MULTIMODALITY IN THE TECHNICAL AGE: A HISTORICAL
SURVEY OF TECHNOLOGY AND WRITING

A Thesis
Presented
To the Faculty of
California State University, Chico

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
English

by
© Christina Deann Kraker 2011
Summer 2011
MULTIMODALITY IN THE TECHNICAL AGE: A HISTORICAL SURVEY OF TECHNOLOGY AND WRITING

A Thesis

by

Christina Deann Kraker

Summer 2011

APPROVED BY THE DEAN OF GRADUATE STUDIES AND VICE PROVOST FOR RESEARCH:

__________________________________
Eun K. Park, Ph.D.

APPROVED BY THE GRADUATE ADVISORY COMMITTEE:

__________________________________
Judith Rodby, Ph.D., Chair

__________________________________
Christian Fosen, Ph.D.
PUBLICATION RIGHTS

No portion of this thesis may be reprinted or reproduced in any manner unacceptable to the usual copyright restrictions without the written permission of the author.
DEDICATION

For my husband, Nathan Kraker—I’m the luckiest woman in the world.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication Rights</td>
<td>iii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iv</td>
</tr>
<tr>
<td>Abstract</td>
<td>vi</td>
</tr>
<tr>
<td><strong>CHAPTER</strong></td>
<td></td>
</tr>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>The Project of this Thesis</td>
<td>7</td>
</tr>
<tr>
<td>II. The Technologies of Literacy in Medieval and Renaissance Europe</td>
<td>9</td>
</tr>
<tr>
<td>From Oral to Written Modes of Communication</td>
<td>11</td>
</tr>
<tr>
<td>III. The “Affordances” of Multimodality: An Analysis of Gunther Kress’ Social Semiotic Theory</td>
<td>30</td>
</tr>
<tr>
<td>A Multimodal Theory of Signs</td>
<td>32</td>
</tr>
<tr>
<td>Mode Logic and Affordance</td>
<td>45</td>
</tr>
<tr>
<td>Gunther Kress and Mode Affordance</td>
<td>50</td>
</tr>
<tr>
<td>Conclusion</td>
<td>54</td>
</tr>
<tr>
<td>IV. Applications of Gunther Kress’ Social Semiotic Theory</td>
<td>55</td>
</tr>
<tr>
<td>New Media Scholarship and Mode Potential</td>
<td>55</td>
</tr>
<tr>
<td>Application 1: The Call</td>
<td>59</td>
</tr>
<tr>
<td>Application 2: “Digital Storytelling”</td>
<td>64</td>
</tr>
<tr>
<td>Application 3: “Technotreason”</td>
<td>67</td>
</tr>
<tr>
<td>Conclusion</td>
<td>71</td>
</tr>
<tr>
<td>V. Conclusion</td>
<td>73</td>
</tr>
<tr>
<td>Works Cited</td>
<td>75</td>
</tr>
</tbody>
</table>
ABSTRACT

MULTIMODALITY IN THE TECHNICAL AGE: A HISTORICAL SURVEY OF TECHNOLOGY AND WRITING

by

© Christina Deann Kraker 2011

Master of Arts in English

California State University, Chico

Summer 2011

This thesis begins with an examination of the spread of literacy during the period spanning medieval and Renaissance Europe. By analyzing the relationship between the proliferation of literacy and the advent of literate technology, this thesis posits that the benefits of literacy are culturally imagined through particular, goal-oriented uses of literate technologies. Using this idea as lens for analysis, chapter two argues that the proliferation of Internet technology during the 21st century is systematically similar to the proliferation of manuscript and print technology in medieval and Renaissance Europe. Influenced by the idea that the benefits of literate technologies are always specifically connected to the practices of a time, place and culture, chapter three closely analyzes and critiques Gunther Kress’ work on multimodality and Internet technology. Chapter three suggests that Kress misinterprets Ferdinand de Saussure’s
linguistic theory of the sign, which leads to great theoretical consequences in Kress’ evaluation of the impacts of technology on 21st century Western literate practice. Chapter four looks at three polemic applications of Kress’ theory to further demonstrate the problems that arise when the proliferation and advent of literate technologies are equated to cognitive and affective growth in human potential. This thesis concludes that the relationship between cultural practice, literacy and technology are dialectical—meaning that any said ‘benefits’ of technology are interdependently connected to cultural practice.
There can be little doubt that a major feature of modern societies is the ubiquity of writing. — David Olson

Literacy is deeply woven into the fabric of Western practice. As I sit at my desk to type this very document, I am hyperaware of the words that surround me. Sticky notes litter my desk with short phrases and lists; a note pad sits next to me, open, waiting for me to jot down an idea; printed books form a tower to my left and are scattered on the floor to my right; articles, printed from the library’s online database, are stacked in various piles around the room; and, of course, my web browser is open and patiently waiting to deliver almost any information I request instantly. I am literally surrounded by writing, making it nearly impossible for me to imagine a world without words in print.

This fairly typical 21st century scene demonstrates some of the major advances in writing technology that we have seen in the past five to six hundred years. The technology in my workspace represents handwritten technology (the pen and paper), printing press technology (the book), laser printer technology (desktop publishing), and Internet technology (digital publishing). This thesis is about technology—about the ways in which technology gives shape to human action through what we call ‘literacy.’
Because I will be talking about the influences of literacy and technology on human communication throughout this thesis, I want to be clear about how I am using and defining the concepts ‘literacy’ and ‘technology.’ My use of the word ‘literacy’ refers to the “social practices and conceptions of reading and writing” (Street 1)—as such, I will more often refer to ‘literacy’ as ‘literate practice.’ I employ the term ‘practice’ in order suggest that the ubiquity of reading and writing in Western culture is not ancillary to the actual day-to-day activities of the people who use written modes. Any activity that includes reading or writing will be referred to as a ‘literate practice,’ as well as considered a practice in its own right—that is, for instance, when I refer to business practices I literally mean the daily ‘practices’ (or activities) specific to businessmen situated within a particular time and place. The term practices is therefore laden with the political, cultural and ideological values of the community by which those activities are valued as part of productive and standard social relations.

In consequence of the relationship between literacy and ‘day-to-day’ communication practices, I will always assume that literate materials (manuscripts, contracts, books, websites) are directly shaped by the practices of the community and culture from which they are created and used. It is important to note, then, the clear distinction I am making between the technologies of literacy—pens, paper, computers, printers, the Internet—and the actual uses and outcomes of those technologies. Consequently, I will always analyze literate materials in relation to social, political and economic activity—and, as such, I will reject any assumption that technology alone (from the printing press to the Internet) directly shapes or influences reading and writing
I first became aware of the distinction between literacy and technology in the Fall of 2010 when I was enrolled in a graduate course on literacy theory. In the beginning weeks of that semester, I read two books (*The Order of Things: An archaeology of the human sciences* by Michel Foucault, and *The world on paper: The conceptual and cognitive implications of writing and reading* by David Olson) that would forever change how I understand literacy and technology. Both Michel Foucault and David Olson argue that the Western proliferation of alphabetic texts (technology) during the medieval and Renaissance periods resulted in a fundamental shift in human cognition. As words became represented on paper, Olson argues, the structures of language became increasingly explicit to readers. As readers struggled to decipher the meaning of texts, new ideas, concepts and syntactic preferences were created to help writers replace the loss of illocutionary force normally expressed in speech.

These changes, according to both Foucault and Olson, fundamentally shifted Western thought by introducing (through the close reading and analysis of words) metacognition into Western practice. Prior to the proliferation of written texts circa the 15th and 16th centuries, Foucault suggests that knowledge was restricted to the ways in which language was represented in nature, so knowledge was limited to the materiality of things, metaphor, and similitude. Foucault argues, for instance, that prior to the spread of alphabetic texts, Western thought was influenced by the idea of ‘resemblance’—that is, ontological and epistemological understandings were rooted in the connections that existed between physical and spiritual entities. Knowledge was understood to be apparent
through the resemblances that existed between things. Language, then, was intimately connected to material things and ultimately connected to God. These connections, Foucault argues, could be read in nature by drawings material things together, finding their common center, or by analyzing the location and propinquity of individual artifacts.

With the proliferation of alphabetic texts, however, Foucault suggests that people’s understanding of language fundamentally shifted. According to Foucault, written texts enable people to analyze (through close attention to the written word) language as though it were separate from the material world. In other words, instead of finding meaning by analyzing the close connections between the ‘resemblance’ of the material and spiritual worlds, people saw language as a signification—that is, words were seen as separate from the objects they represented. This shift in thinking, according to Olson and Foucault, was a consequence of “the world on paper” (Olson).

For Olson and Foucault, new ways of interpretation (brought about by writing) fundamentally changed how people saw the world. Foucault suggests, for instance, that instead of “drawing things together” people were “discriminating” and noticing the differences and the discordance between things (Foucault 55). Such discordance required a new type of discourse, a discourse that essentially allowed people to look for literal and implied meanings in words (that is, rather than finding meaning in nature). For Olson, it was the technologies of literacy (from manuscript technology to print technology) and the ability to read that increased the cognitive potentials of Western thought. From Olson’s perspective, literate technologies created the possibility to analyze written texts, interpret meaning from written words, and manage illocutionary force. For
Olson, these new Western literate practices led to a new understanding of language and, thus, a new understanding of the world. Although this brief account of these two incredibly complex theoretical texts does not begin to cover the intricacies of either argument, the main point that both Foucault and Olson make (which was most influential on my thinking) is that literate technology advances cognitive potentials.

When I was first introduced to David Olson’s theory, it made complete sense to me; I was able to link a great deal of the cognitive potentials he suggests come from close reading to my own growth as a reader and writer. Foucault’s similar conclusions about the role of alphabetic writing in the reorganization of the sciences during the Renaissance, in my mind, further supported the notion that there was something interesting (and relevant) about the role of literate technology on human cognitive potentials. With this interest, I started the research project that you see here in this thesis.

When I started to write this thesis, I also had a strong conviction that digital technology could create ‘new spaces’ for writing in academic settings, as well as increase the ‘social’ and ‘participatory’ nature of reading and writing in general. From this perspective, I assumed that there was a great amount of semiotic and cognitive potential that could be unlocked through the teaching of new media in first year composition curriculum. With this conviction, I began to study the uses of literacy during the medieval and Renaissance periods in order to find support for the claim I wanted to make about the importance of literacy and computer technology in the 21st century. I thought that if I could draw a parallel between Olson and Foucault’s observations of literate technology in the Renaissance and my own observations about literate technology in the 21st century, I
would be able to make a claim about the importance of multimodal texts in writing classrooms. This is not that thesis.

Not only did my findings completely change my research project, they unraveled any assumptions I had about the benefits and potentials of literate technology—that is, I started to realize (and more closely understand) that the benefits of literacy are culturally imagined through particular, goal-oriented uses of the technology. I found that what both Olson and Foucault were pointing to (without fully acknowledging) were particular benefits of academic literacy practices. As such, Olson and Foucault’s theories do not account for the ways that literacy was taken-up through the political and economic situations spanning between the early medieval and Renaissance periods. In other words, my research indicates that changes in Western thought are a product of complex social, economic and political changes, not (as Foucault and Olson seem to suggest) the proliferation of alphabetic writing or the technologies that accompanied it.

The parallel that I wanted to draw between literate technology during the medieval and Renaissance periods and the twenty-first century was, perhaps, unsuccessful for my original goals, but was nonetheless useful. As I started to read *Literacy in the New Media Age* by Gunther Kress, I noticed a shocking similarity between the arguments of David Olson and Gunther Kress. Like Olson, Kress suggests that it is through the modes of communication (which for Olson was alphabetic writing, but for Kress includes other modes such as image and sound) that human understanding changes. Kress makes two arguments that are important to consider. First, with an ultimate goal of demonstrating that economic, technical, and political changes are
intimately connected to changes in modes of representation, Kress argues that the advent of computer technology has greatly impacted how texts are designed and interpreted (with this point I more or less agree). However, he further suggests that changes in the uses of modes will result in a shift in human cognitive and affective relationships with the world (it is with this point that I am in sharp disagreement). To me, the former point is very similar to the argument that David Olson makes about the potentials of writing (that is, what he calls “the world on paper”) and the advancement of human cognitive potentials. As such, I use my findings on the role of literacy in the medieval and Renaissance periods as a lens to analyze Gunther Kress’ work on “multimodality.”

**The Project of this Thesis**

This thesis is the culmination of my intellectual and ideological struggle to understand the relationship between literacy and technology. In chapter two, I survey the proliferation of written texts from the early medieval period through the advent of the printing press. Chapter two demonstrates that the proliferation and use of literate technology is closely linked to the economic, political and ideological goals of a culture. In chapter three, I closely analyze Gunther Kress’ theory of multimodality to suggest the ideological constraints of his theoretical concept *mode affordance*, as well as to question what he sees as the ‘benefits’ of multimodal composition. In chapter four, I look at three polemic applications of Kress’ theory to further demonstrate the problems that arise from the concept *mode affordance*. In the conclusion, I further articulate the implications of associating the proliferation of any literate technology with cognitive or affective potentials as well as offer a suggestion for further research.
The goal of this work is to identify the theoretical (and therefore ideological) underpinnings of the academic work that calls us to ‘rethink’ the potentials and uses of writing in light of Internet technology. By deconstructing the work of Gunther Kress, Ellen Cushman, Cheryl Ball, Glynda Hull, and Mark Nelson, I show that theorizes and applications of multimodality fail to account for the complexity of everyday, lived literate activity. Through an analysis of writing technology—the manuscript, the printing press, and the Internet—I suggest that theories that focus on the semiotic potential of multimodality (such as the theories published by Gunther Kress) disregard the cultural, political, and ideological influences that enable the proliferation, interpretation, use, and potential of any form of communication, written or otherwise. The consequence of Gunther Kress’ theoretical work, I suggest, can lead writing studies toward a ‘cognitivist’ perspective not only because his theory suggests that the incorporation of image, sound, and video into education and culture will increase “human cognitive [and] affective potentials” (Kress, “Literacy” 1), but also because it creates esoteric academic discourse around digital texts.
CHAPTER II

THE TECHNOLOGIES OF LITERACY IN
MEDIEVAL AND RENAISSANCE EUROPE

Our twentieth-century western form of literacy is not an invariable form; it is as culture-bound and shaped by available technologies as medieval manuscript literacy was. Comparing medieval norms with modern ones puts current questions about literacy in perspective. The best way of understanding the modern western literate mentality is to see where it came from.

— M.T. Clanchy

Michael Clanchy wrote the sentences in the above epigraph over three decades ago, but the truth of his observation is perhaps even more relevant today. As the proliferation of Internet technology rapidly changes how humans communicate, it follows that we will seek to understand the impacts of the Internet on literate practice. Gunther Kress, in the text Literacy in the New Media Age and Multimodality: A social semiotic approach to contemporary communication, provides one such example. Kress attempts to understand current changes in literacy practice by analyzing literacy as it is used in the 21st century. Based on his observations of 21st century texts, Kress suggests that writing is being displaced by the image as the dominant mode of communication. Kress attributes this change to the advent of the computer screen and the proliferation of digital technologies (such as word processors and video editors)—technologies that, he suggests,
facilitate multimodal composition through an increased usability of text, image, sound and movement in page design and layout. The ease by which such technologies enable multimodal design, he suggests, have not only expanded the meaning of the words ‘writer’ and ‘publisher,’ but have also changed the very nature of texts in and of themselves. According to Kress, texts composed primarily by alphabetic design—and therefore dictated by the logic of the page—are no longer (with the exception of the “political and cultural elites”) the dominant form of communication; rather, texts are multimodal and largely dictated by the spatial logic of the image (“Literacy” 1-5). Kress further suggests that although multimodal texts existed prior to the advent of digital technology, the issue of multimodality has become more salient in the 21st century because the accessibility of digital design software has made the composition of digital, multimodal texts commonplace rather than specialized practice. In other words, nearly anyone with computer access can design and publish, with relative ease, a multimodal text.

The transformation of the logics and organization of texts that Kress seems to identify as being a ‘special’ phenomenon central to the advent of Internet technology is not, however, in isolation from other historical shifts in literate technology. Historically, the advent and proliferation of new forms of writing technology are often followed by changes in the use of literate materials. Because advances in literate technology nearly always accompany shifts in the design and distribution of texts, I use this chapter to look back to the Middle Ages and the Renaissance when the spread of alphabetic literacy shifted how people participated within particular sectors of society—thus illustrating that
the material artifacts of literate activity are intimately connected to social, technical and economical factors. In the second part of this chapter, I look at the role of literate technology in changing classification systems, both materially and ontologically. This chapter does not seek to define the “consequences” of literacy, rather this chapter seeks to illustrate how the movement from primarily oral to written modes during the Renaissance is economically, technically, and systematically similar to the (perceived) movement from alphabetic to multimodal texts in the 21st century. I should note, in addition, that my discussion of medieval and Renaissance Europe is not attempting to account for the history of all of Europe. This chapter, rather, looks at this greatly diverse and long time period in broad strokes—that is, I intend to make a general observation rather than a detailed account of literacy during these periods. In any number of cases, what seems to be the proliferation of literacy in one region would not indicate the practices of other regions; I acknowledge this constraint.

**From Oral to Written Modes of Communication**

In a culture that is highly immersed in literate practices—from street signs, to advertisements, to pamphlets, to books—it is difficult to imagine a time when reading and writing were not common practices. We take for granted that reading and writing are actually separate activities—in the Middle Ages, for instance, the technical skills required for writing were taught separately from reading skills (Clanchy 193-195)—and we often fail to recognize writing as a technological skill that, without training, would yield no more than scribbles on a page. The technological nature of writing is, perhaps, most salient when looking back to the twelfth and thirteenth centuries when the process of
writing a document was laborious and required costly, specialized tools. Composing manuscript documents, for instance, would “require clerical training and special equipment; parchment, ink and quill pens” (Clanchy 47). As a result, writing was used for specific purposes, and only rarely for individual endeavors. In this section, I look at the ‘skill’ of writing as both specialized and ancillary to economic and political practice. This perspective, I suggest, will show how the movement from writing as a rare, technical skill to writing as the foundation for a cultural mentality—that is, as Clanchy suggests, a mentality about reading and writing that exists “in the imaginations and assumptions of numerous individuals” (187)—is ideologically tied to technological, economic and bureaucratic practices. By exploring a brief history of writing technology (as a full history is beyond the scope of this argument), I will draw a parallel between the proliferation of alphabetic literacy and the proliferation of digital media at the end of this chapter.

There are, of course, limits to discussing the proliferation of alphabetic literacy from a 21st century perspective. Contemporary methods for measuring literacy rates during the medieval period, for instance, primarily rely on a 21st century perception of literacy, rather than what it actually meant to be literate during the medieval period. During the 13th century, men working for the monarchy (such as men who recorded testimony or collected taxes) were multilingual, and therefore conducted business in French, English and Latin (Clanchy 331). Business was often conducted orally in vernacular languages (such as, for instance, French or English) while the “practice of writing documents” was done in Latin (331). As such, measuring the rate of English
literacy during the 13\textsuperscript{th} century would fail to consider the linguistic complexity and knowledge of 13\textsuperscript{th} century men. In other words, because reading and writing practices were likely conducted in Latin, it would be difficult to compare English literacy rates to contemporary standards.

Renaissance literacy rates are equally difficult to measure. Methods for measuring literacy during the Renaissance often rely on analyzing legal documents for the presence of a “sign or mark” (Houston 200). According to R.A. Houston, definitions of ‘literacy’—and therefore the correlated ‘literacy rate’—during the Renaissance assume that “those writing their full names [are] literate, [and] those making a mark or initials…[are] illiterate” (Houston 200). In this respect, the definition of literacy is loosely defined by one’s ability to write a name rather than read and compose texts, which not only limits our ability to understand the role of literacy in daily life, but also reduces that knowledge to speculation. Although literacy rates have been difficult (if not impossible) to accurately measure, the increased presence of literate materials during the period spanning the thirteenth and sixteenth centuries indicates that levels of literacy in Europe were on the incline.

As early as the twelfth and thirteenth centuries, written documents began to emerge as reified forms of the bureaucratic ideologies that dominated the king’s governing practices. By the thirteenth century, literate modes—especially in the documenting and recording of royal activity—proliferated in the king’s government, thereby indirectly impacting all levels of the European social hierarchy (Clancy 2, 44-47). For example, by the reign of Edward I, during the late thirteenth and early fourteenth
centuries, serfs were required to maintain written charters in order to authenticate property rights (Clancy 2). And, although there was not a direct need for literacy among the majority of the population, reading and writing were important skills for landholding peasants and yeomen who wanted to protect themselves from men of power and status (Graff 153). Written modes, in other words, slowly took shape as the primary means for developing institutional frames by “setting up…centralised bureaucracy” and solidifying legal transactions (Street 111).

The proliferation of writing was, however, slow and often relied heavily on oral modes. Although writing was used to document “property dealings and legal conflicts,” many merchants and bureaucratic men used writing as a mnemonic device to assist oral modes (Innes 8). As such, written texts integrated into a “long-established and durable cultural system” that was still heavily rooted in an oral tradition (5). In that sense, “the emergence of new patterns of communication” was most likely a synthesis of oral and literate practice, with the written word (eventually) emerging as the central mode for legal and business proceedings (Innes 10). In hindsight, then, the survival of various written manuscripts allows us to see the “social and political organization” of medieval communities (5), but can hardly gives us an exhaustive picture of how literacy impacted daily life and oral practice.

Although the king’s government used written documents more than any other sector during the medieval period, the king’s use of written documents slowly integrated into other cultural spheres. During the Renaissance, for instance, the use of written modes to record and conduct merchant trade sharply increased. Businessmen used writing to
accurately record transactions in ledgers, manage double-entry bookkeeping, draft correspondence, prepare bills of exchange, and write and negotiate contracts. Literate merchants used reading and writing to facilitate more productive commerce, which was especially important as the economy shifted from a primarily land-based economy to a primarily trade-based economy. What is clear, then, is that during the Renaissance, merchants were politically and economically influenced by literacy because they needed to read and write in order to conduct business and trade. Scriveners, for instance, were highly motivated by middle class economic values and business profit (Pattison 95). Professional scriveners were often copyists as well as moneylenders, making them important in both documenting business contracts and financing business transactions. In addition, with the “expansion of private property ownership...[came] more formal and direct needs for the uses of literacy” (153). From this perspective, we see that the spread of literacy—at least outside of elite, upper class settings—is importantly connected to economic trends in the Renaissance period.

Prior to the advent of the printing press circa 1450, uses of literacy were already well established—that is, at least within the ruling and business classes. During the medieval period, literacy played an important role in the acquisition and sale of property as well as other bureaucratic and economic practices. As we move further from a somewhat limited use of literate technology in the medieval period toward a more substantial spread of literate technology during the Renaissance (through the printing press), we should note the relative slow progression of what has been called the “Western literate mentality.” Through the complex social integration of literate documents into
various social groups and systems of activity (such as, the use of literacy in capitalist business practices), we can see the spread of “literate habits and assumptions” manifesting well before literacy became common in Western practice (Clanchy 183). The popularity of print in the Western context, then, can be most associated with the idea that an already semi-literate society, with an already proto-capitalist mentality, embraced a new writing technology for economic and political purposes.

Although literacy practices were common among early medieval businessmen and scholars, the printing press provided a unique means for the dissemination of standardized ideas and propaganda to the masses. At a very basic level, the speed of reproducing printed texts far outweighed the capabilities of a scribe, which enabled relatively quick and easy dissemination of identical texts. This new capacity of print not only provided a means by which ideas could be distributed, but also encouraged rapid production so that printers could quickly turn profits. The influence of a trade-based economy drove printers to reproduce a multitude of texts with the hope of turning profits. Printers, for example, responded favorably to the Reformation and embraced the “new market with an outpouring of Bibles, Books of Days, and other holy works” (Lagerfeld 108).

Another important advantage of print technology was its capacity to make the reproduction of texts feasible. The technical capabilities of print had a great impact on features of textual design such as layout, tables of contents, syntax and other modern print conventions. A major constraint of handwritten manuscripts was, as mentioned above, the relative difficulty of (re)producing manuscripts; with print, however, quantity
was not a constraint. Perhaps even more difficult than copying written texts by hand was
copying images by hand. Elizabeth Eisenstein suggests that the ability to print and
replicate images was another significant revolution of print technology. Eisenstein states,
“The capacity to produce uniform spatiotemporal images is often assigned to the
invention of writing without adequate allowance being made for the difficulty of
multiplying identical images by hand” (57). As such, not only did print help to spread the
literate mentality, it further proliferated the use of standardized images in texts. The
advent of “wood cuts and metal engravings” (54), for example, made the reproduction of
images relatively easy—that is, in comparison to a manual reproduction. Print
technology, then, accounts for the increased use of written and visual modes as well as
the emergence of standardized layout and design in printed materials.

Standardization—another significant contribution of print technology—had a
significant impact on the spread of propaganda and ideology. Unlike handwritten
manuscripts, print ensured a multitude of standardized, fixed copies. As a consequence,
ideological movements against dominant hierarchy—such as the Catholic Church—were
not only possible, they were revolutionary. Martin Luther, for example, used the printing
press to disseminate large quantities of vernacular Bibles (Eisenstein 303). Unlike scribal
manuscripts, print “lent itself to commercial advertising, official propaganda, seditious
agitation, and bureaucratic red tape” (Eisenstein 59). The printing press, in other words,
was not only a tool for spreading God’s word, it was a tool to propagate ideology and
stimulate reform. In fact, print also “made possible more explicit recognition of
individual innovation and encouraged the staking of claims to inventions, discoveries,
and creations” (Eisenstein 84). By the 16th century, legal documents were already being devised to facilitate the patenting of inventions and works of literature (84). This gave new powers to newly formed bureaucracies as they played the role of intermediary in the legal filings of intellectual property. Note, however, that the legal documents did not lead to new “inventions, discoveries or creations,” but rather facilitated a durable, material form by which inventors could claim ownership over ideas. Written texts, in other words, ensured the stability of laws to protect anti-piracy, plagiarism, monopoly as well as a multitude of bureaucratic and hegemonic endeavors.

The role of print in the dissemination and standardization of the written mode was both technical and economic. It was technical because it enabled authors and publishers to design multiple copies of one text with relative ease. The technical features of print not only enabled printers to reproduce written manuscripts, but also made it easier to design texts using spatial forms—that is, from a Renaissance perspective, the printing press enabled the production (and perhaps more significantly, reproduction) of multimodal texts. By comparing, as the epigraph at the beginning of this chapter suggests, “medieval norms with modern ones” (Clanchy 196), we can begin to bring the current scholarship on multimodality—of which I use Gunther Kress as the exemplar—into perspective. By fast forwarding to the 21st century, we can draw some important connections between medieval and Renaissance literate practice and understand in part where “the modern western literate mentality…came from” (196). As I have demonstrated, the spread of alphabetic literacy between the medieval and Renaissance periods is associated with: 1) the uptake and increased use of written documents by the
monarch for bureaucratic purposes; 2) the slow integration of written documents into business and social practices; 3) a gradual increase in the accessibility and affordability of literate materials (via print technology).

Before I explicitly draw a parallel between the 21st century and the medieval and Renaissance periods, I want to offer a more concrete example of how changes in bureaucratic, economic and technological practices during medieval and Renaissance Europe helped to spread literate practice and mentality. I use, as an example, the evolution of accounting practices. The evolution of accounting practices not only demonstrates the cultural move from oral to written practice, but also exemplifies how government influenced accounting practices, how the growth of a trade-based economy was closely associated with the spread of literacy among businessmen and how the printing press helped to proliferate standardized accounting practices.

In Great Britain, methods for documenting financial records evolved from a primarily oral system to a written system. Prior to the eleventh century, “financial data was nearly always communicated and verified orally” (Tebeaux 323) and debts were tracked via a “tally stick” (324). The tally stick—normally made from hazelwood—was notched at various locations to indicate the amount paid and to serve as evidence for tax payment to the king’s government. The oral-based accounting system was viable because it served the needs of a primarily illiterate culture, thus making it possible for illiterate landowners and tradesmen to negotiate debt. Early written records were also kept by the king’s scribe, who would document, via a Pipe Roll, a “narrative of receipts and expenditures” (326). The Pipe Roll, written as a transcription of the oral transaction,
primarily served as a memory device. Other early medieval European accounts—such as household and business accounts—were composed using the same narrative style, and primarily served to “assist the memory of the businessman” (Carruthers and Espeland 40) who was faced with complex business and estate financial transactions (Tebeaux 329).

Starting as early as the 13th century, business transactions were logged into an accounting book using interpersonal, narrative prose. This style of accounting was used in private, business and government transactions, which required executors of business transactions to both read and write. Often, the use of accounting records was enforced by the king’s government, and therefore required businessmen to either become literate or hire a literate clerk. For instance, as a trade-based economy emerged in Europe, European governments enforced laws requiring written-records of all sea voyages. In large cities, such as Venice and Barcelona, the government enacted laws requiring “big ships to employ two scribes” for record keeping purposes (Carruthers and Espeland 45). These scribes, holding an official position, would record transactions and subsequently file the accounting records with the government in case of a legal dispute. In addition, some smaller maritime cities required ships to hire a scribe as an official member of the crew (45). In other words, the move from oral to written accounting records was importantly connected to changes in business practices and government mandates.

The next shift in accounting practices first appeared in northern Italy where mercantile “capitalism as an economic system first” developed (Carruthers and Espeland 44). In 1494, Luca Pacioli published a book titled *Summa de Arithmetica, Geometria, Proportioni et Proportionalita*, which contained a detailed section articulating the
procedures for double-entry bookkeeping (Tebeaux 332). Unlike the prose style of early 
accounting systems such as the Exchequer system—a method in which business 
transactions were carried out publicly (in both written and oral forms) and was, therefore, 
“intensively personal” (Jones 466)—the double-entry method was completely spatial, 
adhering strictly to a two-column bookkeeping approach where number values were 
entered as either a debit or a credit. Except for an occasional footnote, narrative prose 
was altogether removed from the accounting process. When accounting books shifted 
from the prose-style of early accounting records to the (primarily) number-based method, 
the interpersonal, public tone of financial record keeping was lost, or at least less 
apparent in the written records.

With the advent of the printing press, Pacioli was able to publish and 
distribute many copies of his book throughout Europe. The use of this new method 
became highly regarded throughout Europe and quickly disseminated to students of 
business. In fact, as early as the late 15th century the “proliferation of accounting 
textbooks...helped to diffuse the double-entry method” (Carruthers and Espeland 49). 
Double-entry accounting procedures, designed for “a literate, trade-oriented culture,” 
made it possible for forward thinking businessmen to track future responsibilities such as 
debt (Tebeaux 336). The incorporation of double-entry bookkeeping into business helped 
to spread the capitalist mentality by providing a means by which business owners could 
aggregate many transactions into simple reports to measure monetary success (Carruthers 
and Espeland 42).
The shift from oral to written modes in accounting records demonstrates that the ability to read and write does not account for changes in business practice. Rather, changes from a land-based to trade-based economy more closely accounts for changes in how merchants conducted business—through a new capacity for capitalist (profit-driven) thought—which is made apparent, I suggest, in the move from an accounting system based on public and personal responsibility to an accounting system based on profits. In other words, literacy was not a cause or an effect of changes in (to cite one example) economic trends; instead, we can say that the spread and use of literacy is apart of the complex social, political, and economic goals of the institutions and/or individuals who use literate technologies.

These observations have led me to believe that the proliferation of writing technology (and eventually printing press technology) during the medieval and Renaissance periods is systematically similar, as I suggested above, to the proliferation of digital writing technology in the 21st century. By looking at a brief history of the spread on Internet technology, we can see the spread of Internet technology follows a similar trajectory as the spread of print-based technology. Much like the specialized use of manuscripts, Internet technology first emerged (through the work of MIT researchers in the early 1960’s) as a specialized technology. By 1968 the ‘Defense Advanced Research Projects Agency’ started funding the development of ARAPNET Internet technology (Wolff, et al 23). In its infancy, the Internet (ARAPNET) primarily served institutional research groups (such as universities) and government organizations (such as the military). The specialized knowledge required to use the Internet in its early years (such
as, for instance, knowledge of computer programming language), closely reflects the specialized knowledge required by 13th century men to compose official, written documents (such as, for instance, fluency in written Latin). As the government continued to develop Internet technology, the technology began to be spread into private organizations.

The commercialization of the Internet started in the early 1980’s when private vendors started to incorporate the technology into their own products—though, at this point, the technology was still highly specialized (30). Private vendors wanting to earn government contracts, for instance, had to incorporate the technology into their products because the “DoD had mandated the use [of Internet technology] in many of its purchases” (30). In other words, just as government mandates had encouraged private merchants to become literate during the medieval and Renaissance periods, government mandates increased the use of Internet technology during the late 20th century. As businesses started to incorporate the technology into their products, more widespread use of the technology emerged. Over the past 15 years, Internet technology has integrated into business and social practices, which is likely due to the gradual increase in the accessibility and affordability of computer technology over the last decade. According to the U.S. Census Bureau’s annual Communications and Information Technologies report, in 2009 sixty-seven percent of households had in-home Internet access compared to only twenty-six percent in 1998—suggesting, then, that since the advent of Internet technology in the early 1960’s, the Internet as a public tool is relatively new.
The parallel between the proliferation of writing technology and Internet technology suggests that the use of literate technology is shaped by social, political and economic purposes. As such, the material artifacts that manifest (visually) through literate technologies are contingent upon the cultural goals and purposes for using that technology—think, for instance, of how user-interfaces guide and regulate computer use, and how the move from complicated programming languages in early computer technologies (such as DOS) to user-friendly interfaces (such as Windows) not only increased computer use, but capitalized and commodified Internet technology. The capitalization and commodification of Internet technology is further apparent in the simplification of web-browsers such as Internet Explorer and Firefox—that is, the mere presence of web-browsers represents the commercial, commodity driven goals of current Internet trends. Think, for instance, of the integral role that web-browsers play not only in making Internet technology user-friendly, but in collecting and selling users’ browsing history (using cookies and other tracking features) to advertisers and marketing specialists. In other words, the commodification and distribution of Internet technology is not incidental to the advancement and use of the technology—in fact, the commodification of the technology is integral to how documents on the Internet are classified (Google, Digg), distributed (websites, blogs, social media), and situated within literate practice (publishing, advertising, socializing).

The history of the advent and proliferation of Internet technology is far more detailed than what I have suggested here, but the point that I care to make is that the integration of Internet technology into 21st century culture follows a similar trajectory as
the integration of print-based technology. This is not to say that we can (or should) look
to the Renaissance to shape how we think about literacy in the 21st century, but rather that
any theory that attempts to understand the influence of literate technology should first
and foremost account for the cultural and ideological shaping of the technology.

If we want to analyze the ‘impact’ that literate technology has on culture, we
need to look at the reshaping of practice through the dialectical relationship that exists
between technology, literacy and culture. In other words, we need to look at the ways that
cultural values and standards shape the use of both technology and literacy, as well as the
ways in which the use of technology and literacy help to mold and (re)shape cultural
values and standards. The proliferation of literacy during the Renaissance, for instance,
not only demonstrates the relative success of governments and merchants to use literate
technology for their own practical purposes, but also demonstrates the ways in which the
proliferation of literate material reshaped how people managed information. Prior to the
advent of the printing press, for instance, medieval book indexes primarily mirrored the
practices of scribal culture and were, “for the most part, idiosyncratically arranged,
designed to help a given custodian find his way to the books” he kept in cupboards, desks
or special chambers (Eisenstein 64). In fact, the medieval scribe organized his indexes in
whatever manner appropriate for his own collection of medieval knowledge (65). Long
index lists were rarely replicated, and therefore not standardized, because the efforts
expended on scribal reproduction far outweighed the benefits for a small medieval library
collection. In this sense, shelf lists were created to serve as a guide for a librarian to
quickly retrieve volumes and manuscripts from his collection. After the advent of the
printing press, however, "shelf lists were supplemented by sales catalogues" which were targeted at consumers not collectors (Eisenstein 91).

After the advent of the printing press, the sheer volume of books supplied to medieval booksellers and library custodians was unprecedented and, consequently, disrupted early medieval indexing practice. The consumer, religious and intellectual drive for knowledge worked in tandem with the capitalist market to fuel an outpouring of both religious and ancient texts. As such, indexing according to a sales list became a more profitable choice because the new book market was, essentially, created around consumption. To maximize profits, booksellers needed to compete with each other, which meant that, in order to appeal to buyers, booksellers needed shelves to exhibit “more clear and coherent arrangements” (Eisenstein 65).

As inventories grew, it became increasingly important to classify books in such a way that allowed librarians and booksellers to easily locate the books on their shelves. As a result, books started to be arranged according to a systematic scheme. Each book had to be defined according to its main subject (despite the diversity of content) in order to be placed somewhere on the shelf. Clay Shirky describes this process as “ontological classification” (Shirky). Ontological classification is the process of “organizing a set of entities into groups, based on their essences and possible relations” (Shirky). Determining the essence of a book was crucial step in placing a book into a systematic classification scheme. With a rapid increase in book production and a growing capitalist society, the need to manage the outpour of printed material led to the evolution of sophisticated classification schemes. The main idea behind that advent of large-scale
classification systems was to provide a means for organizing, locating and storing large quantities of physical objects that otherwise could not be stored in the human mind (Shirky).

I outline this move from early manuscript-based classification systems to book-based classification systems to make an important point about the nature of literate materials in “advancing” Western thought. Surely the invention, incorporation, and dissemination of literate technology were a part of the cultural changes during medieval and Renaissance Western culture, but we should not associate such changes with advanced cognition. Rather, we should associate changes in cognition with changes in cultural practice (such as, for instance, new ways of thinking about how to manage and control information due to an unprecedented increase in book production). As the changes in indexing practices suggest, for instance, the new ways of thinking that derived from the proliferation of print-based materials were more likely the result of a capitalist economy (which was responsible for driving book sales), the need to manage large volumes of literate material (which altered classification practices), and the use of literate material to reify certain practices for later use (contracts and records). This perspective demands that we look at the influence of literacy, not as though the written mode changed practice, but as though practice shaped the uses and meaning of the written mode.

Reading and writing practices during the Renaissance are far more complicated than what I have briefly presented here; however, this analysis provides a somewhat general idea not only about the uses of literacy during the Renaissance, but also the political and economic work that helped to spread the reading and writing
practices. A trade-based economy, for example, provided an environment that both fueled the desire of booksellers to make profits and encouraged businessmen to keep standardized records of business transactions and contracts. Also, the advent of the printing press enabled fast dissemination of ideas. The results of these changes are somewhat apparent—the use of business documents gave institutions more authority over contracts, business records and other financial matters, while the printing press was an important tool for spreading ideas, propaganda and communicating a ‘fixed,’ uniform message to the masses.

What this analysis demonstrates is that the use of literacy is shaped through social practice. The value that a social group places on the ability to read and write is apparent in the emphasis that the group places on the teaching and acquisition of literate skills. As such, it is through all levels of education (informally, formally or through apprenticeship) that we learn the standards and practices of our culture’s written communication. In other words, the importance of literacy and our ability to use literate technology depends on the practices of our social group or culture. That is, we learn the ways of thinking about literacy through the activities of a social group—thus, the advantages of alphabetic literacy and literate technology are determined by the practices of a given community. This is not to suggest nor underestimate the advantages and value of literacy and literate technology (as this chapter demonstrates, literate technology has been highly important in the physical shaping and proliferation of dominant ways of thought), but that such advantages must always be accompanied by the recognition that literacy is a part of and shaped by practice.
In the next chapter, I will analyze Gunther Kress’ theory of multimodality to demonstrate the relative dangers of not recognizing that literacy is a part of and shaped through social practice. By not looking at the historical and systematic similarities between the proliferation of various literate technologies, Kress’ theory suggests that literacy and technology are important in the development of human cognitive and affective potential.
CHAPTER III

THE “AFFORDANCES” OF MULTIMODALITY:
AN ANALYSIS OF GUN ther KRESS’ SOCIAL SEMIOTIC THEORY

In chapter two, I looked historically at the proliferation of various literate technologies (the manuscript, the printing press and the Internet) to suggest that the advent and spread of alphabetic literacy in the medieval and Renaissance periods is systematically similar to the advent and spread of Internet technology (and ‘literacy’) in the 21st century. Through that similarity, I argue, we are able to recognize the importance of social and cultural practices in determining the material shape, use and purpose of literacy. Based on the conclusions of chapter two, this chapter questions the validity of the current theoretical scholarship on multimodality. Using Gunther Kress as the exemplar, I deconstruct the idea that the Internet enables new forms of communication potential through multimodal literacy. This chapter is an analysis of Gunther Kress’ theory of multimodality—a theory that, I suggest, views the proliferation and advantages of Internet technology out of historical context.

According to Gunther Kress, the change in literate technology from a page-based medium to screen-based medium is “vast enough to warrant the term ‘revolution’, of two kinds” (Kress, Gains and Losses 6). For Kress, the 21st century communication
revolution is recognizable through the proliferation of digital media, which has resulted in a fundamental shift in the dominant modes of communication (from the centrality of writing to the centrality of the image) and the primary method through which those modes are transmitted (media). Kress argues that these changes have revolutionized not only the ways in which we make meaning with and derive meaning from texts, but the very nature of texts themselves. In consequence of these textual changes, Kress suggests that we will see fundamental changes in “human, cognitive/affective, cultural and bodily engagement with the world, and [in] forms and shapes of knowledge” (“Literacy” 1). As such, I analyze Kress’ theory of multimodality with a critical eye toward the concepts he uses as the foundation of his theory—concepts of which I argue are derived from Ferdinand de Saussure’s theory of linguistic signs.

To start, it is most appropriate to acknowledge the limits of my analysis. First and foremost, there is a salient tension between the claim that I will make (that Kress’ theory is a theory of mind) and the claim that Kress makes (that his theory is a “social” theory). I acknowledge this tension—in fact, I too (at times) find myself at odds with my own antagonism toward Kress’ theory. For instance, even in moments of the text when I disagree with Kress’ theory most, Kress instantly reminds me that meaning “has to be shaped to its social environment” (“Literacy” 39), therefore making traces of the theory of mind difficult to spot. In his shorter publications (such as book chapters and articles), Kress always prefaches his argument for the benefits of multimodal composition with sentences rich in key phrases valued by teachers and scholars of writing (which will be
covered in more detail in chapter 4). For instance, he states, “The technologies of representation and those of communication and/or dissemination are everywhere bound up with the larger, wider changes in the (global) economy, in social and political changes, and in accompanying ethnic and cultural change” (“Gains and Losses” 6); and, in a co-authored publication with Jeff Bezemer, he notes, “Our specific focus…is on writing within a broader interest in relation between social environments and representation” (“Writing in Multimodal Texts” 166). These claims embody the ideological values of theories of literacy and composition set out by prominent theorists such as Brian Street, Paul Prior, and Carolyn Miller, thus setting the tone of the argument in a chord that rings loud and strong within composition studies. As such, I will point to specific moments in Kress’ texts where I see Saussure’s theory of linguistic signs emerge (and thereby undermine Kress’ attempt to create a social theory).

In this chapter, I look at three specific aspects of Gunther Kress’ theory of multimodality. First, Kress’ theory of multimodality is a theory strongly bound to linguistic theory, despite his attempt to move it outside of that tradition. Specifically, Kress’ theory relies most prominently on Ferdinand de Saussure’s linguistic theory of signs. Second, Kress’ use of the word “affordances” in relation to ‘mode’ is (both explicitly and implicitly) tied to the idea that there are cognitive “benefits” to multimodal composition. In other words, Kress’ use of the concept affordance in relation to mode situates multimodality as a theory of mind. And, third, Kress’ ambiguous use of the word ‘social,’ I suggest, is merely superficial.

A Multimodal Theory of Signs
The foundation of Kress’ multimodal theory has been most clearly articulated in *Literacy in the New Media Age* (2003) and *Multimodality: A social semiotic approach to contemporary communication* (2010). In the seven-year span between the two publications not much has changed in terms of Kress’ theoretical argument—in fact, Kress uses a great number of the same examples in both publications. The most noteworthy change between the two publications is Kress’ replacement of the concept “literacy” with the concept “social semiotics.” In a survey of Kress’ published work between 1998 and 2010, for example, there are six publications that address the “social” and “conceptual” aspects of his multimodal theory, but only two instances (noted above) where he articulates the foundational aspects of his theory. As a result, concepts (such as affordances, modes, logics and aptness) are in the foreground while the theoretical position (that is, the linguistic foundation of the theory) is in the background. I suggest that the theoretical concepts that have more or less derived from Kress’ theory are theoretically similar to Saussure’s theory of mind. In other words, Kress’ movement from a focus on “literacy” (in his 2003 publication) to a focus on “social semiotics” (in his 2010 publication) isn’t simply a shift in how he perceives reading and writing practices in light of new media technology, but rather a manifestation of a larger, more intricate theory that suggests that a “new” focus on multimodality will offer increased cognitive and affective potentials for culture at large.

However, before I discuss the foundation of Kress’ theory in relation to theories of mind, I will first articulate what I see as the foundation of his theory. Kress’ theory of multimodality relies most prominently on two principle characteristics of the
linguistic sign outlined by Ferdinand de Saussure in “Nature of the Linguistic Sign.” Saussure argues that linguistic sign is the unity between “a concept and a sound-image”—that is, the signified and the signifier, respectively (“Nature of the Linguistic Sign 842). The unification of these two entities—the concept and the sound-image—occurs psychologically “in the brain by an associative bond” (842). On the one hand, a concept (which Saussure terms as the “signified”) is the more abstract of the two entities. On the other hand, a sound-image (which Saussure terms as the “signifier”) is the more “material” of the two elements in that the signifier is the “psychological imprint” obtained from the outside world (842).

The linguistic sign, according to Saussure, embodies two basic principal characteristics. First, Saussure posits that the relationship between the signifier and the signified is arbitrary and “unmotivated,” meaning that “once [a sign] has become established in the linguistic community” an “individual does not have the power to change” it (843). For example, the relationship between the signifier (“tree”) and signified (tree) is arbitrary and unmotivated because our choice to use the word “tree” to mean tree is largely (if not solely) dictated by its conventional use within the English speaking linguistic community. The second principle suggests that the linguistic signifier is linear in nature. Saussure argues, for instance, that unlike “visual signifiers…which can offer simultaneous visual groupings in several dimensions, auditory signifiers have at their command only the dimension of time,” a feature which is most apparent in the written form (844). For Saussure, in other words, language is not just a naming process such that our brain signifies a multitude of signs, but rather a chain or grouping of signs
that, by their associative or syntagmatic relationships, impact the meaning value of one another in a systematic fashion (“Binary Oppositions 850). To reiterate, these relationships—both the psychological unity of the signifier and signified into the sign and the associative and syntagmatic relations between various signs—occur in the brain and are therefore part of a cognitive meaning making process.

In response to Saussure’s conception of the sign / signifier / signified relationship, Kress makes two moves to dispute Saussure’s theory. First, Kress argues against the idea that the relationship between the signifier and signified is arbitrary and, instead, argues that the relationship is always “motivated.” Secondly, Kress attempts to extend Saussure’s second principle of the sign (that is, that signifier is linear in nature) to argue about the nature of what he is calling multimodal texts. Before fully moving on to outline Kress’ theory of signs, however, we must take a moment to consider Kress’ interpretation of Saussure’s theory of linguistic signs. He articulates his interpretation as such:

In the example usually quoted, Saussure said that even though the object in the world referred to by the word tree in English or arbre in French is the same object, the sound-forms which represent this same object in the two languages are very different, proving that the relation of form and meaning was an arbitrary one. This embodies a fundamental error, a confusion which has gone unrecognized by and large, and endlessly repeated. It is a mistake about levels and forms: the level of the signified tree—the meaning—is matched by the level at which the signifier is lexical form—the word: not phonetic or phonological form as Saussure is said to have stated. In Saussure’s formulation the level of meaning is mismatched with the level of sound; meaning is thought to be realized in sound. (Kress, “Literacy in the New Media Age 41; emphasis in original)

It is unclear in the previous quotation (and elsewhere throughout the text) whether Kress is referring to his own interpretation of Saussure’s theory or whether he is relying on the
interpretation of other scholars—he does note in the quotation above that “Saussure is said to have stated,” thus implying that he is not directly taking responsibility for this position. Nonetheless, Kress uses this position as the starting point of his theory, so it is essential to both his argument against Saussure and the development of his multimodal theory.

First, note that Kress has changed the words that Saussure uses to define signifier from sound-image to sound-form. I suspect that this change in wording has to do with Kress’ own theoretical goals, which primarily rely on the word “image” as a fundamental concept. As such, Kress’ replacement of the concept sound-image for sound-form may be a strategic move to deter the reader from associating Saussure’s theory with his own; however, regardless of his intent, this move holds deep theoretical consequences. For example, for Saussure, the term sound-image describes not the material manifestation of the signified concept, but rather the mental imprint of the concept in the brain. In fact, Saussure clearly states, “[A sound-image] is not the material sound, a purely physical thing, but the psychological imprint of the sound, the impression that it makes on our senses (“Nature of the Linguistic Sign” 842). The sound-image, then, is the psychological impression “independent of any actualization in speech” (Riedlinger 66). The word sound-form, in contrast, implies that the materialization of the sign is only articulated in the form of sound.

Kress’ use of the term sound-form leads him to largely misinterpret Saussure’s theory of the linguistic sign. Consider, for example, the following excerpt from the above quotation: “In Saussure’s formulation the level of meaning is mismatched with the level
of sound; meaning is thought to be realized in sound.” In this sentence, Kress is arguing that Saussure suggests that meaning is realized in sound; however, for Saussure, meaning is realized within a language system in which a single sign is “the counterpart of the other signs of language” (“Binary Oppositions” 845). Meaning, then, depends upon the location of the sign within the system it is used—as such, signs receive a “value” based on their environment. The word “environment” here means the relationship between signs within a system, not “social environment,” as meaning making for Saussure is a cognitive process. The most important thing to note, then, is that for Saussure meaning making is a cognitive process in which the sign is an inwardly received concept (signified) with a psychological imprint (signifier) that can be, but does not have to be, articulated as sound (or writing). For Saussure, then, the relationship between the signifier and signified is arbitrary insomuch as there is no associated natural meaning between the psychological process and the signified verbal state of the word. To state otherwise, meaning is processed internally and expressed as sound arbitrarily according to social convention.

The location of meaning making (that is, whether meaning making is a cognitive or social construct) is the vital point that we must consider. Kress argues that Saussure’s linguistic theory ‘limits meaning making potential’ because meaning is only articulated through sound—that is, in other words, through language. However, with an accurate reading of Saussure, meaning can be articulated in communication modes other than sound because, as we discussed, the signifier (sound-image) is not realized in sound, but rather it is merely an imprint on the psyche. By simply extending Saussure’s concept
of signs to encompass images and motion—which is what I argue Kress does—then, the problem that Kress sees as a result of the “dominance of writing” (such as, limits to meaning making potential) will altogether disappear. In other words, for Kress, by simply “motivating” the relationship between the signifier and signified, mode selection becomes intentional rather than ‘arbitrary.’ According to Kress, the relationship between the signifier and signified is always ‘motivated’ by the choice of the sign-maker to use the most “apt” signifier “for expressing that which is to be signified” (42). In other words, signs (or “texts” in our case) are always designed by employing the modes (signifiers) most apt for portraying meaning (signified).

The problem (in my mind) is not the ‘motivation’ Kress wants to create between meaning and the use of modes—any such motivation would simply, as I suggested above, result in an extended use of Saussure’s theory—but rather the problem is the location of meaning making. Like Saussure, Kress’ theory maintains the idea that meaning construction is situated cognitively between a text and a person. Regardless of how many times Kress claims that meaning making is a social process, in his model meaning is nonetheless always the results of a motivated, psychological “fusion” between the signifier and the signified—concepts which denote an inward, cognitive process. Rather than situating meaning in activity and practice, then, Kress merely extends the possibility of mode selection from the Saussurean focus on language to a focus on multimodality.

Kress’ treatment of meaning making as a cognitive process is apparent in his articulation of communication processes. For Kress, communication is a two-stage
process—the first stage is dependent upon the interest of the sign-maker (rhetor) and the second stage is dependent upon the interpreter and his or her own interests and engagement with the sign (Kress, “Multimodality” 36). Kress, for example, suggests that the “inner transformations” of inwardly received signs (reading/viewing) into outwardly articulated signs (composing/curating) is both the process of learning and the process of new sign making. This process, Kress argues, is how semiotic change (especially in terms of modality) “always reflects and tracks the values, structures and meaning of the social and cultural world of the meaning-maker and of the socio-cultural group in which they are” (40). Meaning is largely constructed, then, in a systematic cycle of interpreting the signs of others and reproducing new signs according to one’s individual intent. Consequently, meaning is stored within the semiotic resource(s) of the text and only realized during the process of interpretation and (re)production (Kress, “Multimodality” 36), suggesting that (during interpretation) texts are ‘freeze-framed’ outside of activity ancillary to the text’s immediate, material design. There are, however, a number of places where Kress suggests that texts are ‘social’ (Kress, “Literacy” 84); however, this is the ambiguity I am pointing to between the foundation of his theory and the social framework he attempts to create.

Let us consider the work of the sign-maker in the first stage of the communication process—and the concepts that derive from that process—in further detail. According to Kress, the sign-maker starts the communication process by making a sign-complex. For Kress, a sign-complex refers to any full production of a message, such as a written text, a digital text, a museum exhibit, or any communication act that prompts
and/or enables response. The production of the sign-complex is “dominated” by the sign-maker’s own interest, his “sense of the audience’s characteristics” and his intent on creating and disseminating a “message” (Kress, “Multimodality” 36-37). The composition of a sign-complex, Kress argues, entails a process where “signs are made—not used—by a sign-maker who brings meaning into an apt conjunction with a form, a selection/choice shaped by the sign-maker’s interest” (62). As we will see in the following example, the keywords here are apt and interest.

To illustrate his point, Kress argues that if he purchased a plant (a ficus) about which he knew nothing, he would have to make a choice of how to signify that plant—that is, he would have to decide what to call it. Kress argues that the issue would not be a question of what sound to use (as he suggests Saussure would argue), but a question of what “lexical entity will serve as the most apt signifier” (66). The decision Kress makes to use the signifier tree instead of the signifier bush for this “no-name plant” suggests, in his mind, that signification is not automatic, and therefore motivated. In that case, he argues that the choice to use the signifier tree is “socially motivated and individually enacted as apt for me” (67). Aptness, then, suggests that naming conventions only apply insomuch as they adhere strictly to individual occasion and use.

As discussed before, Kress is misapplying Saussure’s notion of meaning and sound in order to make a larger point about the aptness of modes. For example, if Kress can ‘prove’ that the linguistic sign follows rules of aptness then he can further extend the principle to other modes as well. However, as we see in “Binary Oppositions,” Saussure addresses this very issue in terms of “associative relations” (851). Saussure argues, for
instance, that “A word can always evoke everything that can be associated with it in one way or another,” (851) thereby suggesting that the relationship between an oak tree, a ficus and a red bud shrub are associative—which further suggests that the terms bush and shrub are associative relations of the term tree. For Saussure, then, the choice to use the term tree, bush or shrub is a mental process in which the “value” of the term is juxtaposed with other terms in the associative group and used based on the circumstances of the occasion (851). The point, however, is not to defend Saussure’s theoretical position, but to suggest that the term apt, as applied by Kress in this context, does nothing more than restate Saussure’s concept of associative relations. The theoretical problem, then, is that Kress’ renaming of Saussure’s “associative relations” to “apt, motivated signs” does not undo (nor address) the social issues that arise when the location of meaning making is invariably tied between a ‘text’ (or any mode or form of communication) and advanced cognitive processes.

Before I move on to Kress’ second stage of communication, I will briefly pause to discuss the relationship between Kress’ idea of aptness and genre. Because Kress does pay close attention to the role of genres in both of his major publications, I should clarify Kress’ position on genre. Kress argues, “Genre offers the means for contextualizing/locating/situating…meaning in social spaces and at the time provides an account of the social characteristics of those spaces” (“Multimodality” 116). In other words, for Kress, genres give shape to social interactions. I, to be clear, agree with Kress’ articulation of the concept genre—especially his recognition that genres are “staged, goal-oriented social processes” (Kress, “Literacy”). However, the importance of genres
in organizing and coordinating activity becomes undermined by Kress’ use of the term *mode* through the use of *aptness*. Kress suggests that *modes* are responsible for “realizing’, ‘materializing’ meanings” (114). Although this is true—writing *does* bring shape (literally) to words and images do materialize moments frozen in time—the focus Kress places on the *aptness* of modes confuses the site of meaning production (that is, the focus on *aptness* and *modes* displaces *genres* as coordinated sites of meaning production with a new focus on *modes* as sites of meaning production). Modes, Kress suggest, offer “meaning-laden means for making the meanings that we wish or need to make material and tangible” (114). By locating the expression of ‘meaning’ within modes (and therefore separately from cultural practice), Kress is merely extending Saussure’s concept of the sign to include multiple modes. The point, then, is that by placing too much emphasis on the importance of modes, Kress’ theory limits textual analysis to sites of display (that is, analysis is possible only through close attention to how modes are used to construct meaning within media). When scholars use Kress’ focus on the *aptness* of modes for textual analysis, the limits of multimodal analysis becomes clear (which I will discuss in chapter 4)—however, for now, I want to clarify that I am not critiquing Kress’ articulation of genre, rather I am critiquing Kress’ emphasis on modes, which comes at the expense of *genres* and their role in constructing meaning through systematic activity.

Kress’ second stage of communication is perhaps the most important stage to consider in terms of the theoretical position of Kress’ theory. According to Kress, the second stage of communication starts with an interpreter whose interest, attention and engagement with the sign-complex initiates the interpretation process. Without an
interpreter, communication (and therefore meaning making) cannot occur. Once engagement has occurred, the process of “reading” the sign-complex takes place. By “reading” Kress does not only mean reading in the tradition linguistic sense, but reading as a ‘design process.’ Unlike traditional texts—which according to Kress were “the embodiment of a unidirectional, hierarchical, dyadic relationship in which power rested with the author” (“Multimodality” 37)—contemporary texts (both print and digital) are designed with the interests of the audience in the forefront (38). As such, the reading path people choose in contemporary digital and print texts is, for Kress, undetermined and shaped only through engagement between the interpreter and the sign-complex. In other words, a sign-complex is designed to prompt engagement, but it is the interpreter’s interest that creates meaning and structure. As the reader engages the text, he or she “selects” elements of the text (that is, the elements that align with the interpreter’s interest) and frames them within the social context in which he or she is active in that moment. I want to highlight that the key moment of interpretation by which Kress suggests meaning is created is—as we saw with Saussure’s sound-image—a psychological process. In this sense, Kress suggests that the sign-complex is taken into the brain where the interpreter creates meaning cognitively by transforming the inwardly received sign into a ‘new’ sign-complex. Take, for example, the following quote:

…meaning ‘is taken’ at the moment when the ‘taken meaning’ is integrated into the existing totality of all meaning in the brain…In writing, meaning is made at the moment when ‘that which is to be meant’ is fused with ‘that which can mean it’, that is, when a meaning is matched with a form/signifier by the writer, in the most apt fashion possible” (Kress, “Literacy” 39).
The process of meaning making for Kress, then, is that of “inwardly interpretation” and “outwardly articulation” of knowledge (40).

Kress argues that the moment most crucial to the meaning making process (that is, the moment when meaning making occurs) is when the interpreter transforms the received sign-complex into a new sign. This outward articulation of a sign complex is called “transformation.” In transformation, the received sign-complex is transformed according to the interpreter’s intentions and reproduced into a “new” sign using the modes most apt to express the interpreter’s meaning making intentions. For this reason, Kress argues that it is through transformation that meaning is always new and shaped by the social and cultural values of a group. However, according to this model, meaning making is social only insomuch as a two-stage communication process passes knowledge “socially” between a sign-maker and interpreter. Despite Kress’ acknowledgement of genres as social processes, we can see that meaning is (for Kress) focused on the interpreter’s social frame and intentions—in fact, Kress goes as far to suggest that readers shape the order of material according to their own interest; for instance, he suggests, “Formally, an author, as in the initial maker of the text/message, had provided [reading path] order; now that work is shaped by the reader’s interest (“Multimodality” 38). As such, Kress’ communication model ignores the ways in which reading paths are (despite the ‘new’ appearance of texts through digital media) largely shaped by political, economic, and cultural conventions. The important point, however, is that by elevating mode potentials and interpreter/reader intention over the role and function of generic
convention, Kress does not consider the importance of economic, political and cultural forces on reading paths and human activity (on- or off-line, through any mode).

**Mode Logic and Affordance**

In the previous section, I suggested that the foundation of Kress’ multimodal theory is essentially an extension of Saussure’s linguistic theory of signs. Now I will turn to what Kress terms the “logics” and “affordances” of modes to further consider the consequences of Kress’ conceptual framework. Before we can discuss the consequences of the theory, however, I must address what I see as Kress’ theoretical position on the ideas of mode “logics” and “affordances” as well as the definitions in and of themselves. The basis for Kress’ theory of mode logic is straight from Saussure’s second principle of the linguistic sign, which posits that “visual signifiers...can offer simultaneous visual groupings in several dimensions, [while] auditory signifiers have at their command only the dimension of time” (“The Linguistic Sign” 844). In other words, Saussure argues that linguistic signs are always expressed according to the sequence of time (in a linear, syntactic fashion), while visual signs are expressed according to spatial orientation (in a simultaneous, multi-dimensional fashion).

Like Saussure, Kress argues that visual and linguistic signifying modes are oriented differently—Kress calls these distinct orientations “logics.” For example, Kress argues that the “visual...is a spatially and simultaneously organized mode” while language represents “sequences of actions, sequences of events, and then their arrangements” (“Visual & Verbal 68-69). As such, Kress suggests that the “logics” of modes—that is, the logic of writing as temporal and the logic of the image as spatial—
greatly impact meaning-making potential because each mode “affords” specific communication potentials. Although he argues that visual modes have been a part of communication for centuries, Kress suggests that the visibility and importance of visual modes is most salient in the 21st century because “contemporary technologies of page or text production make it easy to combine different modes of representation” (56).

My issue, however, is not that Kress argues that modes are governed by different logics—I think that we can see in any number of cases that writing does serve some purposes and activities differently than images and visa versa—rather, my issue is (specifically) Kress’ use of the word “affordances.” By suggesting that modes have distinct affordances, Kress creates a level of exclusivity between the logics of modes, which can have severe ideological and hegemonic consequences. Brian Street, for instance, demonstrates that the level of exclusivity that Great Divide theorists created between oral and written practice only worked to privilege elite and academic ways of thinking at the expense (and ruin) of the traditions and practices of other cultures (2-3).

Before I address Kress’ treatment of modes and their distinct affordances, however, let us stop and consider the word “affordance” and its theoretical use.

First and foremost, I want to be clear about what the word “affordance” means. According to James Gibson, author of The Ecological Approach to Visual Perception and the first scholar to develop a theory of affordances, affordances “are what [the environment] offers the animal, what it provides or furnishes, either for good or ill (127; emphasis in original). An affordance, then, is the perceived outcome of human activity in relation to a specific medium (ground, air, water) or object (detached or
attached to the environment medium, man-made or natural). For our consideration, however, we will only discuss the affordances of objects. As such, it is important to note that objects in and of themselves do not have *affordances*, because the affordance of any given object varies from circumstance to circumstance and is always perceived in relation to human activity (139). Objects afford particular types of human behavior, but do not act as causes for that behavior (133). Further, the affordance of an object is in no way related to what it is “called”—such that “You do not have to classify and label things in order to see what they afford” (134). A stick in the wilderness, for example, might have the perceived affordance of firewood, while that same stick in the middle of the city would have a completely different perceived affordance (perhaps that of a bat in a street game of baseball). What is most vital in terms of our interpretation, however, is that affordances are always perceived and can only be perceived in direct relation to the object (tool or otherwise) and its use in activity.

Let us now consider what Gibson calls “detached objects”—which consists of tools such as pens, paper, computers and cameras—to understand how Kress’ use of the word “affordance” suggests that modes (such as writing) have cognitive affordances. As we have already discussed, Kress’ theory most heavily relies on the idea that modes (such as writing, images, movement) have particular and distinct affordances for communication and human potential. For example, Kress argues, “Semiotic modes have different potentials, so that they afford different kinds of possibilities of development: bodily, cognitively, affectively” (“Visual and Verbal” 75). Kress, here, is suggesting that “modes” have affordances. I suggest, however, that it is impossible for a mode to have an
affordance. There is no affordance of “writing.” There is no affordance of “image.” For example, a pen affords particular types of behavior, which is often perceived as ‘writing.’ In other words, as a detached object a pen affords writing and, therefore, writing is a perceived affordance of a pen. This suggests that it is through the use of a pen that we can perceive human activity. This is equally true for other modes such as speech, images, sound and movement—these are perceived affordances of particular types of activity (with or without objects).

To provide a clearer illustration, for example, take the perceived affordance of a cliff—falling. The affordance of a cliff—that is, what a cliff offers to a human—is the ability to “fall.” Under the conditions where human activity (say, moving too close to the edge of a steep cliff with loose footing) results in the “falling” from a cliff, the perceived affordance of the cliff is falling. Falling then is comparable to writing. They are both perceived results of human activity in relation to the environment. As such, saying that a mode affords a particular type of human activity is like saying that falling affords a steep cliff. Falling is the perceived effect of a human's activity (walking off a cliff) in as much as writing is a perceived effect of a human’s activity (communication).

This is, in no way, to suggest that writing (or any other mode for that matter) is neutral. The use of writing, for example, has facilitated many types of human behavior (such as record keeping) that has had many benefits (good and bad). As Gibson suggests, "when vocalization becomes speech and manufactured displays become images, pictures, and writing, the affordances of human behavior are staggering" (137). We should not, however, be confused between the affordances of human behavior and the perception of
that behavior. So, to reiterate the point, a pen as an object has (under the correct conditions) the affordance of writing, but writing cannot in and of itself have an affordance. As such, certain human activities may privilege the use a particular mode, which consequently makes the use of that mode more salient within cultural practice. We can see, for example, that the proliferation of literate activity during the Renaissance was strikingly (or perhaps coincidently) accompanied by a shift from a “land-based” to a “trade-based” economy. We may be tempted to argue, as many Great Divide theorists have, that the proliferation of literacy caused fundamental shifts in the economy (and, for that matter, science and cognition); however, if we apply the theory of affordances, this line of thinking is impossible. For example, we can argue that during the Renaissance a pen and paper afforded the skill of writing, but we would be foolish to argue that writing afforded a "trade-based economy" or "property contracts" or "accounting records." What is clear is that human activity during the Renaissance afforded a "trade-based economy" with writing (and images) being how we can perceive (over six centuries later) that activity.

What seems to be most at stake when we discuss modes in terms of their “affordances” is our perception of knowledge, and, therefore, how we teach writing. If we are willing to make the argument (or even acknowledge the argument as truth) that modes of communication “afford,” as Kress argues, distinct potentials for communication and representation, then we are fully disregarding the substantial impact of human activity in the creation and use of literate materials (such as books, websites, lists, and contracts). Such an understanding of the “affordances” of modes invites the teaching of
communication to focus on texts as though they were ‘freeze-framed’ and isolated from practice—that is, attention to mode affordance only looks at how modes are working in particular texts without attention to the activity surrounding that text (I will discuss this in more detail in chapter 4). In other words, if we look at literate materials in their systematic use, we will begin to notice that any use of a communication mode is tied to how meaning is perceived within particular cultural practices and cannot be determined through the individual sign-maker’s intentions.

Gunther Kress and Mode Affordance

Gunther Kress uses the term “affordance” in several ways, which each warrant individual attention. As I have discussed, Kress uses the term affordance to suggest that modes of communication have distinct meaning making potentials. Kress uses the word affordance in relation to technology (that is, the affordances of technology) and in relation to the “screen” (that is, the affordance of the computer screen as a site of display). In this section, then, I will analyze Kress’ use of the word affordance in relation to the computer screen, technology in general, and modes of representation.

Let us first consider what Kress refers to as the affordance of “the screen.” For Kress, the screen denotes the site of display in relation to computer technology—this is, for instance, in contrast to what he calls “the page,” which is the site of display most commonly thought of (at least in Kress’ mind) in terms of books. The important thing to note is that Kress suggests that the affordance of the screen is multimodality—as such, from Kress’ perspective, the affordance of the screen has important pedagogical consequences. I will visit the idea of pedagogical consequences at the end of this section,
but for now I want to explore the issue of affordances in relation to the screen. Take the following quote for example:

The affordances and the organizations of the screen are coming to (re)shape the organisation of the page…Writing on the page is not immune in any way from this move, even though the writing of the elite using the older media will be more resistant to the move than writing elsewhere. (“Literacy” 6)

To be clear, in Kress’ analysis the affordance of the screen is multimodality, which (in consequence of spatial representation) is further reflected in the reshaping of the page. Changes in mode logic (to Kress) resituate writing as a representational mode by suggesting that the “affordance” of writing as an organizing, temporal mode no longer dominates communication. Rather, for Kress, (most) all communication is now subject to the logic of the screen (that is, the logic of the image). Kress argues, for instance, “It is possible to see writing once again moving back in the direction of visuality…organised and structured through the logics of the visual” (7). What is clear is that, although Kress seems to be talking about the affordances of a screen, he is actually talking about what we earlier identified as the “affordance” of modes. For Kress, then, the affordance of the screen is its spatial logic, which changes how information is presented on the page and the screen. In other words, the shift from the logic of writing (temporal) to the logic of the image (spatial), for Kress, suggests that the “affordance” of a computer screen is its ability to display visual and spatial arrangements.

According to our analysis of the term “affordance,” the idea that a computer screen has an affordance is acceptable. A computer screen would be considered a detached object and it does provide use in human activity. However, the affordances of a
computer screen are subjective (perhaps even more subjective than a pen and paper), such that its use in human activity is extremely diverse and largely dependent not only upon what it is being used to accomplish, but (perhaps more importantly) the economic and cultural position of the user (which would not only determine the size of the screen relative to cost, but also the software and hardware available to that user, the user’s access to the internet and the user’s knowledge and/or training in using the software and hardware). In other words, the modes we see on the screen are not (and cannot be) an affordance of the screen. Rather, I would suggest, the screen (as it is used with a CPU, keyboard, software, Internet access, digital cameras, cables for uploading and downloading images and sound, and particular types of human activity) affords images and writing, which (as we have said) are perceived affordances of communication. In other words, what is displayed on the screen reflects human communication, but the modes by which that activity is displayed should not indicate the potentials of that activity. We might more accurately look at the screen as a lens and see that computer technology affords (on a global scale) a widened perception of human activity—the impacts of this wider perception will tell us more about literate activity (its diversity, its homogenizing effects on human behavior, its systematic and integral role in activity) then will the attention that Kress pays to multimodality.

Kress’ insistence that the affordance of technology is multimodality has the potential to lead to great consequences for the teaching of writing. Take, for example, the following quotation:
The ease in the use of different modes, a significant aspect of the affordances of the new technologies of information and communication, make the use of multiplicity of modes usual and unremarkable...[as such] naturalized uses of modes will lead to greater specialisation of modes: affordances of modes will become aligned with representational and communicative needs. (5)

From this perspective, we can see that Kress is again suggesting that the affordance of technology is the “specialization of modes”—thus leading back to the discussion above. What is most important to note here, though, is that for Kress the “recent re-emergence of the visual,” has undermined the “cultural and political dominance” of writing (“Visual and Verbal” 60). For instance, Kress believes that “written language has dampened the full development of all kinds of human potentials” (“Visual and Verbal” 75), which suggests why he seeks so strongly to push forward the idea that modes have affordances.

As such, a close and careful look at this strict dichotomy Kress creates between modes is vital for how we use multimodality in education. For instance, Kress’ claim that each mode affords a particular set of semiotic potentials quickly aligns Kress’ theory of multimodality with theorists such as Walter Ong, whose work on the “affordances” of writing helped to set a dichotomy between written and oral practice. For instance, in “Orality, Literacy, and Medieval Textualization” Ong argues:

If writing becomes more widespread, the culture itself, as a whole or in significant parts, can become fully literate. In such cultures writing provides new resources for thought...These resources alter the mental processes of the culture in significant ways. (5-6; emphasis mine)

We can see similar articulations of this idea in the work of Kress. Take, for example, the following quote:

At the moment it is too difficult to know just what the conceptual-cognitive gains or losses are...[but it] seems obvious...that mode is inseparable from cultural and
from social but also—and especially because of its material aspects—from affective and cognitive matters. (Kress, “Literacy” 59).

I am drawing a parallel between Ong and Kress to suggest that the focus Kress places on mode potentials and affordances is quite similar to the attention that people such as Walter Ong and David Olson put on the importance of writing for advanced cognition. For Ong, the mode of writing has the power to “alter the mental processes of the culture in significant ways,” suggesting that it is writing, not cultural practices, that develop cognitive ability. And, although we can recognize in various ways how writing facilitates certain human activities, it is not the ‘mode’ of writing that alters mental processes. Again, this is not to suggest that the use of various modes do not facilitate certain types of activity, but rather that we should not (as Kress and Ong do) assume that the materiality of modes is fundamentally connected to cognitive capabilities. In fact, as Brian Street suggests, any ‘cognitive’ potential of associated with writing (or, in this case, images, sound and movement) would more closely highlight “the ideal standards of [certain] social groups” rather than the actual measurement of advanced cognition (39).

Conclusion

In this chapter, I have suggested that Gunther Kress’ theory of multimodality is a theory of mind, which is articulated through his use and extension of Ferdinand de Saussure’s theory of linguistic signs and his treatment of modes as having distinct ‘affordances.’ In the following chapter, I will demonstrate, by looking at three applications of these ideas, that Kress’ focus on the potentials of modes has deep theoretical consequences for the teaching of writing.
CHAPTER IV

APPLICATIONS OF GUNThER KRESS’
SOCIAL SEMIOTIC THEORY

This chapter looks critically at three polemic applications of Kress’ theory, all of which situate “multimodality” as the primary means for creating and expressing meaning in digital artifacts. I aim to demonstrate the problems—both ideological and practical—that arise through applications of Kress’ theory, specifically when the application is centered on the concept of ‘mode affordance.’ I analyze the work of four new media scholars (Cheryl Ball, Ellen Cushman, Glynda Hull and Mark Nelson) with particular attention to three specific tensions that consistently arise in applications of Kress’ theory: 1) The tension between written and visual modes; 2) The antagonism toward linguistic modes; and, 3) The creation of esoteric, scholarly discourse around multimodality. In the conclusion, I discuss how applications of Kress’ theory of multimodality work against the idea that meaning is shaped through cultural practice.

New Media Scholarship and Mode Potential

The texts that I analyze in this chapter are considered, more or less, New Media Scholarship, so before I move forward I will briefly discuss and define New Media Scholarship. To borrow Cheryl E. Ball’s definition, New Media Scholarship “uses modes other than only written text to form an argument” (404). Based on this definition, we
might say that *New Media Scholarship (NMS)* is synonymous with multimodality; however, *NMS* is distinct from multimodality (although it is multimodal) because it is meant to be taken as serious scholarly work. Ball further differentiates between *NMS* (multimodal academic texts) and *scholarship about New Media* (that is, academic texts that use “print conventions such as written text as the main mode of argument”) (404). As such, my focus in this critique is not on *New Media Scholarship* per se, but on the *scholarship about New Media*.

There are two perspectives about new media and the teaching of writing that are emerging in the fields of composition, rhetoric, and literacy. One perspective—which will not be a focus of this chapter, but nonetheless needs to be recognized—is what I will call the ‘design perspective.’ The concept of design was first defined by the New London Group as the practice of using “media to encourage the development of multimodal designs” (George 18). Gunther Kress and Jeff Bezemer further this definition to include “the practice where modes, media, frames and sites of display on the one hand, and rhetorical purposes, the designer’s interests, and the characteristics of the audience on the other are brought into coherence with each other” (“Writing in Multimodal Texts” 174). Using this definition of design, theorists writing from a ‘design perspective’ primarily focus on how multimodal texts are situated within literate activity. Scholars such as Diana George, Mary Hocks and Jody Shipka, for instance, use multimodality in their composition and rhetoric classrooms, not to teach the distinct potentials of multiple modes, but to demonstrate the ways in which texts are designed and circulated in literate
practice. From this perspective, multimodality is seen as a process by which technology works in cooperation with human activity to facilitate particular communication goals.

Mary Hocks, for instance, complicates the idea that writing is visual by suggesting that “digital writing environments make it difficult to separate words from visuals or privilege one over the other” (629). To Hocks, information technology (such as the Internet) “simply assumes” the use of various modes (631; emphasis in original), suggesting that writers do not necessarily ‘choose’ to use multiple modes, but rather that the use of multiple modes is simply a part of composition and communication activity. Hocks notes that although books or other traditional media are also ‘visual’ modes, issues of “the visual” seem most salient now because composition in digital environments is still fairly new. As such, Hocks suggests that teaching digital writing through a lens of rhetoric teaches students how elements of design work to create structured, rhetorical arguments. As Hocks suggests, we are always already surrounded by visual texts (digital or otherwise) so understanding how authors compose those texts to reach rhetorical ends is, perhaps, central to not only to understanding digital texts, but to producing and distributing them as well.

Scholarship that emphasizes design rather than multimodality is important to understanding the ways in which texts are both composed and circulated. According to Jody Shipka, “Increasing the range of semiotic resources with which students are allowed to work will not, in and of itself, lead to a greater awareness of the ways systems of delivery, reception and circulation shape…the means and modes of production” (278; emphasis in original). This suggests, then, that incorporation of multimodal composition
into writing classrooms has to lend itself to particular goals and purposes. Shipka argues that by teaching what she calls “multimodal tasks”—that is, the engineering of a rhetorical events that (may) employ the use of various media and modes to achieve specific communication goals—students can, through “their efforts to purposefully structure the delivery and reception of that work,” use various modes to gain a “wider, richer repertoire of semiotic resources” (279). The key, however, is that a multimodal task increases “students’ rhetorical, material, and methodological flexibility by requiring them to determine the purposes and contexts of the work they produce” (285-286).

The second perspective—which is the focus of this chapter—is what I will refer to as the ‘mode perspective.’ Mode theorists situate their arguments around the idea that written (monomodal) texts limit meaning-making potential. The primary focus of these scholars is to demonstrate that multimodal composition can be used as a tool for teachers and scholars to ‘dislocate’ the written word as the primary semiotic mode in both academics and culture at large. Ellen Cushman, for instance, argues that the written mode “hinders knowledge making and teaching practices” by privileging letters and text over other modes such as images, sound and motion (66). As such, Cushman suggests that, in order to level the dominance of writing, professors in English studies should “produce multimodal scholarship and create more assignments [that] ask for multimodal products” (65-66). The need to emphasize multimodal composition comes from an increasingly prevalent attitude among teachers and scholars of writing that “schools and universities…are staunchly logocentric, book centered and essay driven” (Hull and
This attitude is the product of a rapid increase in the use of digital technology among students, young adults and professors alike.

The main defining feature of the ‘mode perspective,’ in other words, is an antagonistic tone against writing. Through this perspective, scholars of writing are increasingly making a move to legitimize the use of digital media in place of what they see as traditional writing. I argue, however, that their antagonistic tone against writing teamed with their emphasis on mode potential obscures the focus of their arguments away from the ways that students (already) analyze and produce (multimodal) texts in lived literate practice toward an emphasis on the (imagined) need to teach students (or rather, through scholarship and pedagogy, to propagate the idea) that modes have distinct potentials.

**Application One: The Call**

In “Show, not tell: The value of new media scholarship,” Cheryl Ball calls for the production of more *New Media Scholarship* and for the recognition of *NMS* as an equivalent to traditional, text-based scholarly publications. While I agree with Ball’s call for the recognition of intellectual work produced by scholars using new media as a primary method for distribution, I disagree with her evaluation of the potentials of multimodal, digital texts. From the beginning, Ball creates a sharp dichotomy between what she sees as ‘old media conventions’ and ‘new media conventions.’ She states, for instance, that although we continue to praise the potentials of new media, “[o]ur scholarly conventions remain in the realm of old media,” (Ball 408–409). Although Ball’s observation is true (many scholars do write about the potentials of new media
composition in using primarily print-based media), she does not acknowledge the ways
texts are shaped, not only by the media and modes used, but also by the communicative
goals of the text-maker and community at large. In any number of cases, for example, we
can see the conventions of “old media” working successfully in “new media”
environments—that is, our communication is shaped through our understanding of how
we participate in society, so of course “old media” conventions will play an important
role in shaping communication online. What Ball appears to be calling for, then, is a
*reshaping* of scholarly conventions and academic argument through, what she sees as, the
benefits of multimodality.

To establish what she sees as the benefits of *NMS*, Ball analyzes a new media
text designed by Adrian Miles—a text that, she argues, demonstrates that modes have
distinct meaning-making potentials (Ball 415). Adrian Miles’ text, “Digital
Multiliteracies,”¹ is designed to look like video-editing software. The text is ‘interactive’
in that readers are required to autonomously piece together his argument as though they
were editing a video. Readers, for example, select the clip-segments (image, audio and
text) and place each segment into a timeline. When the video is played, the reader (not
Miles) has created the sequence of the video. My point, however, is not to critique Miles’
work, but to highlight what Cheryl Ball sees as the benefits of modes in Miles’
multimodal text.

Ball argues that the “text clips”—that is, the clips with alphabetic sentences
and paragraphs—help the reader to move through Miles’ argument linearly. And,

although the reader can rearrange the text clips in the viewer-timeline (thus changing the sequence of the argument), “text clips [still] tend to spell out Miles’ argument more specifically and succinctly than audio and still clips do” (Ball 418). The distinct potential of the written mode, in this case, is that it provides the reader with a sense of sequence—that is, writing is used to communicate the main point in an explicit manner. Although I agree with her assessment of how text functions in this particular piece, I would not be so willing to say that the text-clips are the only mode to do the work that Ball suggests is achieved most successfully through writing; audio-clips, for instance, could achieve this same effect. However, Ball suggests that the “audio clips” have more meaning-making potential than the “text clips” because the audio represents “Miles’ voice and the tone with which he delivers these audio-based arguments” (419)—that is, Ball is suggesting that the listener can hear how Miles intended the message to be taken because of the illocutionary force of his utterance (Olson 102). While I agree that aural modes can portray the emotion of the speaker in a way that is not possible through written modes, looking closely at Miles’ text makes me question the distinction Ball tries to make between aural and written modes in this particular example. Miles’ oral delivery, for instance, sounds as though he is reading a written argument out loud, rather than delivering an extemporaneous speech full of emotion and passion. As such, in terms of the structures and tone of the argument, not much is lost between the words written on the page and the oral delivery of those words.

In fact, it is difficult to differentiate between the effectiveness of written and oral modes (in this example) because the composition and delivery of Miles’ speech is
directly shaped through the academic, literate mentality of both the composition and rhetoric discipline and new literacy studies. Take, for instance, the following sentence (read out loud in an audio-clip) where Miles notes, “Collage foregrounds the [unintelligible word] and recontextualized nature that which you are colliding with.” The poor-quality of the audio-clip as well as the highly specialized language of Miles’ argument suggests, to me, that the tone of Miles’ voice is merely ancillary to the delivery of this sentence—that is, the content and form of the argument is more indicative of Miles’ academic, literate practice, as well as the rhetorical purpose (symposium speech) by which Miles’ argument first took shape. In other words, when an argument is composed according to written, academic conventions and read out loud, we have to wonder how to draw a distinction between the ways of interpretation associated with the written text and the ways of interpretation associated with the oral delivery of that text. My assumption is that the distinction is not quite as clear as Ball seems to suggest. This example shows, then, how deeply the literate mentality is woven into the activities (oral and written alike) of multimodal composition. My point is that the conventions of an academic argument remain relatively intact despite the ‘multimodal’ and ‘digital’ delivery by which Miles’ argument is distributed—meaning, in other words, that the ways of thinking associated with an academic discipline are not simply ‘reshaped’ through Internet technology (as Ball seems to suggest), but rather Internet technology merely provides new methods for distribution.

Ball further argues that images play an integral role in the meaning making of Miles’ text. The still clips, she suggests, ask “readers to be *hyperconscious* of the
symposium’s setting and the medium of photography…as a meaning-making strategy” (420; emphasis mine). According to Ball, the still clips give the audience an immediate sense of where the text ‘lives’ by placing it in the context of the actual location that the presentation was delivered. In the context of Miles’ digital text, however, the images do not seem to add the level of “hyperconsciousness” that Ball proposes. For instance, hearing Miles’ delivery of the argument orally (especially hearing him deliver strings of highly esoteric sentences like the one quoted above), a scholar or student familiar with the academic ritual of ‘the symposium’ could probably imagine the atmosphere of the symposium without the added visual element. The possibility to imagine the symposium setting, then, would more likely be associated with the conventions of Miles’ oral delivery, which would be shaped by the exigency of its delivery (the symposium), which would be further shaped by writing and drafting, and so on—in other words, the use and delivery of various modes in Miles’ piece is more closely associated with the activity of composing and presenting a symposium paper than Ball is suggesting. Further, by assuming that the place of delivery (the symposium) is where the text ‘lives,’ Ball ignores the complex activities by which Miles learned, planned, discussed, composed, drafted, edited and, finally, disseminated his work at the symposium.

The work that Ball tries to do in her analysis is undermined by her attention to mode potentials. On the one hand, she is suggesting that the dominance of writing has made it difficult to have New Media Scholarship recognized by the academy. On the other hand, in an attempt to demonstrate the importance of NMS, she undermines her argument by focusing on the “potentials” of modes rather than on how the activity of the
academy is (better) represented through various modes. Because the type of text composed by Adrian Miles is not representative of how the majority of people experience literacy, a focus on the activity of composing a multimodal text might better represent the influence and purposes of multimodality in academic settings. In other words, Ball’s argument develops an antagonism against writing without demonstrating how multimodal texts add to or further academic knowledge.

Application Two: “Digital Storytelling”

Digital storytelling is a pedagogical movement that is appearing most prominently as a teaching strategy at the K-12 levels. The Center for Digital Storytelling (a large, California-based, international organization that promotes digital storytelling through student-focused workshops and teacher training efforts), defines digital storytelling as “A short, first person video-narrative created by combining recorded voice, still and moving images, and music or other sounds.” Digital storytellers use digital media “to document life experience, ideas, or feelings” in a multimodal, narrative style. In this section, I do not intend to critique the digital storytelling effort as it manifests as a K-12 teaching practice; I do, however, use Glynda Hull and Mark Nelson’s theoretical approach to digital storytelling as an exemplar of the problems I see arise from applications of Gunther Kress’ theory of mode affordance.

Like Gunther Kress, Hull and Nelson suggest that each communication mode has, more or less, distinct ‘affordances.’ In their approach, they argue that Gunther Kress’ concept of the affordances of modes is “the most crucial conceptual tool that one must bring to bear in understanding the workings and meaning of multimodal texts” (229). As
such, they suggest that multimodality creates “a different system of signification, one that transcends the collective contribution of its constituent parts” (225). Further, Hull and Nelson argue that digital, multimodal texts create a more complete semiotic message than could have been created prior to digital technology (225-226). Hull and Nelson use a digital text produced during an afterschool program called DUSTY, or “Digital Underground Storytelling for You(th),” as the exemplar of the affordances of multimodal composition (231). To be clear, I am not arguing that Hull and Nelson are wrong about the relative capabilities of various modes to achieve certain types of meaning over others—in any number of cases we can point to the semiotic differences between linguistic and visual modes—rather, I am suggesting that their focus on the affordances of modes dislocates the text from the rhetorical situation in which it is a response.

Hull and Nelson argue that there is “a certain urgency” for multimodal composition, especially in a time when Western society is dominated by the conventions of print (225). As such, they imply that the incorporation of multimodality into literacy studies works to ‘dislocate’ the written word as the primary semiotic mode in academics and culture at large. According to Hull and Nelson, multimodal composition enables certain types of meaning making not possible in only written modes—they argue in regards to digital storytelling, for instance: “the visual nature of digital stories invites authors to situate themselves in places; and furthermore, many of our storytellers made strong identity statements through valences of alignment and distancing in relation to particular locales neighborhoods” (233). The assumption that Hull and Nelson are making about multimodal texts, then, is that multimodality ‘affords’ certain types of
composition (narrative, interpersonal, local) over others (namely, academic) (231). In fact, they even further suggest that digital stories “typically privilege a personal voice and allow participants to draw on popular culture and local knowledge” (231). It is at this point I am in most sharp disagreement with their analysis of digital storytelling. It is not, I suggest, the use of multimodality or digital media that encourages authors to situate themselves in ‘places,’ or to make ‘strong identity statements,’ or to ‘draw on popular culture and local knowledge’—rather, it is the rhetorical situation, the exigent need, or (perhaps) the pedagogical environment that encourages particular types of composition.

In my mind, it is the ideological position of the DUSTY faculty and their digital storytelling curriculum that shapes the digital stories and (even more appropriately) the genre of digital storytelling—that is, through the dialogical interactions between digital storytellers (students) and the teachers and tutors in programs such as DUSTY, the ideologies that guide an (imagined) need for multimedia and literacy education becomes reified into the digital story genre. For instance, in a recount of her experience as a participant-observer during one of DUSTY’s after school programs, Pauline Hathorn describes her method for mentoring students: “learners are encouraged to create their own stories from their own experiences and express them through art, oral history, creative writing, speaking, photographs, music, news clippings, digital video, the Web, graphic design, sound engineering, or animation” (Hathorne 32; emphasis mine). Hathorne further notes that mentors encourage “students to make notes completing the statements, ‘I see...; I smell...; I hear...; and, I taste...’” while they walk through their own neighborhoods (35).
From this perspective, the idea that multimodality shapes the composition of digital stories is questionable. By assuming that *multimodality* enables and encourages students to compose ‘local, narrative-style digital stories,’ Hull and Nelson are completely disregarding the rhetorical and pedagogical situations from which digital stories are produced—that is, the affordances of multimodality are elevated above the influence of the DUSTY faculty and curriculum. I suggest, however, that a focus on multimodality ignores the fact that the digital stories produced in DUSTY are most likely prompted responses to digital storytelling curriculum, not phenomenon of multimodality. From this perspective, it is not multimodality that provides opportunities for particular types of response, but rather it is the activity of being a participant in DUSTY that shapes the types of responses students are likely to produce.

**Application Three: “Technotreason”**

In her article “New Media Scholarship and Teaching: Challenging the Hierarchy of Signs,” Ellen Cushman argues that both the production and teaching of *New Media Scholarship* is an important step in dislocating what she sees as the “systematic problem” of English studies—that is, the valuing of “the interpretation of text above the production of text, image, sound, and motion” (65). Cushman argues that by privileging writing as the dominant mode of production and consumption, English studies have elevated the “text and its interpretation above all other forms of expression” (65). As such, it is through multimodality, Cushman suggests, that all signs are put on the same level, with no one sign being privileged over the other. From this perspective, Cushman suggests that by teaching and producing multimodal texts, scholars can work to
“destabilize” the “hierarchy of signs.” In other words, she suggest that multimodality disrupts the “supremacy of letters, the habits of mind cultivated with this tool (textuality), and the artifacts of knowledge produced and delivered with this tool (print)” (68). Such a strict focus on modes, I suggest in contrast, merely creates esoteric, scholarly discourse around multimodality.

As an example of how multimodality can destabilize writing, Cushman analyzes her own *New Media Scholarship* text, “Technotreason.” In “Technotreason,” Cushman uses music, images and sound to create a short, 1 minute and 54 second video that, she suggests, to an untrained eye may seem artistic. Cushman argues, however, that “Technotreason” is not an artistic expression, but rather it is *New Media Scholarship*—an academic argument. I am not, here, concerned with analyzing Cushman’s video; rather, I am concerned with the ways in which Cushman articulates the potentials of such a text.

Take, for instance, how she articulates the ‘affordances’ of music in her video:

> The music’s gritty sound quality *demands* that the audience listen hard in order to *decode* the lyrics playing during this frame sequence. In this segment, a person on an airplane calls a friend to say, “Guess where I am? I’m calling from the plane. I’ll call you when I get there.” The first two lines *suggest* that the person has called not to convey a message at all but to use the phone embedded in the seat. When placed in the context of the relatively poor quality of the lyrics themselves, the novelty of the airplane communication system again *comments* on the evolution of communication technologies” (72; emphasis mine).

Cushman’s use of the words *demands, comments,* and *suggest* demonstrate the highly academic tone of her analysis. My point, in this case, is that the way Cushman ‘reads’ this piece of *NMS* is largely centered on the very scholarly, academic “habits of mind”

---

she suggests created the hierarchy of signs in the first place. As such, Cushman analyzes “Technotreason” as though it were a piece of literature. Take, for instance, the moves she makes to describe the potentials of the multimodal nature of her text: 1) she points to a detail of the text (the dialogue between the airplane passenger and a friend); 2) she fully explicates that detail (by connecting it with the poor sound quality of the audio); 3) she argues that there is an implicit message in the video (that is, the video “comments on the evolution of communication technologies”). Cushman’s academic analysis of “Technotreason” demonstrates that her interpretation (and therefore her composition) of the piece is more closely associated with her role as an academic than she acknowledges. In fact, based on her analysis, we have to assume that decoding the message in this type of text would take specific, academic habits of mind (that is, for instance, analysis of abstract details, explication of details and finding implicit meaning). My point, then, is that the way in which we make meaning from a text is not simply the result of the modes used to compose the text (written, image or otherwise), but also highly dependent upon the practices and ideologies of the culture and community we participate. As a consequence, specific attention to the potential of modes will only work to create esoteric and academic ways for composing and analyzing multimodal texts—that is, the practice of multimodal composition will become institutionalized by academics in the academy.

Scholars and students whose job is to study (often theoretically) how texts work must recognize that the analysis of abstract ideas and concepts (in any form) are completely separate from how the majority of people experience literacy. In other words, it should not be our mission to, as Cushman suggests, destabilize the word (especially
through an esoteric and made-up genre that is not representative of how multimodal texts exist in practice), but rather it should be our mission to help students see the ways that literate technology impacts communication practices. Focusing on communication practices (and therefore literate activity) will automatically lead to the teaching of new media in our classrooms. Focusing, however, on the potentials of modes only works to conceptualize multimodal practices at the risk of creating a dichotomy between those who understand modes (as we define them) and those who do not. If we, as Cushman does, create the reason for multimodal composition around the need to dislocate writing as a dominant mode, then the ideological goals of multimodal composition will be situated around an antagonism toward writing rather than a need to prepare students to communicate in the 21st century.

**Conclusion**

In his essay, “From Speech Genres to Mediated Multimodal Genre Systems: Bakhtin, Voloshinov, and the Question of Writing,” Paul Prior makes a key point that is central to understanding the limits of “multimodality.” Prior argues:

Multimodality is not some special feature of texts or certain kind of utterance, and certainly is not a consequence of technologies…Multimodality has always and everywhere been present as representations are propagated across multiple media and as any situated event is indexically fed by all modes present. (282)

As my above analyses demonstrate, any attempt to argue for distinct potentials in modes does not consider the ways in which texts are situated in activity. Removing texts from the rhetorical situation to which they are a response—that is, removing texts from practice—can lead us to make assumptions (as Ball, Cushman, Hull and Nelson do) about
the potentials of modes, with the danger of assuming that those potentials apply to all situations. What is more likely true, in other words, is that digital storytelling was an important vehicle for engaging young students in an afterschool program; or, the multiple modes in “Technotreason” were influential in reaching a particular academic audience at a particular moment in the debate about multimodal composition. What is not true, however, is that the potentials of multimodal composition are universal. As such, it is more useful to talk about what it is that texts do, in particular context, for particular purposes, rather than the ‘affordances’ of particular modes.
CHAPTER V

CONCLUSION

In this thesis, I have focused on the dichotomy that Gunther Kress creates between visual and linguistic modes of communication. My goal has been to demonstrate the importance of activity in shaping our conceptions of literacy. I have attempted to show that the composition of any text (print or digital) is intimately connected to the practices of a given culture or community. As such—because Western culture is tightly bound by a literate mentality—it is nearly impossible to see a distinction between the influences of literate technology, linguistic modes and ways of thinking that manifest through the use of literate materials. It is this impossible distinction that makes Gunther Kress’ theory problematic. On the one hand, Kress wants to acknowledge the ‘social’ features of literacy, while on the other hand he wants to acknowledge the cognitive and affective potentials that, he suggests, are afforded by technology. As I have suggested in previous chapters, however, the cognitive potentials of any mode are culturally constructed and, as such, cognitive potentials can only be realized through an examination of culturally situated activity—suggesting, then that the attention Kress gives to modes of representation will tell us little about the how texts work within activity. As such, in this chapter, I conclude that Gunther Kress’ theory of multimodality (as a whole) is not a useful theory for understanding the complexity of literate activity.
Further research on the impacts of digital texts must look at how digital texts are (as part of complex rhetorical activity) composed, disseminated and used. Research by scholars such as Jody Shipka, Diana George, Mary Hock and Anne Frances Wysocki has begun such work by focusing on how a writing pedagogy centered on the design and circulation of digital texts leads to a greater rhetorical awareness of how texts function in society. Focusing on design and circulation requires that we consider—beyond just a superficial suspicion that the ‘visual is all around us’—how the use of multiple modes (in a course that teaches ‘writing’) can purposefully add to our overall goals for student learning outcomes. Shipka argues, for instance, “Increasing the range of semiotic resources with which students are allowed to work will not, in and of itself, lead to a greater awareness of the ways systems of delivery, reception and circulation shape…the means and modes of production” (278). This suggests, then, that incorporation of multimodal composition into writing classrooms has to lend itself to particular goals and purposes. Shipka argues that by teaching what she calls “multimodal tasks”—that is, the engineering of rhetorical events that (may) employ the use of various media and modes to achieve specific communication goals—students can, through “their efforts to purposefully structure the delivery and reception of that work,” use various modes to gain a “wider, richer repertoire of semiotic resources” (279). The key, however, is that multimodal tasks increase “students’ rhetorical, material, and methodological flexibility by requiring them to determine the purposes and contexts of the work they produce” (285-286).

My overall conclusion to this project is that any study of literacy and
technology must be situated within systems of activity. As a result, further research would need to consider how the design and circulation of digital texts is a representation of not only literate activity, but of the ideological, economic and political goals of the engineers and investors whose software shapes our use of Internet technology. In other words, the use of multiple communication modes does not shape or motivate our use of literate technology (through it may shape the content and form of digital texts). As my study of the proliferation of alphabetic literacy indicates, no mass spread of communication technology is detached from the economic, political and ideological values of a culture. The proliferation of Internet technology should not be treated without the same scrutiny.
WORKS CITED


Eisenstein, Elizabeth. The Printing Press as an Agent of Change. Cambridge: Cambridge


---. *Multimodality: A social semiotic approach to contemporary communication*.


