Reading as Transformation

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Over the past decade, educators have increasingly stressed the importance of providing students with transformative learning experiences. In order to advance a complex notion of the transformative learning that occurs within disciplinary and professional communities, one particular group of educators has built a theory called threshold concept theory. When educators view college reading from the perspective of threshold concept theory as well as from the perspective of the rhetoric and writing studies discipline, educators see reading as transformation. Indeed, interview data collected as part of an empirical study of 75 learners demonstrates that students, likewise, consider reading to be a transformative experience—that is, a receptive, relational, and recursive experience.

Reading and Transformation

In December 2014, the *New York Times* published an op-ed that summarized findings from three research studies, all of which were led by the op-ed's co-authors and each of which examined the experiences of readers reading texts. The research designs of these studies distinguished between readers reading works of fiction and readers reading works of nonfiction (Djikic, Oatley, Zoeterman & Peterson, 2009; Djikic, Oatley & Carland, 2012; Djikic & Oatley, 2014). As such, these studies prove germane to discussions about the Common Core State Standards and their emphasis on the reading of nonfiction and informational texts ("Common Core," 2015). The op-ed, however, failed to mention these standards and it largely avoided assessing the merits of reading one type of text over the other. Instead, the op-ed offered its strongest claim when its co-authors—psychologists Keith Oatley and Maja Djikic—discussed the experience of reading and its psychological effects. Noting that "the idea of communication that has effects of a nonpersuasive yet transformative kind has rarely been considered in psychology," Oatley and Djikic express hope that their "studies encourage others to investigate further this important kind of influence" (2014). In short, Oatley and Djikic's op-ed sought to encourage future research on the experience of reading and reading's transformative effects. This purpose is, not surprisingly, best captured in the title of the op-ed: "How Reading Transforms Us."

Just as it was the focus of Oatley and Djikic's op-ed, the notion that reading

is, in its effects, a transformative experience is the focus of this chapter. And while the transformative effects of reading are, according to Oatley and Djikic, rarely considered in psychology, the transformative effects of reading have received a fair amount of attention from individuals in other disciplines, rhetoric and writing studies among them. Examples of rhetoric and writing studies research that consider the transformative effects of reading can be found in the work of Barbara Couture (1998), Marcel Cornis-Pope and Ann Woodlief (2002), and Mary Lou Odom (2013), as well as in my own work (Gogan, 2013).

In *Toward a Phenomenological Rhetoric: Writing, Profession, and Altruism*, Couture observes that reading is often understood as an experience that involves resistance (1998). According to this understanding, "[m]eaningful interpretation results only when readers resist and thus appropriate the alienating contours of the text, transforming them to match their own self-image" (Couture, 1998, p. 40). Although Couture's larger goal is to refigure the experiences of reading, writing, and rhetoric in a way that moves beyond resistance, Couture's point remains that reading is predominantly understood as a transformation involving self and text.

Similarly, Cornis-Pope and Woodlief's discussion of reading, rereading, and the hypertextual affordances of digital technology in "The Rereading/Rewriting Process: Theory and Collaborative, On-line Pedagogy" frames an ideal kind of reading as transformative: "Ideally, the reader should pursue an uninterrupted interpretative process, with an active, transformative rereading already implied in first reading" (2002, p. 155). Understood in the context of Cornis-Pope and Woodlief's argument, the implication is that the transformative effects of reading are not a given; rather, transformation often follows much rereading and is often encouraged by sound pedagogical approaches.

More recently, Odom's 2013 study of the way in which writing across the curriculum methods might be used to redress reading-related problems suggests that, when readers personally engage texts, readers can "transform that initial engagement on the level of feeling to higher order processes such as analysis or focused research" (2013). Odom thus intimates that the relationship between self and text—the same relationship that defines reading in the theories explored by Couture as well as Cornis-Pope and Woodlief—might well constitute a transformative experience that enables readers to complete more complex cognitive tasks.

Likewise, I have emphasized the transformative effects of reading, defining reading as "a dynamic mode of reception that transforms student learning and learners" (Gogan, 2013). In "Reading at the Threshold," I argue that this definition of reading possesses the potential to initiate and sustain cross-disciplinary conversations about reading. My argument—that one common, cross-disciplinary definition of reading might be productive for readers, teachers, and researchers—builds upon Mariolina Salvatori and Patricia Donahue's view that multiple definitions of reading spread across different disciplines can be productive (2013, p. 200). To

support my argument, I conducted a three-part, mixed-methods empirical research study of 75 learners enrolled across four sections of a writing-intensive course, and I analyzed the study's data using threshold concept theory—a theory that understands particular concepts as transformative to learning within disciplines and professions. While my study revealed that students associated reading with transformative effects, the study focused on the importance of reading to students as they developed an awareness of genre and, subsequently, left the concept of transformation underdeveloped. This study begs for a rejoinder, a follow-up that probes the implications of viewing reading as transformation by asking: How can educators understand reading as transformation?

In the remainder of this chapter, I offer such a rejoinder by revisiting my earlier study with the goal of more acutely focusing on the transformative effects of reading. In particular, my reevaluation of the study examines the transformative effects of reading by: (1) rereading threshold concept theory to more fully delineate its treatment of transformation; (2) synthesizing work on reading, transformation, and threshold concept theory to better identify the characteristics of reading that make reading a transformative activity; and, (3) reassessing data from my initial study to illustrate students' understandings of reading as transformation. Ultimately, I demonstrate that the receptive, relational, and recursive characteristics of reading activity position reading as transformation.

Threshold Concept Theory and Transformation

Developing a deeper understanding of the concept of transformation and of the way that the college students who were interviewed as part of my study associated reading with transformative effects begins with a reexamination of threshold concept theory. Threshold concept theory was first articulated by Jan Meyer and Ray Land in a 2003 occasional report entitled "Threshold Concepts and Troublesome Knowledge: Linkages to Ways of Thinking and Practising within the Disciplines." The report—which has subsequently spawned over 1100 publications and presentations by academics across the globe (University, 2015)—coins the term *threshold concepts* to denote concepts that are located within disciplines and that are transformative to students' learning (Meyer & Land, 2003). In this initial report, Meyer and Land explain that threshold concepts are requisite for disciplinary progress, in that these concepts mark "a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress" (2003, p. 1). Indeed, Meyer and Land enumerate five defining characteristics of threshold concepts, arguing that threshold concepts are:

- Transformative, in that learning a threshold concept effects an epistemo-

logical, ontological, or ideological shift in learners
- Irreversible, in that the effects of learning a threshold concept cannot be undone
- Integrative, in that a threshold concept exposes hidden interrelatedness
- Bounded, in that a threshold concept marks disciplinary territory
- Troublesome, in that a threshold concept poses difficulty for learners

Of the characteristics that Meyer and Land initially associate with threshold concepts, the first characteristic, which positions threshold concepts as transformative, constitutes the most central characteristic. Meyer and Land focus on identifying, defining, and exploring the transformations that occur in learners as a result of learning a threshold concept. Put differently, their initial report and the impressive amount of research subsequent to it follows from the idea that learning can, indeed, be transformative.

Arguably, the emphasis that Meyer and Land's threshold concept theory places on transformation has grown in strength since the publication of their 2003 report. Meyer and Land frequently employ the nominalization "transformation" as a synonym for the learning associated with threshold concepts. For example, the co-authors state that the purpose of their 2010 collection *Threshold Concepts and Transformational Learning* is to address "the nature and process of this transformation," where "this transformation" refers to learning (Land, Meyer, & Baillie, 2010, p. xii). Thus, the transformations effected by threshold concepts seem to overshadow the other four defining characteristics of threshold concepts—so much so, that it might be more accurate to describe the four other characteristics as modifying transformation, where transformative learning is understood as irreversible, integrative, bounded, and troublesome.

Further emphasizing transformation, threshold concept theory has identified three broad categories of transformations that are associated with learning a threshold concept: (1) epistemological transformations, which affect learners' knowledge; (2) ontological transformations, which affect learners' self-perceptions; and (3) ideological transformations, which affect learners' perspectives and worldviews (cf. O'Brien, 2008, pp. 292–293). These three categories are regularly viewed by threshold concept researchers as impacting a learner's relationship with a particular disciplinary community or a professional society. Thus, the transformations in knowledge, self-perception, or worldview that occur in conjunction with learning a threshold concept are bounded by a singular field of study. These transformations are, according to Meyer and Land, manifested in a learner's thought as well as identity (2006, p. 21). Meyer and Land explain that, when an individual comes to an understanding of a threshold concept bounded by a particular community, that individual "acquires new knowledge and subsequently a new status and identity within the community" (2006, p. 23). Prior to learning a threshold concept, the

learner is divided from, or uninitiated in, the knowledge, perspectives, or self-awareness that marks the community. Yet, after learning a threshold concept, the learner proves capable of sharing in thought or identity with a disciplinary community or professional society. The learner's thought or identity, therefore, shifts—or, is transformed—in accordance with a change in epistemology, ontology, or ideology.

Regardless of the kind of transformation, the shift in a learner's thought or identity is described by threshold concept researchers as a recursive and oscillatory process. This oscillatory process is aptly captured by Meyer and Land, who use the Latin word for "threshold" (*limen*) to connote a "suspended state" of learning that leaves the learner hovering at or around the threshold, without yet undergoing transformation (Meyer & Land, 2003; Land, Meyer & Smith, 2008, pp. x-xi). Ultimately, Meyer, Land, and other threshold concept researchers recognize that the "process of transformation, and hence movement within these liminal spaces is not unidirectional, yet may 'involve oscillation between stages, often with temporary regression to earlier status'" (Timmermans, 2010, p. 11). Transformation is, therefore, neither a resolutely linear process nor a swift process, especially when transformation involves a learner's regression, oscillation, or suspension in a liminal state.

Yet, in order for a learner to move beyond a liminal state and garner the effects of transformation, a learner's relationship to a disciplinary community or professional society is thought, again, to be crucial: The learner must identify with—that is, share in thought or identity with—a particular community (Meyer & Land, 2006, pp. 23−24). Transformation is, in other words, facilitated by the individual learner's relationship with an established community that is united in epistemology, ontology, or ideology. Threshold concept researchers, including Julie A. Timmermans (2010, p. 13), note that establishing these relationships necessitates both acquisition and loss. Although the learner of a threshold concept gains new thoughts and new identity markers through the learning of a threshold concept, the learner loses an old component of identity or thought not associated with that threshold concept. Accordingly, transformation seems dependent upon the learner's acquisition of thoughts and identity markers that jibe with the community and the learner's simultaneous loss of thoughts and identity markers that clash with the community.

In sum, threshold concept theory advances a complex notion of the transformation that accompanies the learning of threshold concepts across disciplines and professions. The theory holds that transformation occurs in conjunction with a learner's thought, with a learner's identity, and always in relation to a community. The theory also holds that three major kinds of transformations—epistemological, ontological, and ideological—can occur as a result of a learner learning a threshold concept. Transformation, irrespective of the type, is further described as a nonlinear process, in which a learner's thought and identity might come to occupy a liminal state, oscillating somewhere in between acquisition and loss.

Transformation Unbound

Reading enjoys a unique position with respect to the epistemological, ontological, and ideological transformations that are characteristic of learning threshold concepts. As I have argued (Gogan, 2013), reading is crucially important to learning across disciplines—so much, so that reading might be said to be positioned before, at, around, and after the metaphorical threshold invoked by threshold concept researchers. Key to reading's importance is its ubiquity: reading, much like writing, is an activity that extends beyond disciplinary boundaries and informs transformative learning in most, if not all, disciplinary fields and professional associations. Put differently, reading can be viewed as transformation unbound—that is, a kind of activity that leads to transformative effects irrespective of a particular community. When understandings of transformation, as articulated in threshold concept theory, are separated from particular disciplinary contexts and synthesized with understandings of reading and transformation, three characteristics emerge as central to an understanding of reading as transformation. Reading can be understood as bringing about transformative effects in epistemology, ontology, and ideology, because reading is a:

1. Receptive Activity: Reading effects transformation by allowing readers to engage, interpret, and respond to texts. Most fundamentally, reading is understood as mode of reception. According to overly simplistic schemes, reading serves as the rhetorical counterpart to writing. Writers produce texts, while readers receive texts. Reading must, however, be understood as a complex and dynamic mode of reception, in which readers engage, interpret, and respond to texts. Receptive reading empowers readers as active agents in the creation of meaning. As such, reading can be understood as transformation: Receptive reading activity transforms readers from passive receivers to active meaning-makers and thereby changes readers' agency—that is, the degree to which readers contribute to or control the meaning of the text.

2. Relational Activity: Reading effects transformation by enabling readers to relate text to context, self to other, and the singular to the collective. In short, the relationships that reading forges are transformational, as these relationships encourage new, plural meanings for texts and identities. By forging new relationships between texts, contexts, self, and other, reading changes texts and readers. Viewing reading as relational activity challenges reductive understandings of reading that involve one discrete text and one discrete reader, each of which possesses singular meaning and static identity. A relational understanding of reading positions both identity and meaning as contingent upon relationships involving other texts, contexts, individuals, and groups—all of which cause texts and readers to both lose old meanings

and acquire new meanings. Thus, reading can be understood as transformation, in that relational reading activity creates new relationships that alter the meaningful identities of both text and reader.

3. Recursive Activity: Reading effects transformation by encouraging readers to revisit, return to, and literally re-course through text. When reading is conceived of as transformation, the oscillatory and nonlinear aspects of the activity receive emphasis. Subsequently, readers' experiences with texts are understood differently. Instead of understanding readers' experiences with text as linear progressions or straightforward marches through information, a conception of reading as transformation suggests that readers journey within texts, meandering in a more circuitous fashion. Conceiving of reading as a recursive activity positions reading activity as a transformative journey—that is, one that affords readers opportunity for discovery, misdirection, redirection, and reorientation. Thus, reading can be understood as transformation, in that recursive reading activity shifts the direction with which readers approach texts. In short, recursive reading reorients readers.

When discussions of transformation by threshold concept researchers are synthesized with discussions of transformation and reading by rhetoric and writing studies researchers, a general notion of reading as transformation emerges. This general notion of reading as transformation highlights the receptive, relational, and recursive characteristics of reading activity and, consequently, frames reading activity as a significant activity independent of the learning of a threshold concept. In other words, this general notion of reading as transformation attests to reading's position as an activity that results in many types of changes, which extend beyond learning one concept within the boundaries of one discipline or one profession. Unlike threshold concept research, which tends to focus on the kind of transformations brought about by learning a specific concept that is bounded by a particular community, the general notion that the characteristics of reading activity effect transformation positions reading as transformative in and of itself: Reading can be understood as transformation unbound. To demonstrate the way in which reading—as receptive, relational, and recursive activity—brings about transformation, I return to data gathered during a two-year empirical study of 75 undergraduate students (cf. Gogan, 2013).

Review of Study Design

In 2009, a colleague and I began a study of four sections of a required writing-intensive course at Virginia Polytechnic Institute and State University (Virginia Tech). The course served as the second of two three-credit-hour courses that constituted

the Composition Program at Virginia Tech and the course emphasized "writing with sources" (George, 2009, p. 6). The four studied sections of this course enrolled 75 students and each section followed identical syllabi and the same assignment sequence—a sequence that focused on the types of reading and writing that learners would encounter in their chosen disciplines. The study attempted to gauge the transformations of the learners and learning that were associated with this course, and one of the study's objectives concerned the role of reading in and beyond the course. More specifically, the study was interested in the role that reading and readers played in the acquisition of rhetorical genre awareness, a concept identified as a threshold concept within the discipline of rhetoric and writing studies by other research studies (Clark & Hernandez, 2011, pp. 66, 76; Pope-Ruark, 2012, p. 243; Adler-Kassner, Majewski, & Koshnick, 2012).

To examine the role of reading in the acquisition of rhetorical genre awareness, the study involved three phases, each of which was administered in compliance with Virginia Tech's Institutional Review Board Protocol 10−251. First, the study used in-class observations of student presentations to assess students' performance of disciplinary reading at the course's beginning. All 75 students participated in the study's first phase. Second, the study administered an electronic survey at the course's end. The survey asked students to gauge their abilities in, and preparedness for, disciplinary reading, and it consisted of a mix of multiple-choice questions, multiple-selection questions, open-ended questions, and four-point Likert items. Fifty-three students participated in the study's second phase. Third, the study conducted follow-up interviews with survey respondents, so as to reevaluate the views, understandings, and self-perceptions that students associated with the "Writing from Research" course. Eight students agreed to participate in the study's third phase, consenting to a 30-minute interview one year after the writing-intensive course ended. Part scripted and part artifact-based, the interview prompted respondents to discuss any changes in their knowledge, sense of self, or worldview that they attributed to their reading and writing work in the investigated course.

When data points from the three phases are viewed in aggregate, the study suggests that students perceived the course's first assignment to be important in their acquisition of rhetorical genre awareness and, more significantly, that reading played a transformative role in that assignment for students. The course's first assignment involved a number of interrelated tasks that asked each student to select a scholarly article from his or her discipline, read and analyze that article, present this analysis orally to the class, and submit this analysis as a short paper. Since this first assignment required students to engage exclusively with one source, the assignment reflects the "less-is-more philosophy" described by Sandra Jamieson (2013). This philosophy—which is supported by data collected as part of the Citation Project and which aims to empower students in their understanding of academic texts—suggests that limiting the number of sources from which students write might very

well promote student engagement with those sources. Framed in terms of the focus of the present study, this philosophy might be understood as limiting the number of sources used by students in order to promote reading as transformation.

The impact of this philosophy, as it is manifested in the transformative effects of reading, became quite clear over the course of the study's three phases. In the first, observational phase of the study, data revealed little about any transformative effects that might be associated with the reading required for assignment one. Although the student presenters offered 20-minute presentations derived from and dependent upon their reading of a scholarly article, many of the presentations did not in any way indicate that the reading of the article was transformative for the student. A strong possibility existed that the presentations were only loosely connected to the reading of a scholarly article and, instead, either modeled after the presentations of other students or narrowly constructed as a follow-up to previous discussions about different readings (cf. Gogan, 2013). Many of the presentations did not, therefore, exhibit the kind of engagement endorsed by Jamieson (2013), in which students "identify and focus key aspects of what they read" and "engage with [the reading] as a whole." Put differently, many of the presentations did not signal that the student presenter—i.e., the reader—had developed an increased sense of agency over the text, had experienced a change in identity through the text, or had applied an altered orientation to the text. Thus, few of these presentations positioned the activity of reading as transformation.

In the second phase of the study, the students who responded to the survey indicated that the reading conducted in conjunction with the first assignment did, indeed, help prepare them for reading in their discipline. Comments from respondents suggest that, by course's end, a number of students viewed the reading conducted for the first assignment as transformative—that is, as a receptive activity that modified reader agency, a relational activity that altered reader identity, and a recursive activity that shifted reader orientation. For example, one student commented that the reading was a "good idea" because scholarly articles are the articles that students "will be reading and responding to in the future." This comment suggests that the student understands that response accompanies the activity of reading and, as such, this comment positions reading as a dynamic, receptive activity in which readers exercise agency by co-constructing meaning. Two other survey respondents framed reading as a relational activity—one noting that the reading associated with the first assignment prepared him and his classmates "for the rest of their college career and possibly post-college career" and the other noting that the activity of reading established a relationship between her and her discipline that helped her "further understand the career." One final respondent mentioned the reorientation brought about by the reading and, in doing so, this individual gestured toward the recursive activity of reading. He describes a transformation in his orientation to scholarly articles, indicating that he now possesses an ability to pick apart

readings "piece by piece" and examine readings "more thoroughly." While these comments from survey respondents suggest that students began viewing reading as transformation, the comments were quite short and lacked the elaboration needed to arrive at a more conclusive finding.

The implication that students were understanding reading as transformation received elaboration in phase three of the study, during which interviews were conducted with eight students. The data gathered from these interviews offer the most conclusive evidence that, one year after completing the first assignment for the writing-intensive course, students viewed the reading component of that assignment as transformative in its effects. In the following section, I reevaluate the interview data from the study's third phase to show the way in which students positioned reading as transformation.

Reevaluation of Interview Data

Student participants described reading as transformation most conclusively in the third phase of the study, during which eight students were interviewed to discuss any changes to their knowledge, self-perception, or worldview that they attributed to their experience with the course as well as with the course's first assignment. The interviews yielded data in the form of eight interview transcripts. While these transcripts revealed much about the students' development of rhetorical genre awareness (cf. Gogan, 2013), these transcripts are further significant for what they reveal about the students' perceptions of reading. During their interviews, students described the reading required for the first assignment as transformative in its effects. The interview questions that elicited the responses, which most conclusively positioned reading as transformation, were:

- What do you remember about the course?
- Which course project did you feel was most beneficial? Why?
- Have you used anything that you learned from the course assignments? How so?

As students responded to the interview questions, the reading that they associated with the first assignment became a receptive activity that increased their agency, a relational activity that altered their identities, and a recursive activity that shifted their orientations to texts. In short, the interview transcripts demonstrate the student's understanding of reading as transformation.

Importantly, most of the students who were interviewed in phase three of the study remembered the first course assignment as a reading assignment. One such student, Angie, recalled reading "a lot of articles" for the first assignment. Although this kind of reading was difficult in the beginning, Angie was quick to note that

this reading prepared her for subsequent semesters. Similarly, a student named Zach remembered the first assignment as being particularly reading intensive, but as being beneficial in terms of its preparation for future reading. Zach stated that, for the first assignment, he "read a lot of articles," many of which he found challenging—that is, "hard to read and understand." But Zach also recognized that the exposure to these articles helped prepare him for even more difficult reading in the future. When prompted to discuss the first assignment, both Zach and Angie described the assignment as predominantly focused on the activity of reading. Such reframing of this assignment was not uncommon and it provides perspective into the way in which students understand the experience of reading. Indeed, data from the interview transcripts reveal that students understand the activity of reading as transformative in its effects on their agency, identity, and orientation.

During the interviews, students described the reading associated with the course's first assignment as helping them assume agency as a reader by reading to meet their needs and by co-creating meaning with the text. In doing so, these students outline one transformative effect of reading. Konnor, for instance, explained that the reading conducted for the first assignment gave him practice reading for his own needs. He explained that he developed the ability to process scholarly articles, so that he read according to his own needs and desires. Referring to the change that he experienced in his reading as a result of the first assignment, Konnor stated: "I could look at the parts that I wanted to and search for what I wanted." Here, Konnor implies that he developed agency as a reader and that this agency empowered him. Clearly, Konnor was not a passive recipient of the text. Likewise, another student named Derek described one take-away from the first assignment as knowing how to "interpret" a scholarly article. Derek's use of the word *interpret* to describe reading an article proves significant, for the word *interpret* positions Derek as a co-creator of meaning. Rather than viewing reading as a passive activity, where meaning is transmitted from a writer to a reader, Derek seems to recognize his role as a reader involves interpretation that co-creates the text's meaning. The comments from both Konnor and Derek indicate that the reading they performed for the first assignment proved transformative, for it positioned them as dynamic readers who exercised agency.

Students, in their interviews, further attributed a change in their identities to the reading required by the course's first assignment. Respondents discussed the way in which the reading expanded their ability to forge new relationships between texts, contexts, self, and others. These new relationships encouraged a shift in the understanding of identities. Some students discussed the way in which the reading made them more comfortable around research articles and subject-matter experts. Bryce, for example, noted that, because the first assignment offered him "so much practice" reading scholarly articles, he "feel[s] more comfortable reading." In addition to practice, Bryce figured that his new, more comfortable identity resulted

from the way he viewed himself in relation to the article's content, its disciplinary field, and its subject-matter expert writer. Bryce explained that, while he realizes he might not "understand all the material" presented in the article's text by the expert writer, he can still evaluate that text and determine if the article "is pretty solid." The ability to render this evaluation boosted Bryce's confidence. Similarly, Matt found value in "being exposed to different kinds of articles" during the first assignment. Matt felt that the reading allowed him to put himself in relation to the text, the context, and the writer. In particular, reading scholarly articles allowed Matt to get "a better grasp of how engineers think." In general, Matt felt that the exposure to other contexts, which reading enables, makes individuals "better thinker[s]" and gives individuals "more of an open mind." For Matt and for Bryce, reading transforms identities: readers gain openness, reasoning, and comfort, while the identities of expert writers become easier to understand and the identities of their texts become more accessible.

Finally, the interview respondents explained that the reading associated with the first assignment reoriented the way they approach texts. Angie, for one, speculated that the reading influenced the way she "went through the article." Specifically, the assignment left Angie with a sense of the two prominent ways that she journeys through texts. First, she reads "really dense" materials and views "every other line" as extremely important. Second, she traverses the materials to "figure out what's really important." Thus, reading within the writing-intensive course reoriented Angie to texts by distinguishing between the two main ways that she approaches texts. Angie's description of these different approaches further suggests that she understands reading as a recursive activity, or one that requires multiple passes over a text. Other students, such as Bryce, also described the way in which the first assignment encouraged them to practice reading as a recursive activity. Bryce described this assignment as asking him to take an article, "look deeper into it," and "really, really work it over." This kind of reading was something that Bryce "didn't normally do with the articles that [he] read." However, Bryce saw this kind of recursive reading as "play[ing]-in more so than anything [he's] done in [his] classes since." The responses provided by both Angie and Bryce suggest that one of the transformative effects of reading is a reorientation to the activity of reading—that is, reading becomes transformative, when it is practiced as a recursive activity.

Perhaps the most striking account of reading's transformative effects came from a student named Tim. Since completing the writing-intensive course, Tim had taken a number of courses toward a degree in civil engineering. When he was interviewed about the course's first assignment, Tim stressed that the reading portion of the assignment was "the most important," as he learned how to read a scholarly article. To support his view, he told a story of reading as transformation—an anecdote that framed reading as a receptive, relational, and recursive activity. Tim began his story by recounting his experience with the assignment. For the assignment,

Tim selected an article from a peer-reviewed civil engineering journal, he "read the whole article," and he composed a presentation that merely "summarize[d] everything that [he] had read." In retrospect, Tim viewed this indiscriminate summary as problematic. While he firmly believed that reading scholarly articles contributes to disciplinary writing and field-specific work, Tim realized that, during the first assignment, he failed to isolate the crucial information or key points from the article. Tim stated that "looking at an article so that you can use it in your writing is a skill that every civil engineer needs to acquire," yet he clarified this view by explaining that he now knows that the "process of taking out the key points from your article is much more important" than he had previously thought. Tim concluded that the skill of isolating key points and elaborating upon those points was a necessary skill that he "started acquiring" in the writing-intensive course, but it is a skill which he is "still in the process of polishing."

Tim's anecdote captures an understanding of reading as transformation. Tim explains that reading is a receptive activity that requires readers to co-create meaning by prioritizing certain pieces of information over other pieces of information. The more passive reader would indiscriminately summarize an article, while the more active reader elaborates upon crucial pieces of information. Tim also shows that reading is a relational activity that forges new identities. As Tim notes, reading plays a role in the identity formation of civil engineers and reading plays a role in his own identity formation. Tim sees the acquisition of reading skills to be transformative to both identities and to be indicative of a polished professional. As a student, Tim is still in the process of polishing this skill. Finally, Tim demonstrates that reading is a recursive activity that will often reorient or redirect readers. Tim's anecdote captures the way in which he journeys back into his first assignment and maps a different and less linear course through the scholarly article that he chose. Thus, Tim understands reading as inviting rereading and he seizes the opportunity to reorient himself as a reader to a familiar text.

Conclusion

The transformative effects of reading experienced by Tim and his peers demonstrate that educators can understand reading as transformation in and of itself. When practiced as a dynamic mode of reception, reading transforms the agency of the reader, allowing the passive receptor to become an active co-creator of meaning. When practiced as a relational arrangement, reading transforms the identity of the reader and of the text, as it stitches together texts, contexts, selves, and others in novel configurations. And when practiced as a recursive journey, reading transforms the approach or orientation of the reader to the text, affording the reader the opportunity to chart his or her course inside of the text. In these three ways,

then, educators can understand reading as transformation and, more to the point, reading as transformation unbound: Whereas the transformation that results from the learning of a threshold concept is bound to a particular discipline or profession, the transformation that results from reading is not bound to one particular community.

The unbound, transformative effects of reading accentuate the importance of pedagogical approaches to reading instruction that, likewise, extend beyond one particular course, discipline, or community. As Ellen C. Carillo stresses in *Securing a Place for Reading in Composition* (2015), reading pedagogy proves crucial in order for students to transfer their knowledge about reading across courses and disciplines. Considering reading's role in first-year writing courses, Carillo argues that college educators "can't expect [students to transfer reading knowledge from writing courses to courses in other disciplines] unless we teach for transfer by framing our teaching of reading in a metacognitive framework that consistently helps students abstract general knowledge about reading from the specific reading practices we teach" (2015, p. 147). From Carillo's perspective, more mindful and more explicit pedagogical framing of reading helps students develop meta-awareness about college-level reading and also promotes the transfer of student knowledge about reading from one context to the next.

Understanding reading as transformation—that is, framing reading as receptive, relational, and recursive activity—constitutes one way in which educators might approach reading pedagogy and, thereby, teach to promote the transfer of student knowledge about reading across courses, disciplines, and communities. Indeed, the interview data from this study suggests as much, for students indicated not only that the reading activity associated with the first assignment transferred from the writing-intensive course to their subsequent courses, but also that the same activity was a transformative experience—one that increased students' agency over the text, altered their identities through the text, and reoriented their approach to the text. Accordingly, the three general characteristics of reading activity that this study has identified might be used by college educators to foster student meta-awareness about reading inside and outside the college classroom. And it is the pedagogical potential of this framework—that is, the affinity between understanding reading as transferable and understanding reading as transformative, between teaching reading for transfer and teaching reading as transformation—that calls for additional research inside disciplines, across disciplines, and beyond disciplines.

References

Adler-Kassner, L., Majewski, J., & Koshnick, D. (2012). The value of troublesome knowledge: Transfer and threshold concepts in writing and history. *Composition Forum,*

26. Retrieved from http://compositionforum.com/issue/26

Carillo, E. C. (2015*). Securing a place for reading in composition: The importance of teaching for transfer*. Logan, UT: Utah State University Press.

Clark, I. L., & Hernandez, A. (2011). Genre awareness, academic argument, and transferability. *The WAC Journal, 22*, 65–78. Retrieved from https://wac.colostate.edu/journal/vol22/clark.pdf

Common Core State Standards. (2015). English language arts standards. Retrieved from http://www.corestandards.org/

Cornis-Pope, M., & Woodlief, A. (2003). The rereading/rewriting process: Theory and collaborative, on-line pedagogy. In M. Helmers (Ed.), *Intertexts: Reading pedagogy in college writing classrooms* (pp. 153–172). Mahwah, NJ: Lawrence Erlbaum.

Couture, B. (1998). *Toward a phenomenological rhetoric: Writing, profession, and altruism*. Carbondale, IL: Southern Illinois University Press.

Djikic, M., & Oatley, K. (2014). The art in fiction: From indirect communication to changes of the self. *Psychology of Aesthetics, Creativity, and the Arts, 3*(4), 498–505.

Djikic, M., Oatley, K., & Carland, M. (2012). Genre or artistic merit? The effect of literature on personality. *Scientific Study of Literature, 2*(1), 25–36.

Djikic, M., Oatley, K., Zoeterman, S., & Peterson, J. B. (2009). On being moved by art: How reading fiction transforms the self. *Creativity Research Journal, 21*(1), 24–29.

George, D., ed. (2009). *Composition at Virginia Tech: Written, spoken, and visual composition*. Boston, MA: Pearson.

Gogan, B. (2013, December 11). Reading at the threshold. *Across the Disciplines, 10*(4). Retrieved from https://wac.colostate.edu/atd/reading/gogan.cfm

Jamieson, S. (2013, December 11). What students' use of sources reveals about advanced writing skills. *Across the Disciplines, 10*(4). Retrieved from https://wac.colostate.edu/atd/reading/jamieson.cfm

Land, R., Meyer, J. H. F., & Baillie, C. (2010). Editors' preface: Threshold concepts and transformational learning. In R. Land, J. H. F. Meyer, & C. Baillie (Eds.), *Threshold concepts and transformational learning* (pp. viii–xlii). Boston, MA: Sense Publishers.

Land, R., Meyer, J. H. F., & Smith, J. (2008). Editors' preface. In R. Land, J. H. F. Meyer, & J. Smith (Eds.), *Threshold concepts within the disciplines* (pp. ix–xxi). Boston, MA: Sense Publishers.

Meyer, J. H. F., & Land, R. (2003, May 4). Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines. *Enhancing Teaching-Learning Environments in Undergraduate Courses Project*. Retrieved from http://www.etl.tla.ed.ac.uk//publications.html#occasionalpapers

Meyer, J. H. F., & Land, R. (2006). Threshold concepts and troublesome knowledge: Issues of liminality. In J. H. F. Meyer & R. Land (Eds.), *Overcoming barriers to student understanding: Threshold concepts and troublesome knowledge* (pp. 19–32). New York, NY: Routledge.

O'Brien, M. (2008). Threshold concepts for university teaching and learning: A study of troublesome knowledge and transformative thinking in the teaching of threshold concepts. In R. Land, J. H. F. Meyer, & J. Smith (Eds.), *Threshold concepts within the disciplines* (pp. 289–305). Boston: Sense Publishers.

Oatley, K., & Djikic, M. (2014, December 19). How reading transforms us. *The New*

York Times. Retrieved from http://www.nytimes.com/2014/12/21/opinion/sunday/how-writing-transforms-us.html?_r=1

Odom, M. (2013, December 11). Not just for writing anymore: What WAC can teach us about reading to learn. *Across the Disciplines, 10*(4). Retrieved from https://wac.colostate.edu/atd/reading/odom.cfm

Pope-Ruark, R. (2012). Exploring scholarship of teaching and learning approaches to business communication research. *Business Communication Quarterly, 75*(3), 237−251.

Salvatori, M. R., & Donahue, P. (2013). What is college English? Stories about reading: Appearance, disappearance, morphing, and revival. *College English, 75*(2), 199−217.

Timmermans, J. A. (2010). Changing our minds: The developmental potential of threshold concepts. In R. Land, J. H. F. Meyer, & C. Baillie (Eds.), *Threshold concepts and transformational learning* (pp. 3−20). Boston, MA: Sense Publishers.

University College London. (2015, May 10). *Threshold concepts: Undergraduate teaching, postgraduate training and professional development*. Retrieved from http://www.ee.ucl.ac.uk/~mflanaga/thresholds.html