

ABSTRACT

REID, GWENDOLYNNE COLLINS. *Digital Writing in the Disciplines: Imagining Possibilities for Scholarship in the Context of Digital Media*. (Under the direction of Dr. Carolyn R. Miller and Dr. Chris M. Anson).

In the quarter century since the establishment of the graphically browsable World Wide Web, academic composers and publishers have experimented with the range of affordances presented by networked digital media—affordances such as modularity, interactivity, multimodality, dynamism, associativity, etc. This experimentation, along with the increasingly widespread use of information and communication technologies and digital media across social contexts, has transformed academic rhetorical environments, presenting scholars with new possibilities and constraints. This transformation has substantially complicated the rhetorical knowledge and literacies necessary for scholarly communicators to operate effectively. This transformation, however, is still an emerging phenomenon, with ongoing experiments that continue to alter the genres and sociotechnical relationships that comprise scholarly work. In the last decade, for example, publisher Elsevier launched digital “Article of the Future” prototypes in several of its journals, while several publishers, universities, and organizations have worked to produce platforms for academic publishers and academics to more easily publish born-digital scholarship. The emerging nature of this changing scholarly landscape provides an exigence and opportunity for understanding scholars’ lived experiences of composing during a moment of transition, and specifically for understanding the forces that shape how and why they take up the multiple affordances presented by digital media.

This dissertation takes up that exigence, focusing on disciplinarity as a force unique to and particularly influential in academic contexts and asking how scholars' digital and multimodal composing shapes and is shaped by disciplinarity. This question is addressed through two case studies of research teams developing work for digital journal publication, one in the field of rhetoric and composition and the other in evolutionary biology. These cases were developed using a naturalistic, qualitative methodology, combining an ethnographic framework with textual analysis of writers' process-related documents and artifacts. Data were collected over a period of twenty-four months and analyzed inductively using techniques from grounded theory, specifically constant comparison, combined with content and rhetorical analysis of documents. Each case was examined through the three compositional lenses of mode, medium, and genre, three interrelated dimensions of communication relevant to understanding digital writing, with categories developed inductively for each lens.

Results for the compositional lens of mode revealed three distinct strategies for multimodal composing—*meaning compression*, *meaning expansion*, and *meaning attention*—which writers used according to their epistemological orientations and goals. For example, all three of these strategies were present for the rhetoric and composition case, an epistemologically pluralistic disciplinary area, while the evolutionary biology team primarily employed a meaning compression logic, reserving meaning expansion and meaning attention for public audiences. Results for the compositional lens of medium revealed that some disciplinary digital composing is characterized by *hypermediacy* (Bolter & Grusin, 1999),

drawing attention to media, with others characterized by *immediacy* (Bolter & Grusin, 1999), rendering media transparent and invisible. Both hypermediacy and immediacy were evident in the rhetoric and composition team's composing, though choices characterized by hypermediacy came primarily from the member of the team with the most hermeneutic, rather than empirical, approach. The evolutionary biology team's composing was marked by immediacy, maintaining transparency for their use of media. Based on these two cases, the distinction seems to correspond to disciplines for whom digital media are both *subject of* and *tool for* inquiry and those for whom digital media are solely a *tool for* inquiry. Finally, the compositional lens of genre brought both mode and medium together and tied them to the teams' social contexts, specifically their disciplinary contexts. This lens revealed that the rhetoric and composition team was writing a generically hybrid text, blending two disciplinary genres, the empirical research report and the hermeneutic scholarly webtext, highlighting the epistemological plurality of this disciplinary context and the challenges and generative potential of collaboration across epistemological traditions. The evolutionary biology case, however, also innovated at the level of text, composing textual elements for anticipated recomposition, but with the express purpose of creating intergeneric and interdiscursive change. Many of their innovative digital composing decisions, including those related to citizen science, were motivated by perceived disciplinary exigences for reaching across discourses, whether toward public audiences or interdisciplinary audiences, suggesting that the way disciplinary writers perceive and take up the affordances of digital media for

their composing is affected by a combination of the discipline's explanatory goals and approaches and the social dimension of this disciplinary work.

Together, these two cases suggest that disciplinarity influences how the affordances of media and modes are seen and taken up. They also suggest that the rhetorical possibilities presented by digital media, when taken up by scholars, amount to changed ways of participating in disciplines, and therefore can affect the constitution of those disciplines. The results have implications for academic publishing, suggesting that publishers need to pay attention to disciplinarity when developing platforms and formats for digital journals since the ways digital affordances are taken up vary widely. The results also provide evidence for attention to mode and media in academic writing curricula, including the epistemic uses of each for disciplinary inquiry.