (Prior, 1998) described by participants, we describe how these perceptions

reflected students' ability to identify and cope with double-binds arising from contradictions within and across the systems of Graduate School, department, advisor and committee, graduate student employ, and job market.

Graduate School

The first system is that of the Graduate School at the University of Minnesota and its various objects, rules, and traditions constituting and monitoring the dissertation production. Participants were most likely to refer to this system, with 23.5% of the total number of turns. The major themes reflected in the interviews under this category included (in general order of their frequency among participants): negotiating academic forms and styles such as departmental conventions and genres, managing institutional and personal issues during the writing phase, shaping of students' future goals related to the dissertation product, negotiating university bureaucracy and structures, and defining the function and role of the dissertation within this system.

One of the primary objects of the Graduate School office is to maintain uniform standards across different units within the university. Underlying this system is a discourse of management evident in rules, policies, procedures, and mission statements that serve to establish and justify institutional order and control (Usher & Edwards, 1994). As Lemke (1995) notes, a discourse of management attempts to standardize phenomena as institutional procedures or policies, masking over the unique particulars of an activity. It is therefore the case that the Graduate School rarely makes exceptions in dealing with deviations from the norm.

The Graduate School has outlined the necessary requirements to move students toward the goal of attaining the Ph.D. including course work, exams, and thesis writing. The Graduate School catalogue states this about the function of the dissertation:

> The thesis must demonstrate the student's originality and ability for independent investigation, and the results of the research must constitute a contribution to knowledge. The thesis must exhibit the student's mastery of the literature of the subject and familiarity with the sources. The subject matter must be presented with a satisfactory degree of literary skill. (The Graduate School, University of Minnesota, 2001, p. 42).

According to this statement, the dissertation genre functions as a tool for display of the student's "contribution to knowledge" and "mastery of the literature of the subject and familiarity with the sources." To display "mastery of" and "familiarity with the sources" associated with framing the research within a larger disciplinary world, students acquire the genre rules of the research review as part of the genre action of displaying competence. As Julie noted:

> I don't know how you read these things, but I read the scholarly literature in my field and I think it tends to be over-cited...that there are lots of ideas and understanding that really don't need attribution, but people do it to show that they're part of this larger conversation.

Students noted that they perceive their work not simply in terms of meeting current requirements, but as also preparing them for participation in future academic work in "contexts of eventual use" (Witte, 1992). As Seth notes:

> With the dissertation, it's forced me to picture the kind of writing that might have to get done in the future which I think is a good piece of preparation…I was going to mention…the larger possibility of publishing parts of it, or it as a whole, outside of the department. And that is always something else that's in the back of my mind, that it's meeting or will do something in my mind that is publishable.

However, while students sense that they are connected to a "larger conversation" in the disciplinary field or in future academic publishing, they begin to perceive contradictions between having to adopt an "objective" style associated with Graduate School's mandated dissertation style and the kinds of writing they perceive in current journal publications or conference papers involving novel forms of reporting or displaying research results. Zachary commented that, while he used the dissertation research review to display himself as someone creatively versed within the discipline, at the same time, he had to adopt a style that undermined his creativity:

> On the one hand, it is about detachment, and on the other hand, locating the source of authority within oneself. It's about a self that, well, you're proving yourself. The dissertation is about the ideas, about you and your creative capacity, but it's also so detached from your person and kind of transcendent. So on one hand…it legitimizes a self, but it's a detached universal self…hard to explain.

Zachary identifies a tension between adopting a detached rhetorical or stylistic stance and establishing a sense of authority about the validity of his ideas. While he wants to prove himself as an authority, the use of a detached stance seems at odds with adopting a writing persona as part of the genre as social action, a tension that locates a student like Zachary within the rules of the Graduate School system. This concern with the language of the dissertation genre raised questions for the participants about the overall purpose of the dissertation within the larger object of the Graduate School system. Given the need to display competence in their knowledge and "literary skill," participants wondered about the audience to whom they are writing. While they are writing for their advisor and committee members, they are also writing for a larger audience of potential readers, including potential employers, a system that may differ from the advisor and committee system. Elena asked,

> How is this going to function? I mean, we're not writing it for those five people to sign on the dotted line, and we're not just writing it for ourselves, and there's that, too. But who's our more general audience? And that tends to be really sticky because it makes us think about language. It makes us think about accessibility. It makes me think about how we write it.

In asking about the "function" of the dissertation relative to the Graduate School's object of maintaining standards related to display of "originality and ability for independent investigation," "contribution to knowledge," and "mastery of the literature of the subject," Elena

is raising the issue of who serves as the actual audience for the dissertation. She notes that while her committee is obligated to read the dissertation, but that, for her, they do not represent her "general audience" constituted by certain disciplinary perspectives not represented on her committee, audiences who may also judge her work. Without a sense of an audience beyond her immediate audiences, she perceives little purpose in the writing other than simply a display of competence for her advisor/committee members. Without a sense of a larger rhetorical purpose of communicating with a wider disciplinary audience, students then believe that the writing is designed for no more than "procedural display" (Bloome, Puro, & Theodorou, 1989, p. 266) of competence related to the Graduate School's object. Yet, without effectively addressing her immediate audience, she may not pass the dissertation. As she notes, "It's like I'm going to write a book and no one's going to come. You know, it's like putting on a performance and having five people in the audience."

These contradictions emerge from tensions between two different systems—the immediate advisor/committee audience operating according to the rules of the Graduate School system and the wider audiences associated with disciplinary fields or potential employers who may apply a different set of rules or expectations. This creates a perceived double bind for Elena, particularly in terms of wanting to write for a wider audience as a specialist but also having to address her more immediate advisor/committee audience, who bring their own disciplinary orientations to evaluating her work.

To cope with this double bind, Elena participated in new activity involving a writing group with three other dissertation writers in her department who shared her own experience of double binds:

> We've all been friends, so we therefore know that we have the same hesitancies and doubts about this whole establishment and the requirements to get authority and power in this institution, especially through writing this document…we spend a lot of time trying to figure out how to talk to these people, or who should be on our committee….we show each other writing, and it's been so wonderful to have that support because there are some people who know what's going on. They know the ins and outs of my dissertation at least.

This writing group functioned as a new activity that provided Elena and its members with an alternative audience familiar with both the advisor/committee audience and a wider potential audience. Given her "need state" (Engeström, 1987) for a wider audience other than just her committee members, Elena received comments from peers who were connected to the disciplinary orientations of wider audiences. At the same time, because they were familiar with the internal experiences of committee members in the same department, they could provide feedback from the committee's perspective. The writing group functioned as a "created new activity" (Engeström, 1987) in which members could test out and explore tentative ideas. At the same time, the new activity was still grounded in the "given new" activity of coping with advisor negotiations and emotional barriers.

However, other students, facing similar double binds, simply accepted these double binds without attempting to create new activities. As Liz noted, "I don't think I have any hugely important thing to say. I see this as a hurdle to get through, that is really what it is... and nobody's going to read it, you know, maybe my advisor." And, when they may gain a sense of accomplishment in completing the dissertation, they do not see it as influencing the field. As Nicholas noted:

> I think I'd have done it differently had I done it again. I'd just zip something out quickly under the idea that really you do learn past the dissertation. You know, you learn when you're a more viable part of a community, and your input is legitimate and not pretend...where you do have votes and a say, and you are building a community and are tenured afterwards.

These students therefore perceived little purpose or value in the dissertation in terms of fulfilling alternative objects other than fulfilling a "hurdle" and simply meeting the Graduate School requirements. Students such as Elena value the dissertation as serving some larger rhetorical purpose by constructing a new activity that served to address her double bind associated with writing solely for a committee audience.

Department

While the Graduate School appears to be the overriding structure for final documentation of the dissertation, each department has some control and degree of interpretation within that structure related to students' defenses and course work requirements. Departments proffer their own interpretations of how to achieve that object, often providing that information on departmental Web pages. These Web pages varied from very specific, user-friendly sites designed to recruit prospective students to more straightforward, pragmatically focused sites which include handbook information and bureaucratic details accessible to current students. Each department's activity system coincides with the Graduate School system in providing structure for students to make progress towards program completion. However, variation across different departmental systems and how they translated the Graduate School's rules created a sense of inequity for students, who noted that some departments were more supportive of their dissertation work and provided more assistance in navigating the bureaucracy of the university than did the other departments.

References to students' experiences within their departments, with 16.8% of the total conversational turns, focused on concerns about the lack of departmental standards and requirements as represented in student guidelines and handbooks, absence of productive support structures for students at the dissertation stage, issues related to ethics and faculty politics, the nature of relationships and community-building among peers and faculty, university bureaucratic negotiations, and obstacles created by departments.

Resources such as handbooks, bulletins, and Web sites are often used by students, particularly at the dissertation stage, as a preliminary point of communication about requirements, especially as many students at this stage have been off campus for years and are not closely connected to their

advisors and peers who typically serve as primary sources for this information. However, participants often found little other specific information about the dissertation requirements on the Web sites and in the departmental handbooks. Typically, the information about dissertations on these sites consisted only of the Graduate School's three-sentence description quoted previously, along with procedures for documenting the process.

Students consistently noted the lack of any articulated guidelines, procedures, or standards that would serve to foster a positive "mode of belonging" (Wenger, 1998). As Seth noted, "you do get lost in the system once you're past your prelims." Similarly, Alicia noted:

> This is the time that the structure goes away. If there's any structure, you have to provide it, and you do need structure, whether it's with someone else or by yourself is a thing you have to determine. This would be, this is the dropout time because you do not have the structure to carry you any more.

Students often perceived this as implying a lack of interest in or concern about their progress. As Julie noted:

> Well, the department's been really, what should I say, um...remiss in having a structure for advising students...I always was sort of self-policing enough to have accomplished those milestones on time or early. Other people of course successfully elude detection and kind of float along for years and years, and in our department, there are 300 graduate students. I mean, it's easy to get lost in the crowd, and if your advisor's on leave this quarter or on sabbatical for a couple years, you can very easily just kind of slump along.

Students also noted a basic contradiction in the departmental system as intersecting with the Graduate School rules for completing their programs within a reasonable time frame. While the departments were perceived to be concerned about moving students along in a timely manner, participants also noted that once students began the dissertation, they were often ignored because there were no departmental norms or rules associated with the object of graduating students. Julie was critical of the fact that the rules of a system were not made explicit in terms of establishing and working with an advisor:

> There isn't much in there about how you attach yourself to someone on the faculty who can mentor you. There isn't much about other than sort of a cursory bibliography that tells you what people's interests are, and if you know Professor A specializes in this and B specialized in that, you don't have any sense of how busy these people are, how many committees they're already on, when they're scheduled for sabbatical. I guess that's the secret of any institution is how do you make your operating assumptions and your infrastructure visible when you're so near to it, when it's no longer visible to you. How do you put yourself in the place of the person at the doorstep, and anticipate what that person needs to know. And that isn't easy, but our department is doing a very poor job with a difficult task.

Julie's comment about the making the rules "visible" reflect a basic problem in any system in which it is often assumed that participants will acquire these rules on their own, negating the

need to spell out the rules for them. At the same time, when rules are codified, for example, related to limits on the length of the program, then these rules may serve to disenfranchise students. Julie discovered that her department created a new form associated with a limit on the years of T.A. support:

> So I asked the secretary, now tell me what this means? And what they've tried to do is keep you on the 6 years of support. And when I came here, I was not offered any support by the department. I got a job through comp, and comp offers six years of support depending on your performance, so this all seems pretty silly to me. I mean, I've already done all this crap, and I have a sixth year coming, thank you very much, and don't tell me that I'm going to grade Shakespeare papers, I'm going to teach comp and get on my way. Of course, that's not the message here, the message is that we'll tell you what you're going to be doing if you qualify, and that's not a very friendly attitude, again I guess I was spoiled, I came into a program that valued teaching and paid attention to what people were qualified to do, what they wanted to do ... it has really changed.

The form included a narrative section for each year of progress for students to report their work and goals in the program, and also included a space for advisors to sign off on this document. Students in this study believed that the idea of this form seemed like a good one, particularly if it helped the department track its students at the Ph.D. stage. However, Julie interpreted this form not as a positive tracking device or "Ph.D. Progress Form" as it was entitled by the department, but as a way for the department to begin to weed out its sixth- and seventh-year students. Thus, by codifying the rules, the department provided students with mixed messages related to their status within the department. Implementing this new tracking system presumably designed to clarify the Graduate Schools rules for degree completion only further confused and even alienated some students such as Julie. Julie can readily identify a double bind associated with contradictions between departmental practices and Graduate School rules, but has no mechanism for creating a new activity for addressing that double bind.

On the other hand, in contrast to Seth's, Alica's, and Julie's experiences, some students described instances of departments providing more structured, supportive experiences. Zachary commented on a useful dissertation-writing seminar:

> Well, my department had a dissertation seminar that you had to take in your fourth year that I think was very helpful...you kind of write a dissertation abstract proposal and then start doing research on a chapter...and also your second prelim question relates to your dissertation, too. So then your course work and your preliminary exams are related to your dissertation.

Similar to Elena's writing group, the dissertation-writing seminar provided a supportive activity for students in helping them cope with their own double binds associated with deficiencies in departmental support and advising.

Students also described departmental attempts to encourage students to engage in "deep participation" (Prior, 1998) with research throughout their program. Alicia described her ongoing sense of socialization:

> In this department it's really cool because this department runs almost very pragmatic, very Deweyian. We've been encouraged all along to be working toward the topic, title, and the research, so I've done a lot of work that will probably be used in part in my dissertation...but the whole thing is that you're really encouraged to start thinking about your dissertation before you finish your course work.

However, most students in this study perceived departmental procedures and rules as being unclear and ill-defined, particularly at the dissertation stage. A departmental self-study conducted by faculty in the Department of Curriculum and Instruction at the University of Minnesota (Avery, DiBlasio, Graves, & Narvaez, 1998) confirmed some of these students' observations about the inconsistencies and the lack of structure at this phase. A faculty member reported that some aspects of this process, like the dissertation proposal, are a "sloppy and inconsistent process" (p. 7). Additionally, low levels of satisfaction were reported in terms of a lack of mentoring and advising to Ph.D. students, specifically during the dissertation phase.

On the other hand, when rules and guidelines were codified, they were often done so in order to conform to the Graduate School's objects of insuring completion in a timely manner, as opposed to assisting students in completing the dissertation. This reflects tensions between the Graduate School and departmental systems' motives related to fostering completion of the dissertation.

Advisor and Committee

Most of the participants' departments did not have guidelines for advisor relationships beyond the usual Graduate School requirements. The advising system is a very important, tenuous part of the departmental structure for students because it is through their advisors that students connect to the Graduate School and departmental systems. Advisors are typically the sole contact for students during a long period of time when the departments no longer provide support and direction for students. Students form individual relationships with advisors and often describe them in this way, but their ongoing exchanges with advisors serve as the means by which institutional rules and procedures are communicated to students.

In describing the advisor and committee system, students referred to negative and positive faculty advising relationships, negotiations with committee members and institutional advising structures, dissertation feedback activities, and student-initiated activities and expectations of departments and faculty in terms of advising roles and relationships.

Some advisors provided little guidance to students, leaving them to fend for themselves. Paul noted how the university system of faculty sabbaticals and leaves often enforced an autonomous relationship among students and their advisors, forcing them to be more independent in the

dissertation-writing stage. In his case, this was not perceived as positive in terms of his own goals of completing the project:

> To be honest with you, it was a very unfortunate situation for me in that my advisor was not working. She was on leave. She was there to look at the final thing, like when I had the interview questions, she looked at them, things like that. I mean I'm not saying I didn't get any help from her, but unfortunately it didn't work very well for me that she had to do other things…there aren't too many faculty members for the programs in education, and because of that, the advisors are not accessible which could be a factor enough to discourage one from completing their [sic] dissertation.

Many students expressed a desire for more mentoring from their advisors. As Elena noted:

> I haven't had a lot of people sort of show me what I'm supposed to do, or help me learn an area or figure out. Even just consistency in terms of advising because in the first year you don't really have an advisor. Then I got an advisor, and she left, so it's been sort of up in the air. I've been mentoring myself, and then a lot of my work is through my colleagues.

When they do not receive support, they turn to other faculty members or peers. As Nicholas commented, "my real thesis advisor spent all told in the two years that I've been working on this, no more than 30 minutes altogether with me, so this co-advisor has been very important to me in my project."

Students also noted that the advising system failed to provide mentoring of students in a supportive, long-term manner, particularly in terms of the transition from written preliminary exams to the dissertation. Elena described the lack of continuity between these phases:

> I don't think they really guide students, not a healthy way that it's done yet. Part of it is having structure from the prelim to the dissertation stage and what it would look like. Possibly changing how the prelim is done, making it more writing that's more productive and making the dissertation that way, making it more productive rather than a document no one's ever going to read.

Some participants experienced double binds arising from contradictions between conforming to the idiosyncratic practices of their advisors and the gate-keeping Graduate School and departmental rules. On the one hand, to garner their advisor's help and final approval, they want to please their advisors, who may vary in their adherence to or adopt ambivalent attitudes towards Graduate School and departmental rules. On the other hand, they know that both they and their advisor are also accountable to Graduate School and departmental rules and norms, which, if not followed, create accountability problems. For example, Nicholas noted that his advisor, contrary to departmental norms, recommended that he not be concerned with placating the demands of his committee members. He recalls his advisor telling him that "you're in it for yourself here, not for your committee members, and that's helped me, but I know a lot of people who are just pulled one way or the other." Because he was concerned with his committee

members' response to the dissertation, he was caught a double bind of not knowing whom to please, his advisor or his committee members.

In contrast to Nicholas, Zachery found a lot of support from his committee members working in conjunction with his advisor:

> I'd spent a lot of time with two people on my committee who I was very close to and who read all my chapters really closely, and we'd spend a lot of time talking about them and going over time. They really liked my work a lot, so I had two close allies and that helped, and I would sit with down with my advisor. He was just really excited about my work…so it was a collaborative thing. It was also very important because I was able to see it as a kind of dialogic kind of thing that had a specific audience.

And, Molly noted, "If I give him something, it's read in 24 hours; e-mail is answered right away; his readings are so thoughtful and so insightful. I admire how he does things so much, so I've found my interaction with him could not have been better."

However, these positive examples were exceptions to the norm. Participants perceived both a lack of mentoring to the departmental system and a lack of departmental standards and consistency around how advising relationships are formed, again suggesting the influence of the interaction between layered systems. While the advising system, as historically ground in the mentor/student relationship as part of an apprenticeship system, was assumed to work effectively in all cases, there was considerable variation in the quality of advising. At the same time, given this assumption, as well as concerns about academic freedom, there were few specific Graduate School or departmental guidelines related to advising.

As these students described it, advisors and committee members represent overlapping systems that influence dissertation writing. These relationships interact with other systems, such as the Graduate School and the department, to shape students' experiences and production of the dissertation. Students perceived these activities in different ways. Some reported positive interactions that made the object of writing the dissertation easier to achieve. In order to finish writing, students reported that advisors in particular were most influential in this phase in terms of providing them with some institutional agency for them with other, less visible layers of these systems. Others reported negative experiences and contradictions among systems that created barriers to their writing, resulting in confusion, frustration, and even misinterpretation of the objects of these systems. Others noted that dissertation advising assumed less of a priority for advisors given faculty accountability to a research university's larger reward system driven by the object of producing research. Students had little recourse for dealing with the situation, other than for departments to provide more explicit descriptions of the functioning of the system. As Julie suggested:

> Put more of that sort of stuff in a handbook that tells people what to do, when you are negotiating an advising relationship, what kinds of questions you should ask about, not just scholarly interests and all that kind of thing, but what are your plans, are you going to be on sabbatical, going to be involved

> in long-term research that's going to take your time and energy...just a
> better way to know who's doing what...who's good at it, who's good at
> working with students and helping them, mentoring them into these fields.

Julie's suggestion reflects the need for students to at least become aware of how commitments to competing systems shape faculty/student advising relationships, even though they may have little impact on changing those relationships.

Graduate Student Employment

Participants also referred to their experiences in their graduate student employment in teaching and research assistantships, administrative positions, and jobs outside the university. All of the students in this study worked between 75 and 100% time or more during most of their graduate school programs. They described concerns about workload issues and the availability of funding and support for their work during the dissertation phase. Students also referred to ethical issues associated with the weak labor market, boundary negotiations with departments and faculty in students' work-related positions, and students' future goals as professionals in local and national settings.

On the one hand, the participants perceived the graduate student employment as providing them with the financial support necessary for completing their dissertation, as well as the teaching experience necessary for later teaching careers. On the other hand, they perceived their work as creating conflicts with their dissertation research. Additionally, their low salaries meant that they needed to work in the summers or find additional part-time jobs to make a living, creating further time conflicts with the dissertation writing. This was especially a burden for single students supporting themselves and for students with families. As Liz noted, "Wow, what a concept, what would that be, $9,000 per year?...yea, of course, we can live on that with two small children!"

One reason for the low salaries is that some departments have appointment caps (at 50% time), designed to help students find time for their dissertation writing and program progress. Ironically, while these graduate assistantships exist to support them and cover their tuition, students often report that they find it difficult to make it financially on these appointments for extended periods of time.

Departments also capped their assistantships after the sixth year with the expectation that students can complete the dissertations in this amount of time. For students with workload conflicts, these caps serve as a deterrent to finishing the dissertation. As Carrie noted:

> I mean I've been working myself to death, I've worked full time that last 6
> years on top of everything else, you know, so that my child wouldn't have to
> be impoverished, and I feel a certain resentment for doing that in good faith
> and then coming to this 6th year and finding out that I've been sort of
> hoaxed. That this is some maybe intentional or unintentional joke maybe on
> poor people who are trying to get advanced degrees, so that makes me angry
> in light of....I've made real decisions about, I can't play with you tonight, I
> have to do this because then I'll pass my prelims, write my dissertation, I'll

> get this wonderful tenure-track job and you'll be so proud of me, and I'll set a good role model for you. That makes me even more enraged than the other stuff.

Carrie raised ethical questions about the degree to which she was being exploited by the university which, given the weak job market, can hire those who have not completed the degree (Graduate Student Caucus, 1998; Kerlin, 1995; Leatherman & Magner, 1996; Magner, 1997; Loukas, 1998; Schuster, 1998; Taff, 1998). She noted:

> In a nutshell, I think that the university takes in as many grad students as it can, it washes its hands of any ethical responsibility to have them finish, and actually it's in the university's best interest that people stop at the ABD level because they will then become a cheap source of labor very dependent upon whatever adjunct work they can get.

Students were also disturbed by the lack of recognition of and appreciation for their teaching contributions to their departments. They believed that within the university system, their teaching was considered as less important than their dissertation research. For students who valued their teaching, this led them to perceive themselves as second-class citizens. As Elena noted:

> I don't think departments are very aware of how students are marginalized... but I don't really think we're recognized for the work we do as well, so I do think that we feel really under-appreciated because we spend so much energy teaching and there's no recognition of that, and the ones who do get recognized are the ones who publish all the time.

Students also noted disparities between the level of support available in the humanities versus the sciences. Nicholas discovered that graduate students in the sciences are not required to teach and receive extra summer salary from a local company: "It's just incredible, you know, these guys are getting like $24,000 to $28,000 for the school year to be R.A.s on subjects on which they're writing their own dissertations." In contextualizing their own disciplinary field as not being valued financially relative to other fields, these students recognized the undervalued nature of society's attitudes towards the profession they were entering, a further disincentive to completing the degree.

Participants therefore perceived major conflicts between the demands of teaching versus the need to complete the dissertation, conflicts leading to delays in completing the dissertation. Many needed to work extra hours to support themselves and their families, extra work that only further prolonged their dissertation writing. While they valued their teaching, they perceived the university as not valuing their teaching. This led some of the participants to reconsider future work in a research-based university in which research may be privileged over teaching. This contradiction in the motives of higher education related to generating research versus providing instruction for students also affects faculty, particularly beginning faculty seeking tenure. Graduate students are particularly adversely affected because if they do not complete their dissertation, they will not be able to enter into the profession. However, in the humanities, if they do not have a record of effective teaching, they may also have difficulty obtaining a position in a highly competitive market. This creates a double bind for students who value teaching but also

want to complete their dissertation. However, students were not able to address this double bind other than simply acknowledging it as endemic to the larger system of higher education, a system that was unlikely to be open to addressing this double bind.

The Job Market

Participants also referred to the job market as another system shaping their dissertation writing. They mentioned issues related to their job search and labor market frameworks guiding their work at the dissertation stage; prior experiences and preparation such as course work, departmental presentations, and professional conferences; the quality of departmental relationships formed throughout Graduate School such as faculty role models and mentoring, networking opportunities, and peer support; and ways in which they were positioning the dissertation to prepare them for the job market.

As noted in the discussion of adhering to Graduate School rules, participants experienced a double bind arising from the contradiction between writing according to the genre rules of the Graduate School and department systems and writing for publications and conference papers valued in the job market system. Students who successfully negotiated this conflict recontextualized (van Oers, 1998) and translated their dissertation work into genres applicable to conference presentations, job talks, and publications. Other students dealt with this double bind by perceiving the dissertation and the publication phase as separate texts operating in separate systems. As Seth noted:

> I've gotten to the point where I want to get it done for the department first
> and foremost, rather than the other part of it that I was going to mention
> which would be the larger possibility of publishing parts of it, or it as a whole,
> outside of the department. And that is always something else that's in the
> back of my mind, that it's meeting or will do something in my mind that is
> publishable.

However, in writing the dissertation, Seth framed his dissertation in terms of future publications geared for the job market: "With the dissertation, it's forced me to picture the kind of writing that might have to get done in the future which I think is a good piece of preparation."

Students who perceived potential employers as placing a high priority on research perceived the dissertation as having more value than did students who perceived their potential employers as valuing teaching. These students addressed the double bind between allegiance to research versus teaching by constructing new transition activities involving job talks, interviews, writing for publication, and conference presentations in which they assumed the roles of researchers sharing their research with future colleagues. They no longer perceived themselves as graduate students caught in a no-win situation, but as operating in a new, alternative activity. As Seth noted:

> There's a goal that's beyond the degree, I think. I can picture myself having
> to talk about it [dissertation] in a job interview since I was just talking to

> people who were at job interviews this week, and I think one of the voices
> that is over my shoulder as I write is that voice, having to give your 10-
> minute version of it to somebody who doesn't know the first thing about it.

And, Julie perceived herself as starting a new trajectory in academia:

> I've been to many conferences and given many papers on panels with
> interesting places both from here and other places...I have a phrase an
> economics professor said...this isn't the end of your life work. This is the
> beginning of it...it didn't have to be Nobel-prize quality, it just had to be
> done, so that he could go on to other things.

Through preparing for job talks, interviews, writing for publication, and conference
presentations, students moved beyond writing only for their advisor and committee to writing
within various professional systems involving multiple audiences and alternative rhetorical
modes. Nicholas recognized that moving into this new activity after an extended period of time
in his graduate program was one way to address his frustration:

> It's been ten years for me. I don't think now it was the smartest thing to do. I
> wanted to learn as much as I could before I hit the job market, but what I'm
> thinking now really is you ought to just get any old, stupid Ph.D. and just get
> on the job market and just continue learning and growing the field itself, as a
> working professional member instead of being left in this like half-assed,
> semi-professional status for so long.

At the same time, moving into this new activity was still very much grounded in the old activity.
Students participated in mock job-talks in their departments, received departmental support for
conference presentations, and obtained advice on publications. For example, for Nicholas, his
final defense served as not only a simulation of future job talks, but also as representing a shift in
his role from graduate student to professional colleague:

> I felt that maybe my finishing the defense, having been through the defense
> which was sort of difficult, you know, prepared me to be in that conference
> room with 200 people to answer questions with scholars who'd written books
> on the subject, and without any sense of difference between the three of us
> really. I mean he may really know his stuff, but I wasn't going to let him
> shove me in a corner as part of his bigger parade, and I think that maybe was
> somewhat conditioned by the fact that I've defended, finished, and that I'm
> no longer an apprentice in some sense.

Zachary perceived this shift in role as enhancing his own sense of agency as he came to operate
within a different academic system constituting a different role for himself:

> I think what happens in doing the dissertation is you do enter into a peer
> relationship with your professors, and my advisor was very clear that the
> dissertation defense is kind of meant to be a conversation among peers, and
> that there's a sense, I think, and one of the ways the dissertation gets done is
> if you can see yourself not as a graduate student but as a professional peer
> and imagine yourself as an academic, as a scholar, and not as a graduate

> student. So yea, there is a transformation that has to occur in your
> confidence, and partially I think that comes through writing.

In other cases, students were socialized for the job market through their participation in professional organizations that provided opportunities to participate as "scholar"/colleagues, a process of peripheral participation (Wenger, 1998). Molly described her experience of serving on the conference panel:

> I was participating in this seminar, this conference last year, the speech
> communication association, and I thought there'd be a mixture of students
> and junior faculty, and I was the only student. So it was this really funny
> thing where this guy would say, well, we're all professors, we're all scholars,
> and I had to laugh. He looked at me and I said I'm not a professor yet, but
> I'm relying on that ethos. I mean I'm the only person here who doesn't have
> a Ph.D., so it's a funny thing and I came in thinking, ooh, he called me a
> scholar. I'll never forget, that was the first time someone called me a scholar,
> I mean, am I a scholar? Oh, I guess I'm a scholar.

Other students defined their writing primarily in terms of the job market as a way to legitimatize their status given the lack of departmental or advisor and committee support. Elena described her strategy of using a potential position to enhance her status in the eyes of her committee:

> I think one of the reasons I decided to try to get a job was like, if I get a job,
> how many of my committee members are going to say, sorry, this
> dissertation is not good enough, you can't go, we're going to fail you! I feel
> like it's pressure to be applied in the right places, like, you've been training
> me the last 6 years so I can get a job? Well, I have a job now, and you're
> going to tell me my work is not good enough!? That could not happen. I can
> write a mediocre dissertation and be happy with it because I see it as a goal,
> one part of the next goal, but it gives me some flexibility and control with my
> committee.

Students also noted that potential employers were primarily concerned about insuring that candidates would obtain tenure, preferring candidates with publications in addition to the dissertation. As Julie noted:

> It takes so much to get a job these days that people might as well be tenured
> up front. I've heard people say things, not here, that I couldn't compete with
> all the candidates we are looking at, I couldn't get a job with all the
> qualifications we are looking for.

In constructing themselves as agents within a new activity, students began to recognize the differences between the objects and motives of research universities as opposed to other university/community college systems. They received mixed messages from their departments and advisors about the function of their dissertation relative to the tight job market in the humanities. While they were told that they could position their dissertation to fit the demands of a range of different type of jobs, they were also told that they were being prepared as future researchers in tenure-track positions in "Ivy-league" or Division I research institutions.

Students who were not seeking positions in these institutions perceived the dissertation as having less value in their job search, other than as a credential that they simply needed to finish to complete the degree. They also did not perceive their dissertation as preparing them for a focus on teaching in work institutions that differ from the University of Minnesota. These students' perceptions jive with the results of a survey of over 4,114 doctoral students in 27 selected universities representing 11 arts and sciences disciplines, of whom 209 were students at the University of Minnesota (Golde & Dore, 2001). While most of the students indicated that they were prepared to conduct research, half to three-quarters of doctoral students in the survey indicated that they were not prepared for teaching, even though 83% indicated that teaching was a reason they were entering academia. (Fifty-four percent desired positions in liberal arts institutions; 54%, in research institutions, 44%, in comprehensive universities; and only 4%, in community colleges—the latter being the faster growing institution in higher education. Only 58% of English doctoral graduates were teaching in a tenure-track position within ten years after completing the degree. Moreover, across all fields, only 57% held full-time positions and 43% held part-time positions. Despite this tight job market, graduate reported that they acquired little information about nonacademic careers; few reported being encouraged to explore nonacademic options.)

In summary, students seeking positions at research universities were able to build on their dissertation experience to construct new activities and roles in which they began to participate in transitional events as future researchers. However, for students seeking position at universities or community colleges in which teaching was a priority, they had more difficulty conceiving of their dissertation writing as preparing them for their future roles as teachers. These students expressed frustrations with departmental/advisor expectations that they were writing their dissertation for a market they were not seeking. This contradiction reflects differences in higher education systems' competing motives and objects relative to valuing research and teaching. This suggests the need for students to align their motives for writing the dissertation with the motives of the higher education system in which they want to work. It also suggests the need for graduate schools and departments to provide these students with transitional activities such as teaching internships similar to those conference/publication activities provided to students focusing on research.

Conclusion

The dissertation has historically been constructed and treated as an individualized writing experience for students. However, consistent with the concept of genre as social actions and practices (Bazerman, 1997; Bazerman & Prior, in press), the results of this study indicate that dissertation writing consists of a range of activities in different activity systems—the Graduate School, departmental, advising, employment, and job market, each driven by conflicting objects and motives.

An activity theory analysis serves to highlight the ways in which contradictions arise in these systems given their conflicting objects/motives, rules, tools, and division of labor. These contradictions included having to:

- write in format and style consistent with the rules of the Graduate School and department, but finding that this format and style does not easily translate into presentations or publications in a different format consistent with the needs of the job market.

- conform to the practices of advisors, particularly the lack of helpful advising, even though those advisors may not be following the rules of the Graduate School and department, rules which were often not made explicit to students.

- devote considerable time to teaching to acquire financial support, time that detracted from working on the dissertation.

- cope with limitations on the amount and number of years of financial support, limitations designed to encourage timely completion of the degree.

- frame the dissertation to position oneself for employment at a research institution, when students may have been more interested in working at an institution that valued teaching.

Consistent with Engeström's (1987) model of development, coping with these contradictions created double binds in some students. In some cases, these students were able to create new activities designed to address these double binds. To cope with the double bind of having to please one's advisor and/or committee, but not receiving much direction or support, students created their own writing support groups that provided support for peers. Or, to cope with the double bind of having to write in a dissertation format and style according to the dictates of the Graduate School and department while at the same time presenting one's dissertation research in a format and style for the job market, students began participating in conferences and job, an activity that provided them with a transition activity as potential members of the academy.

However, in most cases, students were not able to create new activities that would address their binds. For example, when faced with the conflict between time devoted to teaching for financial support and time devoted to work on the dissertation, they had no way to address that double binds. Frustration with not being able to cope with these double binds created some degree of dis-identification (Hodges, 1998) from the different systems shaping dissertation writing. Some students complained that the rules operating in these systems were often not made explicit, under the assumption that they should be able to intuit these rules on their own. These perceptions coincide with the Golde and Dorn's (2001) survey results, which indicated that one- to two-thirds of doctoral students were unclear about the applicability of their course work, the amount of time they needed to spend with their advisor, funding for their project, and the criteria for evaluating their progress in a program. (Only 14% of English doctoral students were "very clear" about how long they should meet with their advisors.)

Specifically, students highlighted difficulties with the unevenness of structures and policies across their departments, and the Graduate School's lack of protocol for defining the dissertation-writing phase beyond a three-sentence description. All of this suggests that the purpose of the dissertation and its role in engaging students in the practices of the academy—such as becoming a faculty member, conducting research, and teaching in higher education—must be examined at the level of activity systems analysis to identify how these systems' objects and motives shape the dissertation-writing activity. As Hinchey and Kimmel (2000) note, "Openly functioning as a weeding mechanism, the dissertation requirement demonstrates the university's tenacity in clinging to outmoded practice and its refusal to consider the best interests of its students rather than its own needs" (p. 91).

The results of this study also indicate various contradictions between systems operating at cross-purposes to each other. Graduate schools and departmental administrators, advisors, and committee members need to examine policies and practices constituting the dissertation writing experience in terms the conflicting objects and motives creating these contradictions, creating double binds for students. They also need learn from instances in which students collectively created new activities for coping with double binds. Rather than the often therapeutic, individualistic orientation of self-help dissertation survival guides, student advising and mentoring needs to honestly acknowledge the inevitable double binds created by contradictory objects of different systems. Through such challenges and accommodation to these challenges, these systems themselves evolve, creating new objects and motives. Further research needs to examine the forces shaping the historical evolution of these systems.

We reiterate that the results of this study are based on students' interview perceptions of these different systems. These perceptions can be based on misinterpretations or the fact that students may not be aware of the fact that they are operating within a system. Researchers also need to examine advisors', administrators', and employers' perceptions of the contradictions operating in these systems.

References

Association of American Universities. (1998). AAU Graduate Education Report. Washington, DC: Association of American Universities. [Online]. Available: http://www.aau.edu/reports/GRADEDRpt.html

Avery, P., Diblasio, M., Graves, M., & Narvaez, D. (1998). *Initial report on the Ph.D. program in curriculum and instruction: Faculty comments, concerns, and suggestions*. (Task Force to Review the Department of Curriculum and Instruction Ph.D. Program). Minneapolis: University of Minnesota.

Bateson, G. (1972). *Steps to an ecology of mind*. New York: Ballantine Books.

Bazerman, C. (1997). Discursively structured activities. *Mind, Culture, and Activity, 4* (4), 296-308.

Bazerman, C., & Prior, P. (in press). Participating in emergent socio-literate worlds: Genre, disiciplinarity, interdisciplinarity. In R. Beach, J. Green, M. Kamil, & T. Shanahan, (Eds.), *Multidisciplinary perspectives on literacy research*. Cresskill, NJ: Hampton Press.

Berkenkotter, C., & Huckin, T. (1995). *Genre knowledge in disciplinary communication: Cognition/culture/power*. Hillsdale, NJ: Erlbaum.

Berkenkotter, C., & Huckin, T., & Ackerman, J. (1988). Conversation, conventions, and the writer. *Research in the Teaching of English, 22*, 9-44.

Berkenkotter, C., & Ravatos, D. (1997). Genre as tool in the transmission of practice over time and across professional boundaries. *Mind, Culture, and Activity, 4* (4), 256 – 274.

Bloome, D., Puro, P., & Theodorou, E. (1989). Procedural display and classroom lessons. *Curriculum Inquiry, 19*, 265-291.

Bolker, J. (1998). *Writing your dissertation in fifteen minutes a day: A guide to starting, revising, and finishing your doctoral thesis*. New York: Henry Holt and Company.

Bowen, W. G., & Rudenstine, N. L. (1992). *In pursuit of the Ph.D*. Princeton, NJ: Princeton University Press.

Brause, R. (2000). *Writing your doctoral dissertation: Invisible rules for success*. New York: Falmer.

Cooke, D. K., Sims, R. L., & Peyrefitte, J. (1995). The relationship between graduate student attitudes and attrition. *The Journal of Black Psychology, 129* (6), 677 – 688.

Dooley-Dickey, K., & Satcher, J. (1991). Doctoral disorder of adulthood. *Journal of Mental Health Counseling, 13* (4), 486 – 491.

Duke, N. K., & Beck, S. W. (1999). Education should consider alternative formats for the dissertation. *Educational Researcher*, pp. 31 – 36.

Davis, G. B., & Parker, C. A. (1979). *Writing the doctoral dissertation: A systematic approach*. New York: Barron's Educational Series, Inc.

Engeström, Y. (1987). *Learning by expanding*. Helsinki: Orienta-Konsulti. [Online]. Available: http://communication.ucsd.edu/MCA/Paper/Engestrom/expanding/toc.htm

Engeström, Y. (1993). Developmental studies of work as a test bench of activity theory: The case of primary care medical practice. In S. Chaiklin & J. Lave (Eds)., *Understanding practice: Perspectives on activity and context* (pp. 63-104). Cambridge, England: Cambridge University Press.

Engeström, Y. (1999). Innovative learning in work teams: Analyzing cycles of knowledge creation in practice. In Y. Engeström, R. Miettinen, & R. Punamaki (Eds.), *Perspectives on activity theory* (pp. 377-404). New York: Cambridge University Press.

Ehrenberg, R. G., & Mavros, P. G. (1994). Do doctoral students' financial support patterns affect their times-to-degree and completion probabilities? *The Journal of Human Resources, 3* (3), 580 – 609.

Faghihi, F. Y., Rakow, E. A., & Ethington, C. A. (1999, April). *A study of factors related to dissertation progress among doctoral candidates: Focus on students' self-efficacy as a result of their research training and experiences*. Paper presented at the annual meeting of American Educational Research Association. Montreal, Quebec.

Gardner, D., & Beatty, G. (1980). *Dissertation proposal guidebook: How to prepare a research proposal and get it accepted*. Springfield, IL: Charles C. Thomas Publishers.

Gee, J. (1996). *Social linguistics and literacies.*, 2nd ed. New York: Falmer.

Germeroth, D. (1991). Lonely days and lonely nights: Completing the doctoral dissertation. *ACA Bulletin, 76*, 60 – 89.

Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. White Plains, NY: Longman.

Goffman, I. (1981). *Forms of talk*. Philadelphia: University of Pennsylvania Press.

Golde, C.M. & Dore, T.M. (2001). At Cross Purposes: What the experiences of doctoral students reveal about doctoral education. Philadelphia, PA: A report prepared for The Pew Charitable Trusts. [Online] Available: http://www.phd-survey.org

Goodchild, L. F., Green, K. E., Katz, E. L., & Kluever, R. C. (Vol. Eds.). (1997). Rethinking the dissertation process: Tackling personal and institutional obstacles. In M. Kramer, (Series Ed.), *New directions for higher education* (Vol. 25, No. 3). San Francisco: Jossey-Bass Publishers.

The Graduate School, University of Minnesota. (2001). Graduate School Catalogue. Minneapolis: University of Minnesota [Online] Available: http://www1.umn.edu/commpub/grad/gen/phd.htm

Graduate Student Caucus. (1998). *Workplace: The journal for academic labor*. [Online]. Available: http://www.nagps.org/~wrkplace/workplace1/wrkplace.html

Green, K. E., & Kluever, R. C. (1997). *The dissertation barriers scale*. Chicago, IL: Paper presented at the Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED 410 253).

Hawley, P. (1993). *Being bright is not enough: The unwritten rules of doctoral study*. Springfield, IL: Charles C. Thomas Publishers.

Hinchey, P. & Kimmel, I. (2000). *The graduate school grind: A critical look at graduate education*. New York: Falmer.

Hodges, D. (1998). Participation as dis-identification with/in a community of practice. *Mind, Culture, and Activity, 5*(4), 272-290.

Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.

Kerlin, B. A. (1996). *Hidden rules, secret agendas: Challenges facing contemporary women doctoral students*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, California, April 20, 1995. [Online] Available: http://www.irn.pdx.edu/~kerlinb/myresearch.hrsa.html

LaPidus, J. B. (1997). *Doctoral education: Preparing for the future*. Council of Graduate Schools. [Online]. Available: http://cgsnet.org/doctoral.htm

Leatherman, C. (2001). The number of new Ph.D.'s drops for the first time since 1985. *The*

Chronicle of Higher Education 47(22), A10, A11.

Leatherman, C., & Magner, D. (1996). Faculty and graduate-student strife over job issues flares on many campuses. *The Chronicle of Higher Education, 43*(14), A12 – A15.

Lemke, J. (1995). *Textual politics*. Bristol, PA: Taylor & Francis.

Long, T., Convey, J., & Chwalek, A. (1985). *Completing dissertations in the behavioral sciences and education*. San Francisco, CA: Jossey-Bass Publishers.

Loukas, K. (1998, March 9). Graduate students protest for improved health care. *The Minnesota Daily*, pp. 1, 8.

Lovitts, B. (1996). *Leaving the Ivory Tower: A sociological analysis of the causes of departure from doctoral study*. Unpublished doctoral dissertation. College Park, Maryland: University of Maryland.

Lundell, D. B. (1999). *Joining the conversation as professionals: An examination of graduate students writing the dissertation*. Unpublished doctoral dissertation, University of Minnesota, Minneapolis.

Mauch, J., & Birch, J. (1989). *Guide to successful thesis and dissertation: Conception to publication, a handbook for students and faculty*. New York: Marcel Dekker, Inc.

Meloy, J. M. (1994). *Writing the qualitative dissertation: Understanding by doing*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

National Association of Graduate and Professional Students. (2001). The 2000 National Doctoral Program Survey. Washington, DC: National Association of Graduate and Professional Students. [Online]. Available: http://survey.nagps.org

Ogden, E. H. (1993). *Completing your doctoral dissertation or master's thesis in two semesters or less*. Lancaster, PA: Technomic Publishing Company.

Olson, G. A., & Drew, J. (1998). (Re)envisioning the dissertation in English studies. *College English, 61* (1), 56 – 66.

Phillips, E., & Pugh, D. (1994). *How to get a PhD: A handbook for students and their supervisors*. Philadelphia, PA: Open University Press.

Preece, R. (1994). *Starting research: An introduction to academic research and dissertation writing*. New York: Printer Publishers.

Prendergast, C. (1997). Catching up with Professor Nate: The problem with sociolinguistics in composition research. *Journal of Advanced Composition, 17* (1), 39 – 52.

Prior, P. (1994). Response, revision, disciplinarity: A microhistory of a dissertation prospectus in sociology. *Written Communication, 11* (4), 483 – 533.

Prior, P. (1997). Literate activity and disciplinarity: The heterogeneous (re)production of American Studies around a graduate seminar. *Mind, Culture, and Activity, 4*(4), 275-297.

Prior, P. (1998). *Writing/disciplinarity: A sociohistorical account of literate activity in the academy*. Mahwah, NJ: Erlbaum.

Rocha-Singh, I. A. (1994). Perceived stress among graduate students: Development and validation of the graduate stress inventory. *Educational and Psychological Measurement, 54* (3), 714 – 727.

Rudestam, K. E., & Newton, R. R. (1992). *Surviving your dissertation: A comprehensive guide to content and process*. Newbury Park, CA: Sage Publications, Inc.

Russell, D. (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication, 14(4), 504-554.*

Saks, A. L. (1996). (Ed.). Viewpoints: Should novels count as dissertations in education? *Research in the Teaching of English, 30* (4), 403 – 427.

Schuster, J. H. (1998, January/February). Reconfiguring the professoriate: An overview. *Academe*, 48 – 59.

Sternberg, D. (1981). *How to complete and survive a doctoral dissertation*. New York: St. Martin's Press.

Taff, J. (1998, August 5). GradSOC kicks off union drive. *The Minnesota Daily*, p. 1.

Tinto, V. (1993). *Rethinking the causes and cures of student attrition*. (2nd. ed.). Chicago, IL: University of Chicago.

Usher, R., & Edwards, R. (1994). *Postmodernism and Education.* New York: Routledge.

Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. New York: State University of New York.

van Oers, B. (1998). The fallacy of decontextualization. *Mind, Culture & Activity, 5* (2), 143-153.

Welch, N. (1993). Conversion, resistance, and the training of teachers. *College English, 55*(4), 387-401.

Wenger, L. (1998). *Communities of practice*. New York: Cambridge University Press.

Winsor, D. A. (1999). Genre and activity systems: The role of documentation in maintaining and changing engineering activity systems. *Written Communication, 16* (2), 200 – 224.

Witte, S. (1992). Context, text, intertext: Toward a constructivist semiotic of writing. *Written Communication, 14*(4), 504-554.

Young, J. R. (1998, February 13). Requiring theses in digital form: The first year at Virginia Tech. *The Chronicle of Higher Education*, A29 – A31.

Notes

[1] There remains considerable theoretical debate about the ways in which, or whether, activity systems intersect with or are laminated to each other. In a discussion of this issue on the XCMA listserve, Bill Barowy, defining activity systems as "sociocognitive structures that spans people and things and are conceptual in nature," argues that:

> It is clumsy to describe activity systems as "bumping," "intersecting," and so on, because "activity systems" is how we are thinking of interaction among humans and things…Two activity systems, being different in many ways than, say, two basketballs, cannot "bump" into each other in the same way, and being different than two lines on a paper also cannot "intersect" in the same way. The work to be done in part is to develop the language with which to describe how people who are involved mostly in one form of activity (such as research) come to interact with people who are involved mostly in another form of activity (such as school) and how people can be engaged in one form of activity (such as K-12 teaching) and then later be engaged in another form of activity (such as attending graduate school). When I write shorthand about "intersecting activity systems," what I really mean to refer to [is] an ensemble of situations as the two above. For these two situations, it is helpful to recognize that two genetic elements of activity systems, "people" (i.e., subjects) and "instrumentation" (i.e., artifacts) can participation in one form of interaction at one time, and that at a later time can participate in another form of interaction. So it is shorthand to write that these people and things participate in different activity systems (B. Barowy, personal communication, xmca@weber.ucsd.edu, February 1, 2001).

Barowy cites the example of Bateson as a researcher conducting research in Bali. Bateson is operating both in the system of university research and in the system of Bali's village life. Because Bateson is only observing the village life without wanting to disturb or change that life, he is primarily operating in the university research system. His

research will have little effect on the village life, but may, with other researchers, result in changes in the university research system through presentations and publications.

In the same XCMA listserve discussion, to sort out the confusion associated with the fact that "activity names the whole, but it also names one of the parts of the whole," Paul Prior posits the notion of a high level "Activity 1 system" as "the total, the whole, the union and disunion of all the things going on" as a "concrete historical practice" (personal communication, P. Prior, xmca@weber.ucsd.edu, February 1, 2001). He also proposes:

> Activity 2 is a plane that pulls out enduring human projects and their specific sociocultural elaborations; it is an analysis of what is happening from a certain macrohistorical perspective. Leont'ev (78) suggests that all activity 1 is multimotivational (i.e., involves multiple activity 2's). So, he suggests, in the most abstract sense, that if you look at people working on a farm, in a factory, in a store, whatever, they will be implicated in both labor and social relations. I'd argue that, as Goffman suggested, any situation is laminated, with multiple activities co-present, though variously foregrounded or backgrounded. This is one of the reasons why gender, race, sexual orientation, nationality, religion, etc. aren't irrelevant in, say, scientific practice. They're always already there. (personal communication, P. Prior, xmca@weber.ucsd.edu, February 1, 2001)

For Prior, learning of various tools:

> does not move not from activity 2 to action to operation. Learning happens in activity 1 (all analytic levels always simultaneously present, always laminated sociocultural activity systems, with tools/artifacts/conditions being at the core of historical processes of development). (personal communication, P. Prior, xmca@weber.ucsd.edu, February 1, 2001)

And he notes,

> the historical development of activity 2's, individuals with their goals, and the artifacts/tools of operations are all co-genetic, always developing in association with other activity 2's etc. The historical development of, say, labor relations or of schooling is not insulated from the historical development of race and gender relations, for example. They are co-developing (and here, of course, development doesn't necessarily mean improvement). (personal communication, P. Prior, xmca@weber.ucsd.edu, February 1, 2001)

Given the multiplicity of different systems and motives, the XCMA discussion also examined the issue of whether an individual has multiple motives through operating simultaneously in different systems. In answering a question posed by Charles Nelson: "Because people can have more than one motive while engaging in work (e.g., survival, pleasure, social influence, etc.), can one person with multiple motives doing the same thing be engaged in more than one activity?", Ricardo Ottoni Vaz Japiassu, notes that:

> Maybe these multiple motives you refer to, could be summarized or reduced to one: the main one. Despite people engaged in an *activity* could, personally, have different motives to be doing it, they would be involved in a very specific socio-cultural object-oriented one. But their *actions* within it, in turn, yes, could have very different *goals.* (personal communication, R. O. V. Japiassu, xmca@weber.ucsd.edu, February 1, 2001

For Japiassu, "if the "real" activity of a couple is, for example, "to have a dinner" in a very "in" restaurant, the motive of each partner to be engaged in it could be very different one another:

> Maybe for one of them the motive could be "eat and banish hungry" to the other, "watch" and "be watched" in company. Even so, the "real" activity would still be "having dinner." (personal communication, R. O. V. Japiassu, xmca@weber.ucsd.edu, February 1, 2001).

Abstracts

Producing Work and the Economy

- *A Central Bank's "Communications Strategy": The Interplay of Activity, Discourse Genres, and Technology in a Time of Organizational Change*

  Graham Smart, University of Wisconsin, Milwaukee

This chapter reports on an ethnographic study of the technology-mediated discourse practices of a professional organization in a period of major transition. Employing theories of genre and activity along with other theoretical constructs, the study examined how the Bank of Canada, the country's central bank, employs a "Communications Strategy" to orchestrate the organization's communicative interactions with other social groups in the Canadian public-policy sphere. After identifying a set of written and spoken genres associated with the Communications Strategy, the chapter suggests that the genre set and various mediating technologies can be usefully viewed as parts of a local sphere of organizational activity. The chapter then describes two features of the genre set: the genre knowledge within the community-of-practice associated with it and the relationship of the genre set to processes of organizational change. Next, the chapter discusses the role that the genre set plays in the activity of the Communications Strategy, focusing on three primary functions: co-coordinating the intellectual and discursive work of a large number of individuals performing a variety of professional roles; generating, shaping, and communicating the "public information" that constitutes the Bank's official public position on its monetary policy; and acting as a site for organizational learning. The chapter concludes with five theoretical claims regarding the way in which the genre set, mediated by technology, operates within the Bank, suggesting that these theoretical claims might serve as a heuristic for other researchers.

2 *Structure and Agency in Medical Case Presentations*

Catherine F. Schryer, University of Waterloo, Canada; Catherine F. Schryer, Lorelei Lingard, University of Toronto, Canada; Marlee Spafford, University of Waterloo, Canada; Kim Garwood, Hospital for Sick Children, Toronto, Canada.

This study investigated the role that medical case presentations play in the renegotiation or reconstruction of agency that occurs between medical students and physicians. Medical case presentations perform a dual function in teaching hospitals. They constitute formalized ways that physicians convey complex information about patients, and they are educational vehicles which medical students use to demonstrate their medical problem-solving abilities. This study observed and transcribed 16 oral case presentations performed by third-year medical students in a children's hospital. As part of an interview protocol, two transcripts, one from a less and one from a more expert student, were turned into scripts, dramatized and videotaped. Ten faculty and 11 students were interviewed and asked to identify the differences between a more or less expert student performance. Data were analyzed using modified grounded theory and statistical strategies. Using a combination of dialectical social theories—specifically structuration theories (Giddens and Bourdieu) and activity theory (Vygotsky and Engestrom)-- as well as rhetorical theories of genre (Bazerman, Russell and Schryer), this study concludes that genres such as case presentations function as mediating tools that allow participants to negotiate agency across generations and across levels of

expertise as sets of strategic choices. This renegotiation or reconstruction of agency, however, is not unproblematic. Genres have ideological consequences, and, through medical case presentations, medical students are learning to classify in quite specific ways, behaviors that could negatively affect communication with their patients.

- *Palm™ Technologies: An Activity-Theoretic Analysis of the Rapid Emergence of a New Writing Tool*

    Cheryl Geisler, Rensselaer Polytechnic Institute

Palm Technologies, a group of personal digital assistants or PDAs developed in the early 90s, have rapidly embedded themselves into the daily lives of users. The aim of this chapter is to provide an activity theoretic account of PDAs as technologies of text. Three questions are pursued: Out of what cultural history did Palm Technologies emerge? What motivated users to adopt Palm Technologies? How did Palm Technologies become incorporated into the activity patterns of everyday life? The evidence presented suggests that Palm Technologies work by moving systematic management techniques originally developed for organizations into the personal sphere. When systematic management becomes personal, task management separates from the task itself, leading to a fragmentation of motive that may challenge some of the basic assumptions of activity theory. This fragmentation is mediated through the space-time affordances of textualization and concurrent linearization of time. Like the systematic management of organizations before it, such textual affordances may become subject to surveillance and manipulation--by ourselves if not by others. All of this suggests that some interesting issues will arise as PDA technologies attempt to move outside of their managerial base and into the domestic sphere, in effect *databasing* our lives.

- *Compound Mediation in Software Development: Using Genre Ecologies to Study Textual Artifacts*

    Clay Spinuzzi, University of Texas, Austin

Traditionally, technical communicators have seen the texts that they produce--manuals, references, and instructions--as "bridging" or mediating between a worker and her tool. But field studies of workers indicate that the mediational relationship is much more complicated: Workers often draw simultaneously upon many different textual artifacts to mediate their work, including not only the official genres produced by technical communicators manuals but also ad hoc notes, comments, and improvisational drawings produced by the workers themselves. In this chapter, I theorize these instances of *compound mediation* by drawing on activity theory and genre theory. I describe an analytical framework, that of *genre ecologies*, that can be used to systematically investigate compound mediation within and across groups of workers. Unlike other analytical frameworks that have been used in studies of technology (such as distributed cognition's functional systems and contextual design's work models), the genre ecology framework highlights the interpretive and cultural-historical aspects of compound mediation that are so important in understanding the use of textual artifacts. The analytical framework is illustrated by an observational study of how 22 software developers in a global corporation used various textual artifacts to mediate their software development work.

- *Writing and the Management of Power: Producing Public Policy in New Zealand*

   Derek Wallace, Victoria University, Wellington

In contrast to the traditional view of policymaking, which assumes a rational process of problem identification and solution evaluation, much actual policy turns out to be solution-led. In other words, predetermined policy measures are imposed as "solutions" to retrospectively presented "problems". This has been particularly true, ironically, of the supposedly rational neo-liberal or "New Right" resurgence of the last quarter-century, whose influence is perhaps diminishing in some quarters but continues to be felt.

In these conditions, the processes and mechanisms of policy development, particularly the various genres of the formal written stages, can be viewed as a *system of production*, where the favored policy is "managed" through the traditional democratic framework of agenda setting, consultation, and enactment. This chapter charts the passage of a particular instance of policy development in New Zealand – the privatization of electricity supply – through this textual regime. The chapter shows both how traditional textual genres can survive unchanged into new circumstances, thereby misleading their readers, and how genres can change or rupture under pressure of new conditions and expectations. It will be demonstrated that the staged production of policy creates a differentiation of audiences that limits participation; and that viewing the texts in interaction allows analysts to refine their perceptions of the rhetorical purposes of each.

Producing Selves in Community

- *Chronotopic Lamination: Tracing the Contours of Literate Activity*

   Paul Prior and Jody Shipka, University of Illinois at Urbana-Champaign

This chapter explores the chronotopic lamination (Bakhtin, 1981; Prior, 1998) of writers' literate activity—the dispersed, fluid chains of places, times, people, and artifacts that come to be tied together in trajectories of literate action along with the ways multiple activity footings are held and managed. Twenty-one academic writers (undergraduates, graduates, and professors) participated in interviews where they were asked to draw and then discuss two representations of their processes in writing a particular piece. To further explore writers' multiple streams of activity and the ways texts mediate that activity, we also asked participants to share drafts, final texts, notes, annotated readings or other material they used in their writing. We focus here on four case studies that illustrate our findings. The interviews showed that the writers' work crossed institutional settings, especially mixing home, community, and discipline, and thus was deeply laminated (multimotivational and multi-mediated). In particular, we found that writers actively engage in what we call ESSP's (environment selecting and structuring practices), which not only lead to their texts but also contribute to the distributed, delicate, and partly intentional management of affect, sense, identity, and consciousness.

- *Intercultural Knowledge Building: The Literate Action of a Community Think Tank*

   Linda Flower, Carnegie Mellon University

Intercultural rhetoric is the study of literate practices that <u>use</u> cultural difference to build knowledge and support wise action. This paper documents the practice of a community think tank on urban workforce issues and examines the strategies used in this dialogue to 1) design an intercultural forum, 2) structure inquiry within diversity, and 3) build

intercultural knowledge. It asks, can such literate action produce significant, *transformative* knowledge?

The study draws on conceptual tools of activity theory and social cognitive rhetoric to explore the conflicts built into this process and the mediating role of documentation. It argues that two important outcomes of intercultural inquiry are its ability 1) to construct a richly situated representation of workforce issues--as a social and cognitive activity, and 2) to build a guide for action that emerges not solely from the arguments of causal logic, but from culturally negotiated "working theories," attuned to multiple realities and possible outcomes.

- *Participant and Institutional Identity: Self-representation across Multiple Genres at a Catholic College*

    Katrina M. Powell, Louisiana State University

This qualitative research project, informed by ethnographic and feminist research methodologies, focuses on how students negotiate various genres with which they come in contact. Through the close analysis of a small, religious-affiliated, liberal arts college, this study examines how students' constructs of "self" are reflected in school genres and how their backgrounds, specific academic disciplines, and institutional goals affect those constructs. In order to conduct this analysis, activity theory is used to examine possible competing goals within the activity system (the college itself) and, in turn, how those goals can affect student writing. Since participant identity is an issue of activity systems, I examine identity through self-representation, as it has been theorized in autobiography studies. Combining activity theory and theories of self-representation and performance, I create a framework to explore how genres can simultaneously liberate and constrain and how students negotiate the various tensions they may encounter within an activity system.

- *Creating a Writer's Identity on the Boundaries of Two Communities of Practice*

    Jean Ketter and Judith W. Hunter, Grinnell College

In this case study, we explore the way one student, who aspired to become a professional writer, learned through her writing activity in two communities: academia and public relations. We use activity theory to conceptualize the student's learning as an activity that balances between individual agency in meaning making and the social, historical and cultural forces that shape how individuals make meaning. Perceiving the two settings as communities of practice that provided opportunities for pursuing shared enterprises and engaging in collective learning, we show how the student's simultaneous participation in these contrasting communities challenged and refined her understanding of what it means to be an effective writer . We discuss how the work she engaged in on the boundaries of two writing communities enhanced her developing identity as a professional writer as she became aware of and tested the limitations of writing in these two communities. Our study shows the benefit of providing opportunities for teachers and students to explore how contrasting communities of practice define successful writing activity and how writing activity operates in the cultural and political sphere of each community.

Producing Education

- *'Big Picture People Rarely Become Historians': Genre Systems and the Contradictions of General Education*

  David R. Russell and Arturo Yañez

This study synthesizes Y. Engeström's version of cultural historical activity theory and North American genre systems theory to explore the problem of specialized discourses in activities that involve non-specialists, in this case students in a university 'general education' course in Irish history struggling to write the genres of professional academic history. We trace the textual pathways (genre systems) that mediate between the activity systems (and motives) of specialist teachers and the activity systems (and motives) of non-specialist students. Specifically, we argue that the specialist/lay contradiction in U.S. general education is embedded in historical practices in the modern university, and manifested in alienation that students often experience through the writing requirements in general education courses. This historical contradiction also makes it difficult for instructors to make writing meaningful for non-specialists and go beyond fact-based, rote instruction to mediate higher-order learning through writing. However, our analysis of the Irish History course suggests this alienation may be overcome when students, with the help of their instructors, see the textual pathways (genre systems) of specialist discourse leading to useful knowledge/skill in their activity systems beyond the course as specialists in other fields or as citizens.

- *Legends of the Centre: System, Self, and Linguistic Consciousness*

  Janet Giltrow, University of British Columbia

Commentators on language standardization, including Bourdieu and Bakhtin, provide various perspectives on what this chapter calls *modern linguistic consciousness*: speakers' awareness of their own speech in relation to others' and in relation to the operation of centralizing *system*. In this chapter, these formulations are used to analyze interview data collected from readers and writers at a South Asian university—and, in turn, these data elaborate the picture of modern linguistic consciousness. Readers and writers can pick out *self* amidst the words of others, and in the presence of centralizing mandates; they can position themselves in working spaces adjacent to *system*, and, while recognizing speech norms, imagine themselves as not occupying those norms. Linguistic consciousness can be detected in the expression of *rules*—but rules themselves turn out to be complex spaces hosting diverse possibilities. Moreover, modern systems, in managing the speech of populations, may not always operate exclusively in the service of the centre.

- *Accounting for Conflicting Mental Models of Communication in Student-Teacher Interaction: An Activity Theory Analysis*

  Kathryn Evans, University of San Francisco

Using activity theory as a framework, this article discusses a naturalistic study of two college classrooms in which the instructors often relied on transmission models of communication—models assuming that stable, fixed meanings can be neatly transmitted from person to person. Particularly noteworthy was that these instructors seemed to rely on transmission models despite training in recent theories of communication and that, contrary to previous assumptions that people's communicative models are stable, both teachers

shifted in and out of these models. Based on an analysis of the contexts surrounding shifts into transmission models, the article argues that these shifts happened in patterned ways. It then accounts for the resilience of transmission models within a broader sociocultural framework.

- *What is Not Institutionally Visible Does Not Count: The Problem of Making Activity Assessable, Accountable, and Plannable*

Charles Bazerman, University of California at Santa Barbara

This hypertext examines from an activity theory perspective the vexed problem of assessment and its relation to planning, accountability, curriculum, and learning. Assessment although only part of the educational process has implications for almost all of education. Local, state, and federal policies that have put great weight and high stakes on a battery of assessment tools that stand outside the daily life of the classroom but are intended to hold classrooms, teachers, and schools accountable for results.

While situated evaluation is an aspect of most human practices, institution-wide testing creates substantial difficulties for the local practices of each class, and particularly creates tensions between student-centered classroom practice and subject-centered expectations. Such tensions have been a continuing puzzle for progressive education. Dewey and his followers regularly preferred to keep evaluation and decision-making local, but for various institutional reasons had to seek larger ways of assessing student achievement without ever being able to develop fully appropriate assessment tools. The teaching of writing has faced a similar dilemma, with standardized forms of writing assessment setting reductionist definitions and expectations of writing, and not directing students towards the highest levels of accomplishment. This study considers genre and activity analysis as the basis for defining and assessing writing tasks through analysis of materials collected from a complex sequence of social studies writing assignments on the Maya from a sixth grade class.

- *Dissertation Writers' Negotiations with Competing Activity Systems*

Dana Lundell & Richard Beach, University of Minnesota, Minneapolis

Previous research on dissertation writing fails to embed it within the context of different, and often competing institutional forces constituting the genre expectations associated with producing the dissertation. The purpose of this study was to examine the negotiations of dissertation writers in a large Midwestern research university across a range of different activity systems: the Graduate School, department, advisor, committee, employment, and potential job market as different "layered" (Prior, 1998) systems. Analysis of interview data of 11 writers indicated that writers perceived marked differences in the objects/outcomes, roles, norms, and genre tools to vary across these different systems. While the Graduate School and departments formulated one set of expectations, the advisor or committee articulated different expectations for completing the dissertation. Writers also experienced time conflicts between the demands of teaching and writing. And, they experienced conflicting outcomes for the dissertation related to writing for an advisor or committee as opposed to positioning themselves for the job market, creating ambiguity related to their dissertation audience. They also noted that the research university positions the dissertation genre as preparing students for positions in other research universities as opposed work in universities in which teaching is a priority.

Editors

Charles Bazerman, professor and chair of the Department of Education at the University of California, Santa Barbara, is interested in the social dynamics of writing, rhetorical theory, and the rhetoric of knowledge production and use. He has been active in developing graduate degree objectives in rhetoric, literacy, and communication at UCSB and previously at Georgia Tech. His most recent book, *The Languages of Edison's of Edison's Light* , won the American Association of Publisher's award for the best scholarly book of 1999 in the History of Science and Technology. Previous books include *Constructing Experience*, *Shaping Written Knowledge: The Genre and Activity of the Experimental Article in Science, The Informed Writer: Using Sources in the Disciplines*, and *Involved: Writing For College, Writing for Your Self*. Co-edited volumes include *Textual Dynamics of the Professions*, *Landmark Essays in Writing Across the Curriculum*, and a special issue of *Mind, Culture, Activity* on "The Activity of Writing, The Writing of Activity." Current projects include a rhetorical theory of literate action and an investigation of environmental information. His Web page can be found at http://www.education.ucsb.edu/bazerman

David R. Russell is professor of English at Iowa State University, where he teaches in the Ph.D. program in Rhetoric and Professional Communication. His research interests are in writing across the curriculum, international writing instruction, the history of rhetoric in education, and cultural-historical Activity Theory. His book, *Writing in the Academic Disciplines: A Curricular History,* now in its second edition, examines the history of American writing instruction outside of composition courses. He has published many articles on writing across the curriculum and co-edited *Landmark Essays on Writing Across the Curriculum,* a special issue of *Mind, Culture, and Activity* on "The Activity of Writing, The Writing of Activity," and *Writing and Learning in Cross-National Perspective: Transitions from Secondary to Higher Education.* He has given workshops and lectures on WAC, nationally and internationally, and he was the first Knight Visiting Scholar in Writing at Cornell University. He is now leading a team to develop online, database-driven case simulations for learning academic writing in the disciplines. His Web page can be found at http://www.public.iastate.edu/~drrussel/drresume.html

Contributors

Richard Beach is professor of English Education at the University of Minnesota. He is author of *A Teacher's Introduction to Reader Response Theories and co-author of Inquiry-based English Instruction: Engaging Students in Life and Literature, Teaching Literature in the Secondary School,* and *Journals in the Classroom: Writing to Learn.* His research focuses on response to literature and inquiry instruction. He is a former President of the National Conference on Research in Language and Literacy and has served on Board of Directors of the National Reading Conference.

Kathryn Evans is an assistant professor and coordinator of Rhetoric and Composition at the University of San Francisco, a private, Jesuit university. She has published in *Computers and Composition, Teaching English in the Two-Year College,* and *Language and Learning Across the Disciplines*, and she is currently working on a book-length manuscript that more fully discusses the research analyzed in this volume.

Linda Flower is a Professor of Rhetoric and past Director of the Center for University Outreach at Carnegie Mellon.. Her work on the contested meaning-making of college students (*The Construction of Negotiated Meaning: A Social Cognitive Theory of Writing*) led to a comparative study of inquiry in academic and community settings in *Learning to Rival: A Literate Practice for Intercultural Inquiry*. For the last 15 years she has combined research in writing and problem solving with the practice of community literacy in urban organizations and workplaces, bringing college students into this sometimes unsettling intercultural activity (see http://english.cmu.edu/research/inquiry/default.html). Home page: http://english.cmu.edu/people/faculty/homepages/flower/default.html.

Kim Garwood is a research assistant and professional writer at the Hospital for Sick Children in Toronto. The researchers on this project are particularly grateful to the Social Science Research Council of Canada for granting them the funding to work collaboratively as a group.

Cheryl Geisler , Ph.D., Carnegie Mellon University, is a joint professor of Rhetoric and Composition and Information Technology at Rensselaer Polytechnic Institute where she conducts research on writing in the disciplines and professions, especially in the context of emerging communication technologies. She is author of the forthcoming textbook on methods for analyzing verbal data to be published by Longman in 2003. The work reported in this volume is part of a larger analysis of personal digital assistants as technologies of text with significant impact on work-life relationships. More information found at http://www.rpi.edu/~geislc.

Janet Giltrow is a member of the English Department at the University of British Columbia, in Vancouver, Canada. Most recently, she has published articles on literary and non-literary stylistics, on genre theory, and on ideologies of language. She is the author of *Academic Writing* (3rd ed. 2002), and editor of *Academic Writing* (2nd ed. 2002). The chapter in this

collection is part of a larger project investigating, by various methods, subjectivity and sociality in language.

Judy Hunter, director of the Writing Lab at Grinnell College, has tutored college students for 26 years. With Jean Ketter, she published two articles: "Student Attitudes toward Grades and Evaluation on Writing," in *Alternatives to Grading Student Writing*, Stephen Tchudi, ed., Urbana IL, NCTE: 1997, and "When Consensus Fails: How Faculty Writing Seminars Limit the Possibility of Multiple Discourses in a College Community," in *Language and Learning Across the Disciplines 2*.2, September, 1997. She received an M.A. in English Education from the University of Iowa in 1997 and has served on the Grinnell-Newburg Board of Education since 1994.

Jean Ketter has worked with student writers for more than 20 years, first as a high school English teacher and currently as a Grinnell College associate professor of education. Her research interests include the socio-political contexts of writing instruction and large-scale writing assessment. She has also conducted research as a co-participant on a long-term teacher-researcher study group focusing on the reading and teaching of multicultural literature in a rural, majority-white middle school setting. She teaches classes in educational history, critical literacy for secondary pre-service teachers, and English and foreign language teaching methods.

Lorelei Lingard, an assistant professor at the University of Toronto, Faculty of Medicine and the Centre for Research in Education, has a background in rhetorical theory and in qualitative research techniques and specializes in health research.

Dana Britt Lundell is director of the Center for Research on Developmental Education and Urban Literacy at the University of Minnesota-Twin Cities (http://www.gen.umn.edu/research/crdeul). She has a Ph.D. in Curriculum and Instruction and is co-editor of the center's monograph series. Her research and publications focus on literacy theory and practice in urban higher education programs.

Paul Prior is an associate professor of English and associate director of the Center for Writing Studies at the University of Illinois, Urbana-Champaign. He has explored sociohistoric approaches to writing, talk, and disciplinarity in a series of situated studies published in articles, chapters, and a book, *Writing/disciplinarity: A sociohistoric account of literate activity in the academy* (Lawrence Erlbaum, 1998). In addition to the drawing studies reported here, his current research also focuses on forms of mediation and interaction in a group revising an on-line art object that combines images, sound, text, and a simple AI program.

Catherine Schryer, an associate professor in the Department of English at the University of Waterloo, specializes in qualitative research studies that focus on genre and is particularly interested in health research.

Graham Smart is an assistant professor in the Department of English at the University of Wisconsin-Milwaukee, where he teaches undergraduate and graduate courses in the Professional and Technical Writing Program. Earlier in his career, he spent 15 years as a writing consultant and trainer at the Bank of Canada, the country's central bank, and five years as an assistant professor in the Rhetoric and Composition Program at Purdue University. His published research has focused primarily on workplace discourse, knowledge-making practices, and situated learning.

Marlee Spafford, an associate professor and the clinic director at the University of Waterloo, School of Optometry, researches aspects of professional gatekeeping, professional socialization, and optomeric education and provided the statistical expertise required by the project.

Clay Spinuzzi is an assistant professor of rhetoric at the University of Texas at Austin, where he teaches graduate and undergraduate courses in professional and civic discourse. His interests include information design, research methodology, activity theory, and genre theory. He is currently finishing a book on research methodology to be published by MIT Press. His website is http://www.cwrl.utexas.edu/~spinuzzi.

Jody Shipka is a Ph.D. candidate in the Department of English and a research assistant in the Center for Writing Studies at the University of Illinois, Urbana-Champaign. She is currently working on a project examining the impact of employing a multimodal/multi-generic, activity-based approach to composing in first-year college writing courses.

Derek Wallace—after brief careers as a poet, an administrator, and an editor in a non-governmental think tank—now lectures in academic and professional writing and interpersonal communication at Victoria University of Wellington in New Zealand. His primary area of research interest is an exploration of the role of writing in the development of public policy, with particular reference to the formation of a "democratic habitus" (in the words of Chantal Mouffe) and a "democratic rhetoric" (Gregory Clark). Work in progress is a study of the ways different polities across time and space orient towards and conceptualize the future. Other details are available at http://www.vuw.ac.nz/lals/staff/Derek_Wallace.html.

Arturo Yañez is associate professor of English as a Foreign Language at Los Andes University in Merida City, Venezuela. He mainly teaches genre-based courses in composition to develop students awareness and competence in multiple literacies. His current research analyzes how Spanish writers compose in English as a foreign language (and in Spanish as a native language) in their disciplines. His interests include research methodology, activity theory, and genre theory.

PERSPECTIVES ON WRITING

Our world increasingly runs on writing-from the grandest treatises of science and literature to the humblest of bureaucratic forms. The study of writing in society can tell us much about the enactment of power and influence in the modern world, as well as about the formation of the collective and individual minds that inhabit this modern world.

The fourteen chapters in this new edited collection, published solely in electronic format, consider human activity and writing from three different perspectives: the role of writing in producing work and the economy; the role of writing in creating, maintaining, and transforming socially located selves and communities; and the role of writing in formal education.

The editors observe: "The activity approaches to understanding writing presented in this volume give us ways to examine more closely how people do the work of the world and form the relations that give rise to the sense of selves and societies through writing, reading, and circulating texts. These essays provide major contributions to both writing research and activity theory as well as to the recently emerged but now robust research tradition that brings the two together."

The collection also launches a new, non-commercial academic publishing venture, to provide-free of charge-important new research on writing. These online books will cross disciplinary boundaries and offer research that commercial academic publishers are increasingly unwilling to support.

To access *Writing Selves/Writing Societies: Research from Activity Perspectives* (html and pdf versions), point your browser to
http://wac.colostate.edu/books/selves_societies/