

## Writing, Religion, and the Complex Spiritual Site of Evolution

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The teachers told us tales of Christian students being persecuted in their colleges for the conservative views they held. We were told that the false theory of evolution would be crammed into our heads in secular colleges.

—Student in Biology 426, Evolution

...being able to admit that I'm not quite so sure to someone was a big step, and then having them look at you like 'you evil sinner, you've gone to the dark side...

- Student in Biology 426, Evolution

Grim as academia can sometimes be, few of us would own up to being in alliance with the "dark side," or confess to having encouraged students to engage in heretical behaviors. But the comments above from students enrolled in a seminar on evolution taught at a small, private religious college suggest that, in fact, there are considerable moral consequences associated with certain disciplinary practices. We know that what students may vaguely refer to as their "values" or their "belief systems" likely contributes to their reluctance to engage in Marxist and feminist critiques of capitalist culture. We know that students sometimes use the word "sin" when confronted with questions about homosexuality and gay rights. But the ways in which students' religious values guide their participation in disciplinary discourse needs further investigation if we are to understand why a student, when enrolled in a course on evolution, would refer to academic practice as "the dark side." Further, what pedagogical practices best help students navigate these difficult sites for composing? What role do instructors play in modeling character and the habits of ethical discursive practice?

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Recent research on spirituality in writing, particularly that which discusses how writers draw from the spiritual during the invention process of writing, has been useful in illuminating this powerful role extra-academic forces play in shaping writers' perceptions about their work. In a CCC's "Interchange" on "Spiritual Sites of Composing," Ann Berthoff suggests that religion can serve as a "binding force" that "offers a powerful antidote to the new positivism, which is called 'antifoundationalism,' a variant of context-free ideology." She proposes that "[S]pirit is a very powerful speculative instrument for this enterprise" (238). In this same forum, Beth Daniell argues that "the dismissal of the spiritual and the religious" is a "troubling" feature of academic work (239). In her own research investigating how six women, all members of Al-Anon, "use literacy in their spiritual lives" (240), she discovered that "spirituality and literacy intertwine in rich and complex ways" (241).

Furthermore, a revived interest in the intersections of rhetoric and religion suggests that there are numerous sites in the history of rhetoric that bear investigation. Grant Boswell and Cheryl Glenn have proposed both specific texts, such as Augustine's *De Doctrina*, as well as historical sites, such as the abolitionist movement of the nineteenth-century, for considerations of how religious rhetoric shapes community. Glenn suggests that we consider "rhetorics that fuse religious conviction with self-consciously persuasive language and social action." She asserts that "Ahead of us are more (not new) rhetorics, each of which illuminates a rhetorical practitioner's ethical-moral-political-spiritual-religious purpose" (33). Certainly Elizabeth Vander Lei's and Keith Miller's careful analysis of Martin Luther King Jr.'s "I Have a Dream" and its participation in a tradition of the African-American jeremiad is an excellent example of how precisely such a historical site illuminates the persuasive dimensions of religion and rhetoric.

Contemporary writing across the curriculum theory must also consider that some students might view the habits of disciplinary inquiry offensive, or even heretical to their religious sensibilities if we are to understand fully how students may successfully negotiate a problematic spiritual site of composing, such as a course on evolution. Critical to this understanding must also be the role of the instructor as mentor and model for students. We know, as Lucy McCarthy has pointed out in early writing across the curriculum research, that "teachers do have a good deal of influence over the nature of

the community." She further explains that "[O]ne of the ways they exercise this influence is through the role they assume and expectations they project as audience" (120). Historically, however, the public university setting has made it difficult for instructors to address explicitly and to meet fully some students' need for spiritual guidance. In a private college context, however, it is possible that not only may this dimension of a student's disciplinary identity be addressed, it may in fact be foregrounded. This essay describes students' process of self-examination and moral self-fashioning in just such a context: a Biology seminar on evolution at a small, private Christian college. In this class, students were expressly charged with the difficult task of confronting the truth of their fundamentalist faith with the scientific truths for Evolution. Students' ability to construct a persuasive ethos in the final paper was the consequence of negotiating that complex spiritual site and finding an ethical position to inhabit. I argue that in this specific context, the process depends first on the instructor's ability to both articulate and model the ethical dimension to disciplinary behavior, and second, on students' perceptions of and trust in the strength of the instructor's Christian character.

The choice to construct or acknowledge an ethical subjectivity in particular ways is certainly a function of disciplinary identity. Richard Rorty refers to the "solidarity of science" as that set of implicit agreements about pragmatic discourse and behavior within a disciplinary community. Writing across the curriculum theory has typically argued that a discipline's coherence is due to these kinds of shared, implicit, and negotiated epistemological assumptions that make themselves manifest in the discourse activity of a discipline. Consequently, early research described the rhetorical choices individual writers made to define a role for themselves within the community. Important early work by Greg Myers (1985), Charles Bazerman (1981) and Michael Halloran (1984) all investigated questions about the writer's ethos or self-representation in scientific discourse to make inferences about the ways written knowledge is both shaped by and shapes a discipline. However this early work, examining as it does examples of professional writing, does not look closely at the role that instructors or mentors play in shaping disciplinary identity.

More recent work has focused on the students' process of self-negotiation as they begin initiation into the disciplinary

classroom. And, in some cases, the ethos or character of the instructor has been acknowledged as a significant shaping factor. For students entering as novices, the disciplinary classroom is the scene of tremendous challenge to their identity. In her ethnographic study of one first year writer as he "traveled" across the curriculum, Lucille McCarthy points out that the experiences of writing and speaking may be so diverse that "the courses may be for the student writer like so many foreign countries" (151). Her examination of Dave's journey from one class to the next is marked by intense re-evaluation of himself as a writer in each setting. In one class, for instance, he learned that "writing is a process that can be talked about, managed, and controlled" (147), while in another he perceived that "he had the right ideas, the teacher just did not like the way he wrote about them" (148). McCarthy's research implies that for Dave, success or failure is contingent on the perceived character of the instructor.

Later work by Berkenkotter, Huckin, and Ackerman (1995) investigated the changing identity and emerging ethos of a writer as he moved from "outside" to "inside" the disciplinary community of composition studies. "Nate's" successful transformation from novice to professional writer resulted from considerable self-reflection and a difficult time of "butting heads" (125) with an academic discourse that seemed to compromise his own foundations for agency and ethical writing. Significantly, in his own reflections on the experience Nate worries about losing his own identity and the prospects for successfully inhabiting alternative discursive positions. In a response to reading he had done for the course, he considers the ways in which his own ethos comes in conflict with the purported ethos of the discipline: "I am a teacher-writerresearcher who has a history of discounting, if not ridiculing universalities...Because of my liberal, literary background, I should rejoice" (125). In a later passage he abdicates his authority to critique entirely, seeing himself still as an outsider: "I am not a social scientist nor a historian or philosopher of science so I cannot asail his criticisms of those disciplines" (126). Nate's final response clearly belies his despair at the consequences of joining a discourse community: "All of this is exciting for me. And troublesome... I don't have the language to capture what is going on... My thoughts and the writing I've used to capture them are shallow...I lost, if you will, my voice — or never had it from the start" (127).

Nate's move from disciplinary outsider to insider depended on his direct examination of how he perceived that his "own" voice or ethos might be compromised if he adopted the voice or ethos of the discipline. That Nate goes on to be successful in his academic projects does not necessarily reflect a betrayal to some primary or truer "voice." However, it does suggest that the transition involved a difficult process of ethical examination, which seemed to present extraordinary challenges to the self and the positions from which Nate had typically assumed authority. Significant also is John Ackerman's "Postscript" to the research based on his writings as "Nate." It is clear from his reflections that as a graduate student he too responded to the character of the instructor:

The exterior qualities of the three papers I wrote mask, to some degree, the ongoing epistemological quest of a student who, like all other students in graduate school, simultaneously tries to satisfy the demands and constraints of each professor and class while at the same time seeks a separate scholarly identity. (147)

And further he writes, "I recall the generative aspect of my graduate school writing as partly the necessary tactics of making do with someone else's conventional practice that at times I admired and other times resisted (as I suspect all student do)" (148). The implication in each of these situations is that Nate/John is acutely aware that success depends on accurately assessing and modeling the conventions of "good" writing as valued by particular instructors. Ackerman is less explicit than Dave about attributing personality as the source for the evaluations of his writing, but nevertheless he recognizes the character of the instructor as one worth emulating or not.

Stephen Fishman and Lucille McCarthy (1995) also recognize that classes are "made up of student 'experts,' people speaking from somewhere, standing for something, and thereby contributing uniquely to the common project" (72). Their articulation of the disciplinary classroom suggests that it is the site of intersection for "gemeinschaft" and "gesellschaft" notions of community. Because these two models of community present conflicting standards for authority and responsibility, constructing a coherent and persuasive disciplinary ethos becomes a complex process of negotiation and self-reflection

about ethical, or ethos-based, commitments to the community. Though the initial atmosphere in Fishman's Introduction to Philosophy class was supportive, accommodating, and vital, there were ultimately conflicts and problems because students misunderstood how responsibility and authority were being constructed in the classroom. Ultimately though, they observed "as students developed their classroom roles, their differences were positioned and valued as if they were vital parts of an organism working toward a common goal" (79). The recognition of a "common goal," a common good, indicates that there emerged, finally, an ethical position all students in the classroom felt comfortable inhabiting.

The disciplinary classroom may also present conflicting articulations of ethos when the discipline itself is in explicit flux. Jim Henry, in his narratological analysis of writing in a landscape architecture class uses Foucault's concept of a "discursive scene, a site in which discourse groups emerge, converge, and diverge" (813) to describe the ways competing discursive agendas emerge in this class. He discovered that students struggled with the conflicting models of ethos that emerged in this complex and conflicted disciplinary site. Henry remarks that while landscape architecture as a discipline did have a history and tradition in design, the instructor was particularly concerned to "elaborate an emerging theoretical tradition in landscape architecture, an endeavor that would raise the discipline's status" (813-4). Particularly difficult was the students' goal of reconciling the goals of a personal, expressivist rhetoric with the demands of a theoretically rigorous discourse. His analysis of the students' writing revealed that "nearly *all* students had difficulty meeting the scene's mandate to embrace the personal as both theoretically valid and discursively valid" (817). He concludes that:

Clearly some [of the difficulty] stems from the approach for appropriate articulation in this interdisciplinary scene. Some difficulty derives as well from the positions students were attempting to construct amid the philosophically clashing views of designer as visionary and designer as advocate. (817)

One student, Sherry, who was able to successfully negotiate a discursive position, does so because she recognizes the fundamental "discourse of ethics" (821) that characterizes the discourse model her instructor ultimately privileges.

Henry hints at the notion that a writer's sense of ethics and the choices about self-representation in a text contribute substantially to the ability to create persuasive disciplinary discourse. I propose that disciplinary success, this kind of movement from "outsider" to "insider" status may rely initially on critical reflection about ethics and the particular "good" to which one aspires. Rather than simple facility with discourse conventions, students' ability to write persuasive disciplinary discourse hinges on their ability to experience fundamental changes in their ethical orientation. Nate, Sherry, Dave, and the students in Stephen Fishman's philosophy class all confronted substantial ethical challenges in their choices to adopt or negotiate the habits of disciplinary discourse. These arguments all suggest that thinking like a scientist or a philosopher or an architect depends on, initially, understanding and consciously identifying with the sense of self and inquiry that disciplinary paradigms necessarily construct for individuals. This research also suggests that the character of the instructor plays an important role in students' processes of constructing a disciplinary ethos. Writing across the curriculum theory must include methods for articulating this ethical dimension to disciplinary identity, including a rich understanding of how students' perceptions about their own ethical action and moral consequences come in contact with those of their chosen discipline.

The later work of Michel Foucault is primarily concerned with this problem of articulating and constructing ethical subjectivity and moral identity, and in his late work, "On the Genealogy of Ethics: An Overview of a Work in Progress," he outlines a broad process for describing ethical subjectivity. Foucault suggests that individuals constitute themselves as "moral beings" by aligning themselves along four culturally determined "axes of ethics." In this framework, ethics is a process, a continual mode of self-definition and improvement that is grounded in the culture and the individual's position in it. We see certain kinds of writing and behavior as ethical or not according to a culture's "axes" of ethics<sup>1</sup>. The moral person is thus distinguished by his adherence to or deviance from these axes. Fundamentally, we are presented with the question of teleologie, "the kind of being to which we aspire when we behave in a moral way" ("Genealogy" 353-5). In the case of the evolution class under discussion in this essay students must ask themselves: "How finally, do we act on and respond to the knowledge about creation?"

In a disciplinary community, if we consider Rorty's notion of solidarity, we would expect clear delineation of these axes by examining the practices and ends exercised by, for instance, scientists. However, in a culture or a site of writing where there are either conflicting or no clear ethical axes, and so it is unclear what constitutes "right" action or even what the "highest" good might be, we might infer that students would have difficulty negotiating an ethical position from which to speak. They consequently would have difficulty establishing coherent ethical communication. Thus, it becomes crucial that ethical subjectivity is either modeled or made explicit in discourse practices if students are expected to reflect critically on their ethical commitments and make informed choices about rhetorical conventions. The Biology course on evolution that I wish to discuss presents exactly this kind of conflicted scene. In the context of a religious school, if there is not a clear model of how to be both religious and scientific, to put it broadly, students will not be able to write ethically sound, and consequently persuasive, papers. An instructor who is able to model successfully this process can better guide students through a process of moral self-examination that may strengthen their ethical commitment to disciplinary practice.

Students enrolled in Biology 426, Evolution, immediately find themselves in a disciplinary Scylla and Charibdis. It is a course that seems to pit science against religion with no easy passage. The course also has a complicated and politically charged history at Religious University because the official position of the governing church body states that we are to understand Creation as it is described, literally, in the Genesis account. To go so far as to teach evolution as a valid scientific theory with explanatory power would, and in fact has, amounted to charges of heresy for the instructor. For most students, success in this course meant confronting their fundamentalist beliefs in a literal interpretation of Genesis with the body of scientific evidence that points to an evolutionary interpretation of life and natural phenomena. The course is rigorously scientific, consistent with Dr. K's own position on evolution. It is not, according to him a case of "fence walking," that is, never giving students enough information about either explanation of origins to allow them to examine critically what they believe. Importantly as well, is Dr. K's own commitment to Christian education. As a longtime member of the faculty, past chair of Biology and now Dean of the College of Arts and Sciences<sup>2</sup>, Dr. K wields considerable authority not only within the school, but also among students whom he has personally mentored and for whom he has provided a model of academic integrity and Christian character. An active participant in the faith life of the campus as well as an academic leader, Dr. K's role on this small campus is significant and well established. Students who enter his class eagerly anticipate the controversy and challenge of his courses.

Consequently, for many students engaging in the rhetoric of their discipline involved a serious examination of the moral consequences for the rhetorical choices they made. Simply choosing a paper topic and writing a thesis statement became substantial commitments to an ethical position on this subject. Further, because science and fundamentalist religion have fundamentally different paradigms for establishing authority, establishing coherence in the paper became very difficult. Students who tried to apply scientific processes of induction and logic to the kerygmatic appeal of the gospel message became increasingly frustrated. Likewise, the otherwise fully scientific paper became disjointed when a "Sunday school lesson" suddenly was tacked onto the end in an attempt to add a "moral" dimension to the paper. An examination of the teleologie at work in the students' and the professor's own writing suggests, however, that there was an ethical position to be constructed that required compromising neither scientific rigor nor faith-based interpretations of Creation. Students who could inhabit this position were able not only to argue effectively the case for evolution but also they were able to assess critically their own beliefs. That emerging position, though not fully articulated in the class along Foucault's genealogical axes, was one of Christian reverence and humility, "a way of being" (teleologie) that resonated with Darwin's own rhetoric and the emerging ethos in the *Origins* of Species.3

This ethical position emerged most clearly in the syllabus and in the draft of the textbook Professor K. was writing on evolution and which he used as the primary text for the semester. The course goals that students received in the syllabus stated that they would "treat others with respect when stating their own positions about the origins of life," and "develop humility in stating their own position with regard to the origin of life." Students read drafts of the successive chapters as Professor K. completed them. The original goal was that students would provide useful responses about the direc-

tion of the work and that the class might engage in a vital, working dialogue about the question of origins. The emerging ethos in the draft of his textbook<sup>4</sup> also suggested that the best student of evolution approached the question of origins with humility and reverence. Students who could construct an ethical position in their writing that showed solidarity with Professor K.'s "theology of humility," as outlined in his class materials, were able to establish coherence in their papers and were able to assess critically their own belief systems.

In Chapter One, "The Search for Origins," Professor K. introduces the work that needs to be done in examining the scientific and faith-based arguments for the origins of life. In his summary of the moderate and fundamentalist Christian positions on creation he introduces the idea of human imperfection, and hence the need for humility. Professor K. suggests that the cardinal sin of fundamentalists is not bad science, but rather, hubris, which distorts the process of inquiry. He writes:

For more moderate Christian denominations, the need to be correct in interpretation is ameliorated by the need to share the love of God with others. It is to these groups understandable that difference should appear in interpretation of Scripture since we are all a part of imperfect humanity. To imagine we, as imperfect creatures, could actually understand God's writing perfectly is, to the moderate, the height of hubris.

For the fundamentalist groups, on the other hand, the need to be right is of paramount importance. Their view is that they are the defenders of the truth against the onslaughts of the devil as incarnated in the remainder of humanity. Truth is seen as an absolute value that they, and they alone, have received by divine revelation. Therefore, any attack on this absolute truth is totally unacceptable and reprehensible. The truth is to be defended at all costs.

In Chapter Two, titled "Types of Explanation" Professor K. traces in more detail the history of the evolving scientific and religious explanations and concludes explicitly with a call for a "theology of humility" as he adopts it from Sir John

Templeton's remarks on the reconciliation of science and religion:

The 'new story' should be written reverently and flexibly... It must be a humility theology that provides a true perspective on the infinity of God [provided by science] and causes us to 'kneel down in humility and worship the awesome, infinite, omniscient, eternal Creator.'

Prof. K comments, "The idea of a theology of humility coupled to a science imbued with humility, offers the best hope for progress in bringing these two polar ways of understanding the universe in closer proximity to each other as they seek the truth."

In the closing paragraph of Chapter Two he offers a series of rhetorical questions aimed at a process for reconciling the aims of science and religion and concludes the chapter stating: "A humble approach by all parties to the discussion will at least allow the discussion to continue. Perhaps this is the best approach to the truth." In Chapter Six, following a discussion of extinctions, our stewardship of the environment, and the question of an evolutionary model he writes:

In the long run the result may not just mean the end of many different species that are of great intrinsic as well as extrinsic value to the world, it may, in fact call into question the ability of humans to survive as well, at least in the form in which we now find ourselves. And while the debate on this issue is far from over, does it not make sense to approach the question with great humility? Should we not strive to limit our impact on the world about us?

He closes the chapter, shortly after this paragraph, with the final sentence of Darwin's *Origin of Species*, which is thoroughly reverent:

There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into new forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved. (Darwin 131)

His use of Darwin at this point is critical in beginning to identify a position of humility and reverence in the context of the scientific discussion. Whether Prof. K's theology (or Darwin's for that matter) is or is not independently useful is not under discussion at this point. Rather, all this is offered as evidence of how Prof. K constructs an ethical position, a teleologie, in the emerging conversation about evolution in his classroom. This emerging "theology of humility" would somehow reconcile the process of science with faith in divine revelation and provide a discursive position from which students could articulate their ethical commitments to both science and religion. Broadly, the teleologie of this theology of humility suggests that ethical Christians are guided by their love for God and desire to be perfected through that love. It is because they love God and want to seek the truth that they seek honest answers to these questions. Because they do not presume that they can understand God's word, they are obliged to continue the journey through science, also understood as part of God's work in our world. In word, manner, and deed, students are to be humble and reverent, whether in their application of scientific logic or in their prayerful assertions of faith. "Salvation" of the religious and scientific soul comes through this new process of humility. The persuasive paper, one that is finally ethical, and as a result coherent, will demonstrate these same characteristics.

The students' own primary writing project was a final paper on a question about evolution of their own choosing. The assignment did not preclude discussing questions within the scientific community about the nature of evolution. One student, for instance, did choose to evaluate the bird versus reptile debate about the origins of the dinosaurs. However most chose to pit creation science directly against evolutionary science on a question of some substantial breadth, such as the "missing link" or plate tectonics versus "catastrophism" (the theory of a Great Flood). The papers were only moderately successful as either strictly scientific evaluations of a debate or as inspired responses to the question of faith and evolution. Most students had attempted to investigate a question far beyond the scope of an 8-10 page undergraduate research paper and so drowned in the complexity of the issue.

Most, too, seemed to not really manifest any apparent or emerging scientific ethos, though this was not strictly mandated by the assignment or the value-based context for the course. For some students, any new articulation of their fundamental sense of teleologie, specifically any interpretation of Genesis other than a literal one, compromised one's chances for Christian salvation. The two papers I will discuss represented clear choices about ethical commitments to a position on the question of origins. In the first, "A" was unable to inhabit any new position offered by the conversation, implying instead that there was no ethical position that subsumed the teleologie of both science and religion. The paper was technically competent, but it was finally incoherent as it contained multiple self-contradictions. The second, though a strange hybrid of personal narrative and objective analysis, was finally coherent and persuasive because the writer was able to inhabit the position of humility and reverence offered in the context of the course.

A's paper was a discussion of the commonality of creation stories across cultures as proof of a one-time, divine act. Her approach to the topic suggested that she interpreted the assignment to be a reconciliation of science and religion, a fundamentally ethical project that presupposed a compromise of her own religious position. Her arguments about the possibility and value of doing this imply a commitment to a tradition of Christian rhetoric that relies on three features, according to George Kennedy: "grace, authority, and the message "proclaimed" to mankind" (129). Kennedy writes, "Christian preaching is not persuasion, but proclamation, and is based on authority and grace, not on proof" (127). He asserts that the truth of the message "must be apprehended by the listener, not proved by the speaker." He continues, "The reaction of a person in the audience to the kerygma is like his reaction to a miracle, the direct evidence of authority: he believes or he does not" (Kennedy 127).

A's discussion suggested that religious "proof" of divine creation rests on exactly this appeal to faith, and scientific logic is irrelevant to the discussion. In the space of a page, following comparisons between stories of creations found in different cultures (as proof there must be historical truth to the Genesis account) she makes numerous statements that indicate science and religion are mutually exclusive enterprises. For instance, in order to explain the common images of dust and mud as the material of creation she states: "It is

poetic, as well, and symbolic of death, which could be why the image is employed. Of course, there is no scientific stand that can be taken on that issue." Of the various differences in the stories of a single, one-time creation, she states: "That does not need to be expanded." She begins a paragraph later, stating: "As for scientific evidence to prove Genesis, little exists. Science cannot explain religion." Finally, in the concluding paragraph she writes:

In conclusion, there is no way to prove or disprove a religion because it is based on believing things on faith; however, I feel that the diverse creation stories and the dates of origin of the stories do not diminish the validity of the Genesis story, and though I cannot explain away any doubts others or myself may have about its truth, I can still believe the Bible without ignoring science.

Professor K. notes at the end of the paper that this last sentence is an "important confession." His use of the term confession suggests this mode of discourse, the confession, is likely an important part of the emerging theology of humility.

However, in a later interview, A's responses to his comments point to a relatively unchanged conception of religious authority and scientific proof. She states: "When I was writing it, he kept telling me I needed proof with science, which I thought was impossible; it's impossible to prove religion with science." And additionally she remarks: "I didn't really change my views on it. I got more information on it, and I had already decided — I've come to conclusions about how creation works, about how it works for me." Not surprisingly, her comments finally turned toward the ethos of the instructor: "I thought he was kind of rude. I'd already talked to him about this stuff; he seemed okay with it. … I didn't think he'd analyze it so much." Finally, a retreat to take his comments personally:

I thought I'd finished off the question and he seemed to think I'd just started the process – and that wasn't giving me enough credit for already doing it. [It seemed like he was] making some comment 'at me', and I didn't think that showed in my paper – maybe that's just what he thought about me.

A was unable to inhabit the position offered in the course as an ethical position on the questions of origins and modeled by the instructor as part of his emerging "theology of humility." She maintained, even entrenched, in her own position about the irrelevance of "scientific proof" on questions of divine revelation. She had "come to conclusions about how creation works, about how it works for me." The result was a paper that existed in rhetorical limbo, alternately an appeal to the necessity of just believing what the Bible says without questioning it, and a semi-critical comparison of parallel accounts of creation. Though her responses seem to indicate that she understands what Professor K. wants in her dialogue about this question, she does not seem to have any useful process for getting there.

A second student, "H", though she came from a religious orientation to the question of origins similar to A, was able to construct able to construct a position from which to speak that did not fundamentally compromise her own "teleological" commitment. She chose to adopt the ethos of Christian humility and the rhetoric of questioning, discovery, and personal testimony of faith. Rhetorically, the paper suggests a "journey;" the writer is on a path of humble self-discovery. It opens with a testimonial that works in an unexpected way to establish coherence in the paper and to meet the goals of the course and the paper. The testimonial also may resonate in comforting ways with a rhetoric of personal salvation that characterizes fundamentalist belief. She begins:

As a student in a Christian high school I was always taught that Creationism was truth. I never thought to question this because the Bible "proved" it. The teachers told us tales of Christian students being persecuted in their colleges for the conservative views they held. We were told that the false theory of evolution would be crammed into our heads in secular colleges.... At first we were offended at the audacity of the professor for even mentioning that evolution could have happened. However, I began to think that some of the tenets of evolution made sense....As I sat through more science classes, the evidences for evolution began to make more sense. A problem remained for me, however. Could I ever reconcile scientific fact with my religious beliefs?

H then states that her purpose in the paper will be to examine the case for continental drift by comparing the evidence provided by the theory of plate tectonics with the evidence provided by "geologic catastrophism," the theory that a Great Flood is responsible for most geological phenomena. She concludes in her introduction: "It is the purpose of this paper to explore which theory better scientifically explains the Earth's make-up today." This statement of purpose seems possible only after a long – in proportion to the rest of the paper – discussion of her personal involvement with the topic and her ethical stake in its resolution. The body of the paper unfolds as a dialogue between the scientific evidence for plate tectonics and the work of a creation scientist she located through a web page whose project she reports as being "to reconcile the most literal reading of Scripture with the most advanced science in existence." She also reviews, briefly, the main tenets of several other creationist justifications of a Great Flood. Her conclusion to this section is interesting, as she directly addresses these creationist authors in the form of rhetorical questions, thereby demonstrating a newly gained sense of empowerment in scientific inquiry. She poses first a series of scientific questions, echoing the rhetorical strategy her instructor often relied on in the closing arguments of his chapters. She writes:

How can you explain the organization of the fossils? Wouldn't the Flood have randomly dispersed the animals? How can you account for organized layers of fossils with the oldest strata containing the simplest to the newest strata containing more complex organisms?

Her conclusions come back to the confession mode that is part of the testimony of her journey. She writes:

I must admit that it has been difficult form me to wrestle with the issues I encountered through my research. I would *like* for there to have been a Genesis Flood. This would better fit my paradigm. However I did not write this paper to be a reflection of my ideas. I wrote this paper so that I may scientifically explore the proofs for the theory of plate tectonics and those for the Genesis Flood.

Through the course of my research, I came upon many more scientific proofs for the theory of plate tectonics than I did for geologic catastrophism. Therefore, it is my belief that in light of scientific evidence, the theory of plate tectonics is better supported. This can be seen in the fossil record, glacial structures, magnetic crystals in the sea floor, and the various rock formations of the continents. This theory does not "struggle" to explain itself. It is all encompassing. Therefore, I support the theory of plate tectonics.

The final paragraph seems excessive, except as further testimony, articulated only for the sake of the writer, to a commitment to this stand on behalf of science. It implies, with her re-emphasis on how from a *scientific* standpoint plate tectonics makes more sense, that her faith is still intact. And in fact, while discussing her work on that paper and in that class she stated the following semester: "It's more important for me to hold to my religious beliefs; that's what I'm shaping my beliefs to and I'd rather be right in that aspect than wrong."

H's paper is the scene of enormous conflict, not all of it effectively negotiated, but a pedagogical success nonetheless because she was able to reflect critically on her beliefs, perhaps the only common goal across the curriculum. And so, arguably, the goals of the course are accomplished. By inhabiting this position of Christian humility she was able to effectively begin synthesizing the opposed "teleologies" of science and religion into a personally coherent, if not always intellectually persuasive, statement about the roles of divine and natural processes in the formation of the Earth's geology. She could still be a good Christian and not necessarily believe in a literal interpretation of Genesis.

Why was H able to inhabit this position and thereby successfully engage in a dialogue about the question of origins and write an effective, coherent paper, while A was not? H was not the only student who was able to examine critically her own religious beliefs. In fact, a review of informal pre- and post-test attitude surveys of students' beliefs about the questions of origins suggested that most students who started from a position of fundamentalist belief in biblical inerrancy moved to belief in the validity of a theory of evolution as responsible for the origin and shape of life. Though not all of them wrote papers that successfully communicated this move, it was clear

that there was critical reflection taking place in many of these spiritual sites for composing. Arguably, some students perhaps did critically reassess their beliefs just on the basis of the scientific information. But researchers in WAC such as Ann Herrington have also documented that "teachers do have a good deal of influence over the nature of the community.... One of the ways they exercise this influence is through the role they assume and expectations they project as audience" (120). Lucy McCarthy concurs that the role of the student in relation to the teachers is "a particularly important role relationship in any classroom because it tacitly shapes the writeraudience relation that students use as they attempt to communicate appropriately" (147).

I think it is fair to assume that Prof. K's own persona in and out of the classroom was in no small part responsible for student's "conversions." In the small college environment where many of the class members had studied with and been mentored both personally and professionally by Professor K., it is likely that strong bonds of trust and mutual good will developed. Professor K.'s concluding comments on their papers suggest that this mentoring role may also depend on "pastoral power" as described by Foucault, and so resonated with students' own experiences with intellectual and spiritual authority. This "pastoral power" is distinct from previous paradigms of "royal power" as a "form of power which does not look after just the whole community, but each individual in particular, during his entire life" ("Afterword" 214). Foucault argues that this power is "salvation oriented" and assumes that individuals cannot exercise this power "without knowing the insides of people's minds, without exploring their souls" ("Afterword" 214). This may seem an unusual and extreme position to assume as teacher, but in this particular classroom it seems to be the key to establishing trust and providing models for ethical discourse in this path of inquiry. Professor K's closing comments are particularly revealing in this aspect. He writes, in part, on A's paper: "Have a little more patience with those who disagree with you. And use the great brain God has given you. Don't be afraid....'Perfect love casts out fear'." And on H's paper he concludes, "I hope I have not diminished your confidence in the love of God for you but rather helped you see that God must be placed above the petty arguments we humans think we must make." There are certainly echoes of the emerging "theology of humility" he has modeled in the draft of his textbook, and with these words he clearly demonstrates an ethos of Christian love and protection for his students. While these kinds of comments may seem entirely at odds with much academic conversation, they are crucial in modeling the *teleologie* that will serve these students best in their path of inquiry.

I believe H's and other students' critical reflections on the question of origins were possible because Professor K offered a way to construct an ethical position, thereby demonstrating awareness of the moral consequences that accompany rhetorical choices. A and H both knew very clearly that to give up their position on a literal interpretation of the Genesis account of Creation would be to lose hope for salvation through Christ. This is no small consequence. And in fact, on a post-test attitude assessment H responded that she did believe that a great flood as described in Genesis was responsible for most of the geologic phenomena we see today. Without the habits of discourse provided by the context of the classroom environment and beyond her discursive analysis of the evidence, she is able to inhabit the scientific position less certainly. The position of Christian humility that the instructor offered provided a way for one student to speak persuasively and compromise neither her faith nor her commitment to the process of science. Christian humility as a teleologie may or may not be useful to her ultimately as a scientist, but it allowed her to be successfully engage in this first, fruitful dialogue in the conflicted disciplinary site of evolution inquiry.

The thought that there are moral consequences involved with disciplinary choices across the curriculum may not always be obvious, but a course like Biology 426, Evolution clearly foregrounds the struggle. I have suggested that we begin to examine the moral self-fashioning students exercise as they negotiate subjectivity within the disciplines and that we model and make explicit the process of ethical subjectivity. We might propose that it is precisely a concern for moral consequences that keeps students in first year composition classes entrenched in their positions on homosexuality, civil rights, abortion, gun control, criminal justice, no-smoking laws, affirmative action and every other topic that somehow touches the question of morality. Deeply held beliefs about moral consequence in disciplinary communities may also be responsible for willingness and readiness to trust and therefore join in discourse. Instructors like Dr. K. who are able to model and make explicit this process of moral self-fashioning provide their students with discursive habits that will allow them successful and safe passage into new disciplinary homes.

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- <sup>1</sup>These axes are: the *substance ethique*, or the part of ourselves that is relevant for ethical judgment; the *mode d'assujettissement*, or "the way in which people are invited or incited to recognize their moral obligations" the *pratique de soi*, or "the means by which we can change ourselves to become ethical subjects;" and *teleologie*, "the kind of being to which we aspire when we behave in a moral way" ("Genealogy"353-5).
- <sup>2</sup> At the time of this research, Dr. K occupied the position of Dean of the College of Arts and Sciences. Administrative changes in the structure of the school, primarily a consolidation of the College of Theological Studies with CAS have resulted in his being now Dean of the College or Theology, Arts, and Sciences, a strong commendation of his Christian character.
- $^3$  I would also propose that though he moves much farther than Darwin from the acknowledgement of a divine

Creator, it is this sense of reverence and even humility in the face of a force greater than ourselves that has made the work of Stephen Jay Gould so appealing to a lay audience.

<sup>4</sup> The primary text for this class was a textbook in progress Dr. K was developing for potential publication. The purpose of the text was to offer students a comprehensive introduction to the basics of the theory of evolution while providing a context for Christian dialogue about the question of "Origins." While the text provided substantial documentation for the classroom context, it was not subsequently developed for publication and does not exist as a formal manuscript at this time.

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