New media rhetoric and the attention economy: creating a material space for the humanities in the emerging technological structures of the 21st century university

by

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A dissertation submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Rhetoric and Professional Communication

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2005

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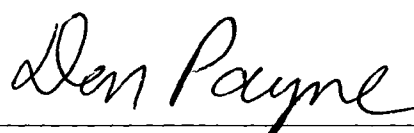
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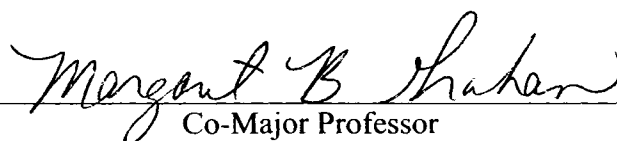This is to certify that the doctoral dissertation of
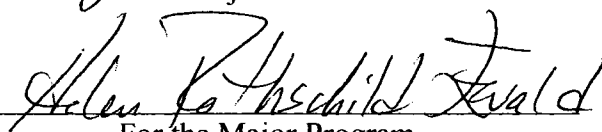
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This dissertation is dedicated to my wife and son, Shari and Blake Ellertson. Shari started this journey with me, and Blake joined us as it all came to a close.

Without them, it would be meaningless.

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ABSTRACT

This portfolio dissertation, comprised of three articles, seeks to clarify some of the trends and possibilities now open for new media communication by focusing on the material realities of the Web. New media and composition scholars are struggling with the materiality of digital technologies and their implications for pedagogy and literacy, often taking a materialist turn to understand them. The first article presents lessons, theories, student work, and students' interpretations of their work in an attempt to open a discussion on the material goals behind multimodal rhetorical practice. The second article presents a multimodal case study, which examines the creation of a competency-based electronic portfolio system that values the web sensible digital portfolio model while maintaining the advantage of a web-serviced application. The goal of this assessment system is to materially embed humanistic assessment practices within the technological structures of the university. Finally, the third article proposes that Rhetoric Technical and Professional Communication (RTPC) departments consider the Rich Internet Application (RIA) model to focus our efforts on incorporating critical/functional literacies of technology into our curricula. The RIA model currently is reshaping the information architectures of the Web by combining interactive multimedia interfaces with web serviced application structures. By pursuing the RIA model, RTPC can position itself to be a leader in the study and development of IT products and industries in a way that does not betray its rhetorical foundation, or its allegiances to humanistic expression.

PREFACE

The three articles in my dissertation portfolio outline what I believe to be a series of

steps toward the creation of both a critical and functional practice in Rhetoric Technical and

Professional Communication departments. My dissertation springs from the firm belief that

if we proclaim ourselves as professional rhetoricians and technical communicators, we

should be able to understand all the tools that both business and the university are using to

communicate. We should also have a firmer grasp of both the communicative limitations

and potentials of each of these tools than our clients, peers, or our students. The fact that we

have not been able to reach a balance between our theory and our practice points to a serious

disconnect between what we claim to be and what we actually are, a situation that I believe

will become untenable in the evolving models of the 21st century university. Therefore, this

dissertation will not only discuss the implications of technology, but also demonstrate the

multimodal potential now open to rhetoricians by being framed in a series of multimodal

arguments.

Let me be clear, however, that I am not advocating the abandonment of critical

theory; in fact, my position is quite the opposite in that I believe theory to be an integral part

of what we have to teach. Obviously, students need to understand that technologies and tools

are not neutral instruments, but instead are objects that are interpenetrated by discourse,

shaping and being shaped by our use of them. Eventually, however, a critical/functional

technological literacy that leads to a contextual and material understanding of our tools must

find a strong place of action in our practice and pedagogy. Basically, we need teachers who

not only write about the possibilities of technology, but who also are knowledgeable

practitioners who are able to evaluate a project as easily as they can a paper, giving specific

advice to students on the employment of technological tools in relation to the communicative context. Such knowledge can no longer be considered as extraneous to our practice, but instead must be thought of as so integral as to be the very base from which to proceed as professional rhetoricians.

I believe there are three major implications for further research stemming from my dissertation: (1) The expectation of what a professional rhetorician should know about his/her practice, (2) what approaches will best help our students develop a critical/functional literacy of technology and, (3) the ability of our practice to effect change within the larger university systems that RTPC inhabits.

CHAPTER 1. INSTRUCTIONS FOR USE

To view this dissertation you will need a CD or DVDROM drive, a set of speakers, and a color monitor. This dissertation uses the Flash player (version 7). Stand-alone projectors of the Flash 7 player have been loaded on this CD; thus, everything that is needed to view the dissertation is included on the CD itself (even if you do not have the Flash player installed on your machine). Merely open the CD and click on the silver file icon AEDissertationStart(PC) or AEDissertationStart(MAC), one of which will appear, depending on your operating system. The dissertation introduction will automatically load. If for some reason you should have any problems viewing a particular article, merely open the appropriate folder on the CD and find the silver Start icon for that particular article.

CHAPTER 2. NEW MEDIA RHETORIC IN THE ATTENTION ECONOMIES

Chapter Abstract

This article seeks to clarify some of the trends and possibilities now open for new media communication by focusing on the material realities of the Web. New media and composition scholars are struggling with the materiality of digital technologies and their implications for pedagogy and literacy. Recent discussions on multimodal composing within Rhetoric and Composition have begun to take a materialist turn, seeking to critically understand and formalize the processes and procedures in which multimodal communication can happen. This article presents lessons, theories, student work, and student's interpretations of their work in an attempt to open a discussion on the materialities and goals behind multimodal rhetorical practice. The overall goal of this article is to set the larger context in which multimodal practice happens.

CHAPTER 3. INFORMATION APPLIANCES AND ELECTRONIC PORTFOLIOS:

REARTICULATING THE INSTITUTIONAL AUTHOR

Chapter Abstract

This article is a multimodal case study presented in portfolio format. It examines the creation of a competency-based electronic portfolio system that values the web sensible digital portfolio model while maintaining the advantage of a web-serviced application. Using Donald Norman's theories on technology cycles and information appliances, in conjunction with Flash component technologies, the Agricultural and Biosystems Engineering (ABE) portfolio system seeks to rearticulate institutional electronic portfolio assessment toward individual multimodal composing. The goal of this assessment system is to materially embed humanistic assessment practices within the technological structures of the university.

CHAPTER 4. TOWARD A TECHNOLOGICAL PRACTICE

Chapter Abstract

This article proposes that RTPC consider the Rich Internet Application (RIA) model to focus our efforts on incorporating critical/functional literacies of technology into our curricula. The RIA model currently is reshaping the information architectures of the Web by combining interactive multimedia interfaces with web serviced application structures. By pursuing the RIA model, RTPC can position itself to be a leader in the study and development of IT products and industries in a way that does not betray its rhetorical foundations, or its allegiances to humanistic expression.

ACKNOWLEDGEMENTS

First, I would like to thank my committee: Dr. Dave Roberts, Dr. Lee Honeycutt, Dr. Volker Hegelheimer, Dr. Steve Mickelson, and my two major professors, Dr. Margaret Baker Graham and Dr. William Donald Payne. The experiences I had that allowed me to create this dissertation would not have been possible were it not for the opportunities afforded me by Dr. Graham, and for the help given to me by Dr. Payne. As I leave Iowa State, I will miss the times spent in Marty and Don's offices.

Further, I would like to acknowledge and thank Dr. Tom Brumm and Dr. Steve Mickelson for the opportunity to work as an instructor and researcher in the Agricultural and Biosystems Engineering Learning Community. For their enthusiastic support, openness to new ideas, and optimistic attitudes, I am grateful. My experiences with ABE provided me with tremendous opportunities for growth and professional advancement. I also would like to thank my fellow doctoral student and good friend, Dave Fisher, who was a great collaborator on the ABE projects. I would further like to thank the design team on the ABE portfolio project, including Will Pohlman, Shawn Entricken, Brandon Reis, Steve White, and Melissa Fenech for their hard work.

I would be remiss if I did not recognize the person who inspired me to want to get a Ph.D., my mentor, Dr. Catherine Cater, and the person who made it possible, my wife Dr. Shari Ellertson. These two people, and my wife especially, have shaped me as a person in ways that I could have never hoped to become had I never met them.