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Birth of a Paradigm: Digital Technology and Its Effect on Literary Studies

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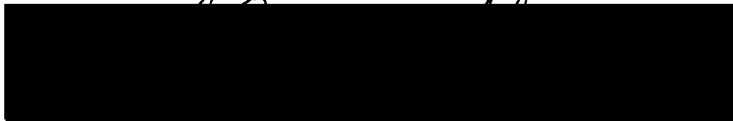# REPRODUCTION CERTIFICATE

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BIRTH OF A PARADIGM:

DIGITAL TECHNOLOGY AND ITS EFFECT ON LITERARY   STUDIES
(TITLE)

BY

CHAD MICHAEL VERBAIS

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

MASTER OF ARTS

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
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Abstract

Digital technology is changing the landscape of literary studies. In essence, the proliferation of computer technology and hypertext is forcing literary scholars to look at how the expanded role of the visual in our society is influencing the way we read and disseminate texts, especially hypertexts, while they also come to a better understanding of the role of the reader in a digital environment and the overall value of electronic literature. Literary studies is witnessing the birth of a new paradigm through digital technology in textual production and dissemination that will not only raise new questions, but further examine age-old literary issues. The following thesis will then explore several ideas concerning digital technology and literary studies including: *ekphrasis*, authenticity and value, and the nature of narrative.

The introduction of digital technology onto the literary landscape has forced the re-evaluation of several aspects involved with literary studies, but more importantly it has forced scholars to examine archaic ideals concerning reading, writing and teaching literary texts. In a hypertext environment readers and writers to enter into a more informal discourse, examine the signifier in a more direct way, and come to a better understanding of how culture influences our ability and means to communicate and replicate ideas. The new paradigm is born out of the idea that the reader can make up a text and the message of the author can still be disseminated.

In the following thesis I suggest that the new paradigm will mark a definite change in the way literature is both written and disseminated; however, it will also simply add new twists to old problems. The place of the reader will certainly be debated with

digital literature, as will the value of this unmediated form of textual production. Yet, above all, the role of the visual in digital literature will most likely be questioned as our culture continues to further embrace graphic images in favor of extended text and dialogue.

The first section will focus on *ekphrasis* and the use of graphics in relation to literary studies, while also looking at the implications of losing textual descriptions to describe a scene. I will look specifically at how the use of graphics is compounding in society today, especially through the proliferation of computer technology, and how the increase in visuals is moving us closer to the "natural" sign. The second section will focus on the ideas of Walter Benjamin, specifically questions he raises in his 1935 text "The Work of Art in the Mechanical Age of Reproduction." Using this work as a guide, I will examine the phenomena of the Internet and the presence of the original as the prerequisite to the concept of authenticity – something in the forefront of scholarly debates about the "value" or "role" of the Internet. Roland Barthes' text <u>S/Z</u> will anchor the third section, where I will use Barthes' notion of readerly and writerly texts to illuminate the differences of narrative in an on-line environment, while trying to better understand electronic texts and reading practices.

Dedication

This thesis is dedicated to my wife Jennifer. Thank you for always believing in me and making my dreams come true.

Acknowledgements

There are many people who assisted in the formulation of this thesis in one way or another. Logically though, I should start by admitting it was my director, Dr. Randall Beebe, who first sparked my interest in digital technology and literary studies. I was further influenced by the solid core of professors at Eastern Illinois University, including my readers, Dr. Parley Ann Boswell and Dr. Tim Engles; English Graduate Coordinator, Dr. Suzan Bazargan; Department Chair, Dr. Dana Ringuette, and a host of other educators I encountered here and at various institutions of higher learning over the years.

I would also like to thank my friend Tim Kasten for assisting me put everything in perspective (both this past semester and prior ones), David Andersen, a.k.a. Blato, for dealing with my stress and consistently losing to me in golf, Lisa Pass for listening to me ramble, all my co-workers in the Writing Center who made each day entertaining, and my entire family, especially Vincent who always seemed to smile and be brave, for being so patient and supportive.

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Introduction: Examining the Issue

"They'll never get me up in one of those,' says the caterpillar to the butterfly,"

- Timothy Leary

The way people read and write is changing. The codex book is no longer the major means of exchanging data; rather, computers and associated technologies are challenging the channels of mediated publishing and offering new ways of producing, reading, and disseminating texts. Even more importantly, as Jay David Bolter points out in his essay "Degrees of Freedom," "The computer as virtual environment is a perceptual experience that engages the user's sense of sight and sometimes hearing in a more compelling fashion" (15). That is to say that the computer has the ability to engage people in more ways than a book; thus, the computer and related technology are positioning themselves not only as accessories to enhance textual experience, but as a new way of approaching the written word.

However, as with every new approach, it has yet to be determined if the new way is more or less valuable than the old. Scholars have given adequate attention to the benefits and problems of this technological revolution, and yet it is still not clear as to who are the prophets of advancement and who are the prophets of demise. In any case, what is clear is that computers and related technology have positioned us on the threshold of a new way to look at the world, a way that no longer relies on the linear format

established hundreds, even thousands, of years ago; rather, the thought of tomorrow will incorporate a textuality of links and networks that will assist in the evolution of literary studies.

This change in the way we approach the written word can best be described as a paradigm shift in communication. We stand at the crossroads of a print-based society and a digital society, with literary studies about to venture down the winding road of technology. In addition, instead of text as a key method of transferring information, our new way of communicating is being based more and more on the visual, allowing for the argument that alphabetic language is slowly disappearing. The changes brought about by this new digital culture call to question several fundamental areas of literary study such as the relation of the image and text, the role of the reader, the value of information, and notions of authenticity . These areas are important because they are discussed again and again concerning the codex book and print, but are relatively new to the world of digital text. In essence, the proliferation of computer technology is forcing literary scholars to look at how the expanded role of the visual in our society is influencing the way we read and disseminate texts, while they also come to a better understanding of the role of the reader in a hypertext environment and the overall value of electronic literature.

The following thesis, in a broad sense, will explore the changes and implications of change to the field of literary studies due to computer technology. More specifically, it will examine whether digital technology can best be understood as a tool to literary studies - a tool that some can discard and others can use - or if it offers, as I see it, a new paradigm that has the potential for re-shaping the core ideals and identity of reading, teaching, and writing about literary texts. The answer is not an easy one, and in order to

address it properly, I will examine three key areas in understanding this phenomena: *ekphrasis*, authenticity and value, and the nature of narrative.

This new paradigm, that I suggest is in the process of being born, will mark a definite change in the way literature is both written and disseminated; however, as I will suggest in the following thesis, the changes to literary study are not entirely revolutionary. Rather, the new landscape of digital technology is inviting us to re-examine key tenants of literary scholarship - the relation of the image and text, the authenticity and value of text, and nature of the narrative - while understanding how they are, or at least can be, altered and changed by it. At the same time, digital technology is also forcing scholars to examine archaic ideals concerning reading, writing and teaching literary texts. The proliferation of digital technology is allowing readers and writers to enter into a more informal discourse, examine the signifier in a more direct way, and come to a better understanding of how culture influences our ability and means to communicate and replicate ideas.

The first section will focus on *ekphrasis* and the use of graphics in relation to literary studies, while also looking at the implications of losing textual descriptions to describe a scene. I will look specifically at how the use of graphics is compounding in society today, especially through the proliferation of computer technology, and how the increase in visuals is moving us closer to the "natural" sign. The second section will focus on the ideas of Walter Benjamin, specifically questions he raises in his 1935 text "The Work of Art in the Mechanical Age of Reproduction." Using this work as a guide, I will examine the phenomena of the Internet and the presence of the original as the prerequisite to the concept of authenticity – something in the forefront of scholarly

debates about the "value" or "role" of the Internet. Roland Barthes' text <u>S/Z</u> will anchor the third section, where I will use Barthes' notion of readerly and writerly texts to illuminate the differences of narrative in an on-line environment, while trying to better understand electronic texts and reading practices. I will follow that with a discussion about the "death of the author" and how Barthes' ideas concerning the signifier directly relate to the disappearance of *ekphrasis* and several issues concerning representation.

To help frame the following discussion, one could look at visionaries such as Vannevar Bush, who long ago saw change on the horizon. Since Bush wrote his 1945 article for <u>Atlantic Monthly</u>, "As We May Think," many of his ideas concerning technology have come to pass. Today, it is easy to see how reliant we are on technology as computers control nearly every aspect of our lives; and yet, people still balk at the system. The field of literary studies is no stranger to conflicts over digitalization. A major point of debate, hypertext, originated in Bush's utopian idea of the memex machine, a system for storing and organizing information, and evolved out of the cataloging of computer files. As Bush states, "a record, if it is to be useful, must be continuously extended, it must be stored, and above all it must be consulted" (12). However, besides aiding our ability to store and recall information, computers have also changed the way we perceive and value our own cultural products, even alphabetic discourse. Sure, literary scholarship benefits from digital technology in various ways, from virtual libraries to interactive texts; yet, the fear and reality of a change in the production and dissemination of the book is forcing people to look at the scope and design of the current literary landscape and to imagine it altered in the future.

Another, and earlier, frame from my study comes from Plato's <u>Phaedrus</u> where he makes the case that alphabetic literacy is not the great invention that most take it to be-the written word will weaken rather than augment men's memories, it will divorce discourse from its authenticating origin in the spoken voice. Plato also seems to make the case that while his oral culture may in fact be destroyed a new paradigm will open up with the ushering in of the printed word. The creation of this new paradigm when society was switching from an oral to a print-based society is comparable to our situation with print and digital text today. We are entering an unknown area in textual dissemination and have no idea how digital technology will effect literature and/or literacy in the future. However, with digital technology, the amplification of memory can be considered only part of the new paradigm as there are also issues concerning the creation of text and, in a sense, the attempt to move back to an oral culture. One example of this can be seen in email where a user can receive an email, respond back to the sender, and create an ongoing dialogue that is both immediate and capable of carrying a record of previous discussions for future reference.

Yet in both ancient and modern cases, the central fear is that what is essentially a means of storage will not organize thought but stifle, disperse, or worst of all control it. And while it can probably be argued that digital technology can in fact do this, in a true hypertext system the reader can re-configure and add links at will, ideally accessing information according to his or her own needs and thus requiring the same ordering of one's thoughts, the same "restructuring of consciousness," to use Walter Ong's term, demanded and fostered by lucid writing.

Literacy did not create a society of information-drunk drones, and the fact that Phaedrus exists as a written document suggests that writing is essential to historical preservation. The digital age is ushering in a new way of preserving and writing text, while forcing scholars to take a close look at the methods of textual production. As George Landow points out in his book Hypertext, "almost all parties to this paradigm shift, which marks a revolution in human thought, see electronic writing as a direct response to the strengths and weaknesses of the printed book" (2-3).

Both literary and cultural scholars have been grumbling about the digital era for some time now. Those for the digital revolution tout the convenience and speed of digital technology, among other benefits, while those opposed fear the world is abandoning tradition in favor of a charlatan harbinger. In either case, the impact of digital technology is being felt in every sphere of literary study and carving its own niche in higher education. Computers are essentially forcing those who study literature to consider such issues as the nature of the narrative, the disappearance of text in favor of graphics, and the value and authenticity of digitally produced documents.

In the early ages of print, churches and clergy could be considered the first editors in that they had the means to produce texts and were largely responsible for what the public could read. However, Gutenberg's press opened up a new era in communication and made texts available to the masses. Today, there are countless publishers who have the ability to produce large quantities of books on a daily basis. At the same time, the Internet's ability to instantly send text to thousands of users at the same time is both challenging and answering the question of what the future of the book will be. It is this

future and the idea of a change in the basic way we read and write that has so many people taking sides.

Yet, fear of change is not something new. Historically people have questioned the "good" of new technology and often feared it would outdate a current novelty. Fears that photography would kill painting, movies would kill the theatre and television would kill the movies were heard repeatedly in the past. Now we stand on the verge of a new change in our society, a change from the codex book to digital text where the visual is as important as ever. However, just as earlier fears were proven false, so too will the fear that digital technology will entirely kill the book.

In Writing Space, Jay David Bolter begins with a quote from Victor Hugo's work, Notre-Dame de Paris, 1482, where the priest Frollo sees the invention of the printed book as an end rather than a beginning. The priest remarks "Ceci tuera cela," (this will destroy that) alluding that this book will destroy that building. Bolter goes on to explain how the priest seemed to believe that the printed word would destroy the authority of the church. However, a similar version of the saying, "ceci tuera cela," can be heard echoing in the halls of academia today. Cultural theorists, professors, literary scholars, and students are all witnessing the birth of a new paradigm in literary studies where digital technology is changing the way books are produced. The computer and related technology are threatening the very base of literary study in that they represent a new way of thinking (non-linear) as well as writing and disseminating texts. A hundred years ago a certain amount of prestige accompanied a published author-it was not something everyone did. And even though today not everyone publishes a book, the opportunity is more readily available through the Internet and computer technology. Homepages, message-boards

and the new Blogger pages are just some examples of how technology provides unmediated channels of publication for any computer-savvy author. In addition, much of the text produced on a computer and published on the Internet is no longer the static representation of the author's ideas that appear in a book; rather, digital text is capable of reinventing itself through every click of the mouse.

The ability of digital text to transport the reader to another document by clicking with a mouse on a certain highlighted word is unique to computers. This text, known as hypertext, can be considered the main thrust behind the push for the acceptance of digital literature. George Landow describes hypertext as "text composed of blocks of text – what Barthes terms a *lexia* – and the electronic links that join them" (Hypertext 4). Remarkably, hypertext has the ability to link not only written words together, but audio and visual modes of representation as well, while also hinting to a revolution in document design, production and discussion.

Serious scholarship on this subject is relatively new, but in keeping up with the evolving medium has been around for at least ten years now. Leading scholars such as George Landow, Jay David Bolter, and Richard Lanham eloquently outline the benefits of hypertext, while others such as Sven Birkerts, Paul West, and Harvey Blume question the new technology. At the center of each of these scholars' discussions can be found questions concerning the place of the reader in a digital dialect, the value and authenticity of digital text, and the future of reading and producing texts with the electronic medium.

And while it may depend upon the context in which we read each author, the debate over digital text has its share of champions and doomsayers. For literary scholars, digital technology opens other problems that could possibly be offset if the benefits were

tangible enough. For technophobes, digital technology is simply another step toward total subservience to machinery. In any case, the debate is as broad as it is deep and will only close once it has been investigated in depth.

Treading the unknown waters of digital literature are several writers who have turned their attention to this technology in hopes of not only figuring it out, but also of either warning or trumpeting its arrival. Looking at a variety of scholarship about digital text, both positive and negative, provides a foundation for further investigation and understanding of what is at stake for literary scholars. For example, well-known rhetorician Richard Lanham bound several of his essays together in The Electronic Word to produce a work that looks closely at the artistic, educational and political aspects of digital technology. His arguments that the digital versus print debate echo ancient debates between philosophers and rhetoricians remind us that this situation has both depth and recourse. However, in Paul West's article "The End of an Elite," he questions the technological leap of society and wonders about the benefit of a distracting technology such as computers. His clinging to the past gives us concrete examples of why change is often so hard.

In Technopoly, Neil Postman argues that print is always rational and that pictures are always a second-rate form of information. Considering the plethora of graphics available on the Internet, and the increasing absence of text accompanying the pictures, his discussion proves interesting. Yet through various twists and turns in his manuscript the reader comes to an understanding of the value of technology, while also understanding dangers that may lurk in the shadows for our society and its way of thinking when new tools are introduced.

W. J. T. Mitchell takes a different approach in <u>Iconology</u> when he looks at the nature of images by comparing them to verbal language. He takes the reader through a series of discussions where he looks at the relationship between text and image, space and time, nature and convention, and eye and ear. He attempts to answer the question of what is at stake in erasing the differences between images and words, while glancing at the canon for information. Using several theorists, Mitchell analyzes the historical conditions that produce "realistic" art, while constantly looking at the relationship between literature and images. Meanwhile, Janet Murray takes us on an adventure into the future in <u>Hamlet on the Holodeck</u> where she attempts to imagine a future where digital technology permeates literature and shapes the next generation in storytelling. Her insight into this new digital literary art form provides excellent theory on how cyberspace can be opened up to accommodate the growing needs of our society.

A cryptic piece by Michael Joyce, "(Re)placing the Author: 'A Book in the Ruins,'" addresses the place of the author and reader in the writing process, and their relationship with the text. Although they are somewhat hard to find, he does make some interesting statements, which he never really fully answers, that are worth exploring such as: print stays itself, electronic text replaces itself; so, electronic text re-animates the word, makes it sensual, vivid, alive; and so, there is a connection between the form and medium of a text and its meaning. His writing seems to encourage the reader to ask further questions and thus take an active role in the understanding of this technology phenomena.

Sven Birkerts, one of the most vocal opponents of digital technology, provides a passionate defense of reading and print culture, while also attacking electronic media in

The Gutenberg Elegies. His focus is that digital technology is the bane of western culture and will ultimately be responsible for its demise. Lamenting on the accessibility of the book and uniqueness of its physical presence, Birkerts looks at the theoretical underpinnings of electronic media and the act of reading itself. And while his attacks against electronic media may not be compelling, his comments are always interesting and thought-provoking.

Marshall McLuhan, the man who coined such phrases as "global village" and "the medium is the message," examines the emergence of mass media in Understanding Media: The Extensions of Man. In it he explores his theory that the technology of communication governs the nature of human communication and thus all human affairs. This type of argument is interesting because when looking at the telephone, television, and computer one can see that society is bringing a very rapid transformation back to the senses of the "tribal" village and a predominance of oral communication. This has enormous implications for human development, including risks of misunderstanding and conflict between those trapped in the environment of the now traditional visually biased print medium and the possibly more sensory balanced electronic oral communicators of the future. McLuhan's vision is particularly astounding when one considers that he died before the proliferation of the personal computer.

In James O'Donnell's article, "The Pragmatics of the New: Trithemius, McLuhan, Cassiodorus," he looks at Johannes Trithemius, a fifteenth century Benedictine Abbot who railed against print, digital prophet Marshall McLuhan, and print preserver Cassiodorus, a fifth century Roman statesman who retired to his rural estate and founded a monastic scriptorium to preserve certain textual treasures amid social upheaval. His

contrast provides us with opposites to look at old versus new technology, while McLuhan alludes to the future. It also raises several good questions regarding the historical fondness for print and our ideas concerning its preservation. Some of these ideas can even be seen in how the Torah became an anchor for Jewish culture following the destruction of the Temple in Jerusalem in 70 A.D. Print has a concrete type of value in that once something is in print it seems permanent and capable of lasting forever; digital text can be manipulated at will and can give the impression that it does not carry much authority.

Harvey Blume's article "Baudy Bandwidth," while somewhat praising the hyperlinks, also cautions us about blindly accepting technology. He refers to the aura surrounding electricity and how people did not understand it, but embraced it nonetheless. With the world changing so rapidly, it is easy to get caught up in the commotion, according to Blume, but he also suggests that change is inevitable and something we must face. His discussion concerning the lack of identity in an on-line world is interesting and forces the reader to think about the identity of authors in print and those who produce texts via digital technology.

In "The Literary Canon in the Age of Its Technological Obsolescence," by William Paulson, the mood is somber when he discusses a revaluation of the literary canon. However, his debate does not take the stance of defending the techno-junkies or "tenured radicals;" rather, he argues that the new canon will serve no universally beneficial idea if it only speaks to contemporary demands. Here he argues for a shape of the canon, not just an expansion of it, while explaining that we must look at how we value old texts before we rush into defining the future.

Seymour Chatman wrote an interesting piece, "What Novels Can Do That Films Can't (and Vice Versa)," on verbal commentary in film and the use of assertive syntax in fiction. Here the assertion is that film does not have to say, "this is what is happening," it just has to show us. In a book, the words must present the scene and pull the reader in. Chatman's general argument then is that film attracts that component of our perceptual apparatus which we tend to favor over the other senses. Seeing, after all, is believing.

At the crossroads of all these works one can find Jay David Bolter and George Landow camped, discussing everything under the sun related to digital technology and the future of literary studies. Through reading the above mentioned authors we can see how technology is not merely a novelty, but a part of our society that is here to stay. By looking at certain aspects of the digital phenomena, a scholar can come to a better understanding of the medium and its inherent implications on our way of thought, and especially the future of literary studies. The proliferation of computer technology has already had a dramatic impact on our culture; coming to a better understanding of it will help us more closely identify with the Internet audience, while realizing the value of electronic literature.

Section One: Looking Through the Eye of the Beholder

It would be fair to say that one of the goals of literary study is to understand the author's idea behind the words on a page. Truly understanding these words often only comes through persistent dissemination of a text; however, when an author includes a graphic within or adjacent to the text, the grand vision of the work can become easier to comprehend. Describing a visual scene with words can best be described using the term *ekphrasis*. One example of *ekphrasis* can be seen in "Ode on a Grecian Urn" by John Keats, where great detail is used for textually transcribing the visual scene on an urn with words. Long ago used by rhetoricians, the word *ekphrasis* was nearly lost in the reshuffling of language. Even the Oxford English Dictionary is surprisingly vague about the expression, which was formerly spelled ecphrasis. Yet, because the term aims at providing a textual description of a scene, in other words representing something, literary scholars are beginning to take notice of it as an issue concerning digital technology. The problem, as many scholars see, is that *ekphrasis* is undermining the entire premise of literary studies in that it is taking the words away from language.

Ekphrasis represents an age-old tradition in literary studies where images were described with words; however, digital technology presents us with an opportunity to remove the words and insert pictures in their place, thus providing a supposed more accurate view of the signified. The word *ekphrasis* does imply a mirroring action, which is highly detailed, and often then extremely interesting. But it is also limiting, and demands a separation between the writer and the object. The writer must stand facing the object, almost challenging it, and constantly wondering if the words will match the

subject. More importantly, however, the writer must provide a mental image for the reader and hope it is understood in context.

Language and pictures have long been partners, with evidence as early as the fifth century B.C. when Simonides said, "as in painting, so in poetry." Yet, it is strange that even now in the beginning of the twenty-first century most undergraduate education in the humanities continues to approach these art forms separately or to focus on student generated text alone for developing and communicating ideas. The continual acceptance of computer technology in higher education classrooms across the nation further mystifies the idea of why we continue to separate the two art forms. The proliferation of computer technology itself is bringing words and pictures together almost instantaneously, while a slow and sure shift appears on the horizon as we move from a text-based society to a visual one.

In "Efficiency of Graphical Perception," Gordon Legge, Yuanchao Gu and Andrew Luebker point out that, "the great advantage of graphical displays over numerical tables is due to the capacity of human vision to process global pattern features at a glance" (112). That is to say that graphical representations are easier for the human brain to conceptualize because of an immediate realization of the signifier and its relationship to the signified. This type of advantage is also evident in literary study with the use of computer technology. For the past few years now text has been gradually disappearing in favor of clickable pictures. This removal of *ekphrasis* seems a natural and logical choice then considering how easily the human brain analyzes objects. However, with the disappearance of text there is also a fundamental disappearance of literature and thus, a disappearance of tradition.

For literary skeptics of technology, this is often enough to scare them away. The mention of the disappearance of text often brings wide-eyed stares and a plethora of defensive arguments, aimed at debunking the "myth" that technology is here to stay, from many people. Simply put, most people like books and are afraid of anything that may be substituted for them. In Tolstoy's Dictaphone: Technology and the Muse, Sven Birkerts expresses this position quite well:

> Screen technologies undo these cultural assumptions implicitly. Stripping the work of its proud material trappings, its solid three-dimensionality, they further subject it to fragmentation. That a work comes to us by way of a circuit means that we think of it as being open - available - in various ways, whether or not we avail ourselves to those ways. We can enter cleanly and strategically at any number of points; we can elide passages or chapters with an elastic ease that allows us to forget the surrounding textual tissue. With a book, the pages we thumb past are a palpable reproach. Whereas the new texts, or texts of the future, those that come via screen, already advertise (many of them) features that fly in the face of definitive closure. The medium not only allows – it all but cries out for – links, glosses, supplements, and the like. (191)

His misconception that technology is non-palpable does not go unshared. Many people still believe somehow that the impersonal nature of computers has doomed them for the scrap heap. However, while technophobes may tout their own fear and attempt to inform the public of the dangers of technology, it is virtually impossible to ignore its cultural implications, especially the implications of technology on digital writing.

Ekphrasis is a symptom of the digital age, and for some literary scholars the bane of technological existence. Yet, it is also a precursor to our future as a visual society. Gone are the days when we received our news from print only sources; today we are bombarded with the visual stimulation of television, billboards, and the Internet. We no longer have to wonder how accurate a reporter's description of a war scene was when in an instant we can see pictures of the battlefield and visions of its wounded via the Internet and television. We are learning more and more that as the old saying goes, "pictures are worth a thousand words."

The presence of visual identifiers, however, is not something new. For years now, advertisements have used flashy pictures or graphs to stress a point, while the text serves as support and clarification for the message. Turn to any page of *Time* or *Newsweek* and see how graphics dominate the page of nearly every story, or open a newspaper and look at the advertisements and how they use graphics to get attention. It is not a secret: people respond to pictures. Why then does *ekphrasis* deserve so much attention? I contend that it is because the continual loss of *ekphrasis* is becoming more widespread and calling into question the future of alphabetic writing itself. The computer is here to stay, and it is only a matter of time before technology begins to sway the masses toward more graphical and vocal presentations and away from the text and its arbitrary signifiers.

Yet, there is much more at stake than various ways of contrasting ink dots on paper. The disappearance of *ekphrasis* calls into question the basis of how we represent things and how we view those representations. George Landow states in his book Hypertext that, "Electronic text processing marks the next major shift in information

technology after the development of the printed book. It promises (or threatens) to produce effects on our culture, particularly on our literature, education, criticism, and scholarship, just as radical as those produced by Gutenberg's movable type" (19). If we are seeing changes in our culture because of the influx of digital text it stands to reason that our modes of representation and dissemination are also changing. With the disappearance of text from various forms of media, especially computers, how we chose to represent the subject matter of various articles becomes very important. If pictures are used then there is nothing for the reader to interpret; if they are not used there is much for the reader to interpret. The entire dilemma calls into question the place of the reader and writer concerning digital text, something I will address in Section Three, but more importantly points to the power of the visual image.

Images are sometimes hard to define, as evident from the amount of scholarship on images and related ideas. However, as with every image there is a representation of something else, with every idea there is a representation of an image. In W. J. T. Mitchell's book Iconology, he discusses various aspects of imagery and how there is no essential difference between painting and poetry. As Mitchell states, "the paragon or debate of poetry and painting is never just a contest between two kinds of signs, but a struggle between body and soul, world and mind, nature and culture" (49). True, the debate between painting and poetry can indeed be a struggle; yet, in that struggle representation is held above all else. It is the representation of the image that artists are trying to obtain, and it is the representation that so often meets the fate of the critics. With the increasing disappearance of *ekphrasis* from digital literary texts, the variation of

differing representations of objects for various readers is being removed and instead the readers are able to view the "natural" signified.

But if *ekphrasis* is disappearing, then are we not getting to a more thorough understanding of what the author is saying? Only the author could say for sure, but it could be argued that we are getting a more accurate view of the author's idea of representation. I contend that with *ekphrasis* disappearing the signified is being thrust in front of the reader and the signifiers are taking a back seat. An example can be seen in the coverage of a military battle: people can now view live and graphical updates from the field through a digital stream on the Internet and see the devastation in a war-torn area instead of reading about it via text in the newspaper the next day. It is the equivalent of taking out the middle man. However, it is this removal that is at the core of any debate concerning technology and writing.

Ancient and modern rhetoric has depended on words to reinforce the image; yet, with the disappearance of *ekphrasis,* the image is enforcing itself. More importantly, though, this inversion of *ekphrastic* technique is allowing the image to reinforce the words and thus create a new paradigm of rhetoric. For centuries *ekphrasis* has been the basis for superior description of a visual scene. Now the computer, with all of its microprocessors and visual displays, has eroded *ekphrasis* until we are now seeing its near disappearance. However, when looking at Derrida's idea of logocentrism we can see that through the proliferation of computer technology the gap is now closer than ever between the sign and the signifier. This is reminiscent of the way in which Plato created his rhetoric in order to bring his writing closer to the natural sign. As Jay David Bolter points out in his essay "*Ekphrasis*, Virtual Reality and The Future of Writing," "Print

managed to establish an equilibrium with representational painting, but that equilibrium began to erode with the invention of photography. Just as photography precipitated a crisis in painting – what could the painter do now that painting could not compete in fidelity with the illusion offered by the photograph? – so photography and the inventions that followed (film, television, and computer graphics) also called into question the power of prose" (265). In this sense, *ekphrasis* was destined to disappear as soon as the first computer came on the scene. The heightened visual culture we now live in is forcing a "denial of *ekphrasis*," as Bolter says, and continually striving for the natural sign in the image rather than through verbal expression.

However, this desire for the natural sign is nothing new. According to Murray Krieger, who wrote <u>*Ekphrasis*: Illusion of the Natural Sign</u>, we have been striving for centuries to obtain the natural sign. Krieger states that, "In speaking of *ekphrasis*, or at least of the *ekphrastic* impulse, I have pointed to its source in the semiotic desire for the natural sign, the desire, that is, to have the world captured in the word…It is this naïve desire that leads us to prefer the immediacy of the picture to the mediation of the code in our search for a tangible, "real" referent that would render the sign transparent" (11). The idea of a transparent sign is not new either. Bolter points out that old movies often started out with a picture of a book with a written introduction on the first page. The page would then turn and the imagined scene would continue in a visual mode. This same mode of representation is currently being used on several computer games such as *Tomb Raider* and *Myst*, further reinforcing the idea of the book as a sign.

Pictures provide people with a "natural" representation that is not a representation at all. Even if someone is looking at a computer-animated picture of a beach, which is

layered with code to reproduce such a complex visual, there is a disappearance of the signifier for the viewer. The sign is perceived because the picture stimulates our brain into recognizing a familiar image. The image of the beach is familiar to us because we have seen it before and understand the likeness. At the same time we have been conditioned to allow the signifier to disappear and see only the signified on the screen. The visual properties of the monitor allow and encourage us to use the computer as a window to the signified.

William Blake was someone who obviously knew the importance of a visual presence accompanying text. His illuminations are often more striking than the words he fixed beside them, but the illuminations serve more than just to clarify his vision - they also serve to clarify the vision of the reader. According to Nancy Kaplan who wrote "Blake's Problem and Ours: Some Reflections on the Image and the Work," "he [Blake] claims that his printing method was to clear the way for redeeming perception, for restoring unity by destroying false divisions" (28). Blake seemed to recognize that while the text was married to the page it was also married to a visual. The marriage was so significant for the poet that he used impractical methods to produce his images and sacrificed economy for quality. In Blake's era moveable type was available and he could have used it to produce his works. Instead, he chose to use metal plates and acid to reveal the vision and produce his text. Kaplan argues that Blake used this technique because he saw how with movable type the graphics often occupied another page altogether or were placed in a space above or below a block of text. In other words, the images were subordinate to the text. Blake wanted his works to blend visual elements and the text together so the signifier could almost disappear for the reader. As Kaplan writes,

That Blake found separation problematic is clear from his practice as an illustrator of other poets. In some of Blake's most important work as an illustrator, the space for text overlaps the space for illustration and the larger area belongs to the picture rather than the text. The illustrations for Edward Young's "Night Thoughts," perhaps Blake's most ambitious commercial project, superimpose a textual space over a much larger and fully continuous graphics space. The illustration leaves of the work look as if someone had pasted a page of poetry from a small volume over the middle of a large picture. Although the text continues to occupy its own, inviolable portion of the page, these illustrations exemplify a unique strategy for circumventing or at least disturbing the technology-driven division between picture and text. (29)

When reading a work of Blake, one is almost forced to look at the text and then back at the picture, switching focus and ideas of representation. Kaplan further suggests in her article that many of the words in Blake's works form shapes and thus, to use Mitchell's term, "natural" signs by assuming similarity to the objects they represent. The manipulation of the image by Blake suggests to the reader that the signifier is not just a sign, but more of a window into the vision of the author.

Today, computers allow us to manipulate our text with not only visual elements, but also audio. And while these things may seem to offer the author more of a chance to provide a window into his imagination, they are also rife with signifiers that must be decoded by the end user. In The Electronic Word, Richard Lanham argues that we are constantly looking at and looking through a work of art - so much so that we subconsciously oscillate between the two. In literature and painting one can look at the

work as an artifact. To look through the work though one must lose oneself in the work and somehow be mentally transported into the middle of the piece. However, in each case one must oscillate between looking at and through an object to remain grounded in reality. It is reality that then comes to play a crucial role in how we interpret *ekphrasis* and the text.

From a philosophical standpoint it is easy to see how a reader could "transport" himself into a painting or text. In reality it is a much more complex issue. Yet there is an ultimate graphical computer environment where a user can completely assimilate into the work. The technology, virtual reality, allows the user to enter a three-dimensional display and instead of oscillating between looking at and looking through the technology one is able to simply look through it. This is achieved because the user wears the machine, typically a headset with a visor and cord connected to a larger terminal, and only sees what the computer draws in the field of view. This technology allows the user, as Bolter describes, "an apparently unmediated perception of another world. They achieve what in popular view narrative fiction and films have always sought to achieve: total empathetic involvement in a created world" (268).

The key in virtual reality is that the user can control the perspective. In literature or film, the user is at the mercy of editors or directors and must change when and where they deem fit. As Bolter states, "In this respect, virtual reality can be understood as a paradigm for the whole realm of computer graphics. And in turn the technology of computer graphics is gaining more and more cultural importance" (268). Computer graphics and animation are becoming the norm now in our society - from the dancing baby on *Ally McBeal* to the large budget animation films released almost yearly. Another

example can be seen in the numerous sports video games available for the home where the ability to use instant replays and shift perspective via computer animation is just one way we are expanding our cultural understanding of the value of perspective. It is this shift that is reinforcing our cultural desire for the natural sign. The assumption seems to be that pictures provide the viewer with a "true" experience and are in effect turning people away from reading and toward visual forms of perception.

It is this new way of perceiving objects and events that is also changing how we exchange ideas. Unlike *ekphrasis*, which depends on a written or spoken text, virtual reality is silent and achieves its point without text – at least to the end user. Interestingly though, even virtual reality is based on a series of codes that were written. However, there is the possibility that writing is becoming increasingly devalued by the masses because information can be obtained just as easily, if not more so, through a visual perception. If this is true then Bolter was prophetic when he wrote, "writing will be more of an "elite" activity." The masses will no longer need to write because they will be spoon fed information while obtaining it through computerized environments that play on their desire for a visual world.

The great struggle is how do humanities teachers dramatize this apparent connection between the verbal and the visual yet still preserve their student's cognitive skills with words and pictures? The answer could be as simple as looking to the past. In elementary school, children often illustrate their words with pictures; yet, this "childish" activity is often abandoned when the upper grades are reached. However, could it be that the connection between words and pictures, which by now should be apparent, is being abandoned because of a favorable tradition of print? I would suggest that it is not just the

loss of the book, but a fear to release the past and embrace the future. New technology, in particular the World Wide Web, is bringing words and pictures together in ways that can bring the connections back to the students. Take a look at even the most basic requirements for any college level paper and you realize that set margins and MLA style already allude to a visual appeal. Look then at the "new" college writing classroom where computers can outnumber students and color and negative space are often discussed as much as, if not more than, the writing process. The visual has already integrated itself in school, and yet many teachers are not even aware of it.

For some reason the disconnection between the verbal and visual in literary classrooms happened long ago. Science textbooks often contain a large number of illustrations to reinforce various techniques discussed, but literary works are often void of visual aides. True, many authors never include pictures with their text, but even that could be discussed on some level. The availability of computer technology has provided students with the opportunity to create and manipulate text and images while gaining important experiences in the composition process. The usability of the Internet has opened the doors for these students to create dialogic writing communities within and beyond the walls of their classrooms where discourse can be continued to infinity and collaboration can happen at the speed of a keystroke. But a fear of change still permeates the classroom.

Humanities teachers have rarely given students the opportunity to combine words and pictures together so that both can be central to communication ideas - often it is the text that is solely important. And while it can be successfully argued that this decision supports the "real" goal of literary studies, by simply publishing a paper on the Internet,

which is common in undergraduate courses today, students are encouraged to reflect on the connections between technology and art, word and image, public and private writing, and their own creative processes. Contemporary composition processes are vastly different from what they were twenty years ago. Today, students are able to cut and paste, copy and transpire any number of passages into a document. The visual appeal of documents has changed as well. With Internet publication of many documents a new form of rhetoric is being perfected that relies on the visual. *Ekphrasis* is disappearing in favor of hyperlinks and animation.

However, the ease of Internet publication, which is contributing to the disappearance of *ekphrasis*, should be looked at closer. When the Luddites of the teaching profession buck at the new system of technological composition, what are they really challenging? Is it their established ideals of writing as a process, or something deeper? Several pro-technology scholars would say it is as basic as wanting to preserve the book. In his book Orality and Literacy, Walter Ong argues that we are in an age of "secondary orality." When looking at digital technology I would interpret this to mean that computer technology encourages a sort of nonsequential reading and thinking because of the ability to jump into a text at any given point and click out of it with an equal amount of ease. But for established teachers, who believe in a tradition of print, there may be something even more disconcerting – books, unlike authors, provide a concreteness that limits the ability to challenge them, while hypertext can be edited, changed and ultimately linked to contradictions and corrections in a matter of minutes.

As Ong writes,

> The author might be challenged if only he or she could be reached, but the author
>
> cannot be reached in any book. There is no way directly to refute a text. After
>
> absolutely total and devastating refutation, it says exactly the same thing as
>
> before. This is one reason why "the book says" is popularly tantamount to "it is
>
> true." It is also one reason why books have been burnt. A text stating what the
>
> whole world knows is false will state falsehood forever, so long as the text exists.
>
> (79)

In essence then, a hypertext is never a complete work and it could be argued that every

link to or from a hypertext is an extension of such a work; yet, with the book it is

generally accepted that the work can stand on its own. This linking of hypertexts changes

the role of reader and author and begs the question of who makes up the text? And while

I address this in Section Three, it is interesting to think about how in a virtual

environment one can experience the text "outside" itself through the click of a mouse, yet

in a book the experience is generally limited to the words on the immediate page.

But there is more lost than books, at least according to Sven Birkerts. In his

article "The Future of the Book," he argues that more importantly than books

disappearing in the physical sense is the thought that the connection between the book

and the idea, or culture, of the book will disappear. In reality it is this culture that holds

so tightly to tradition and is reluctant to embrace any new technology. For hundreds of

years people have been comfortable flipping through pages and stuffing the book in a

pocket of their coat. Now, the book is evolving into electronic hand-held devices that

store thousands of pages and yet is smaller than a soft cover mystery novel. The

computer is allowing electronic books to refer immediately to other electronic books and is taking away the singularity of any work. To Birkerts this seemingly represents a loss of our way of life. However, one only needs to look back fifty years to realize that technology is enhancing our life every day and progress of any sort is synonymous with human nature.

In the next two sections I will explore the areas of authenticity and value concerning digital text as well as how digital literature offers us new ways of experiencing a work, something not all scholars are sold on. And while the current situation concerning the disappearance of *ekphrasis* may stun and frighten many people as well, it is not something that will go without a fight. For myself, the disappearance of *ekphrasis* is as inevitable as the disappearance of the horse and buggy - meaning it will never fully disappear, but rather be marginalized and eventually looked at as something of an antique. The visual world dominates everyday activities such as driving a car, buying clothes and watching television. The disappearance, or marginalization, of *ekphrasis* seems only natural then, especially with the proliferation of computer technology and graphic design. But this disappearance should not necessarily be hailed as a loss of culture or tradition. Rather, it can be heralded as the stepping stone into a new type of culture where text and visuals merge. As Bolter points out, "rather than defining a new orality, as (Marshall) McLuhan and Ong predicted, electronic technology seems to be moving us toward an increasing dependence upon and interest in the visual.' The hypertext character of Web documents 'defines space in which arbitrary signs can coexist with perceptual presentation. However, it is not a peaceful coexistence" (271). The verbal text is now struggling to be seen, while the visual is taking leaps and bounds

at culture as a whole. Yet, the disappearance of the text will not go silently, and just as

Frederick Jackson Turner eulogized the closing of America's western frontier, so will the

Sven Birkerts of today eulogize the disappearance of the book.

Section Two: Authenticity and Value Concerning Digital Text

The Internet has thrust literary studies into a new era as far as textual dissemination is concerned. Texts can now easily be reproduced and scholars are, with the help of powerful computer search engines, no longer forced to sift through stacks of books to find many obscure titles. Yet these concerns are not entirely new, as literary scholars have looked at the issues of authenticity and value concerning texts for years. However, due to the relative novelty of digital text, issues such as authenticity and value, along with the context in which a text is read, are gaining popularity in digital technology scholarship circles.

In his 1935 essay "The Work of Art in the Age of Mechanical Reproduction," Walter Benjamin anticipated many of these same questions as he explored the impact of technology on art. In particular, he was concerned with the experience one has with art when it becomes easy to reproduce. This same thought can be applied to the current situation of the Internet and its capability to reproduce literature in various forms. The Internet has the ability to produce copies of original manuscripts, text with graphics, or modified text with various fonts, all in ways the author never intended or imagined the work would be read. I suggest then that each subsequent viewing of the text, in different ways than the original was viewed, introduces a new way of approaching the work and thus a new paradigm in literary studies, especially with digital technology, because the author is no longer the sole architect of the text.

In Iconology, Mitchell argues that "there is no essential difference between poetry and painting, no difference, that is, that is given for all time by the inherent natures of the

media, the objects they represent, or the laws of the human mind" (49). Yet the tools we use to disseminate both poetry and painting may subconsciously enforce a difference in the meaning. It is this inherent difference in meaning that culture is simultaneously challenging and attempting to change. We now have options when looking at works of art or reading poetry and they no longer have to be the static representations the author submitted. Rather, digital technology allows us to add on, subtract or entirely delete a work with the click of a mouse. At the same time, computer technology is allowing us to view a work of art or an ancient text from our homes: art affectionados can now view the *Mona-Lisa* via the Internet from their living room, or read the sagas of ancient Icelanders on a CD-ROM. And while this method of re-presenting material may not be much of an issue on the surface, it becomes one when you consider the way the author or artist intended the work to be viewed as opposed to how it is viewed in a modified state.

Benjamin's text begins with the argument that works of art were always reproducible and thus able to be re-presented. Students were often given the opportunity to copy their master's work and thus their master's talent. However, the dawning of the age of mechanical reproduction presented a new problem. For Benjamin, the problem was more than mass production of goods. The problem represented a new way of disseminating art and text, a way that he was struggling to comprehend.

Written long before micro-chip computers flooded our culture, Benjamin's work offers valuable insight while raising equally valuable questions concerning the ability to reproduce art and text. Mechanical reproduction, according to Benjamin, changed not only the aesthetic experience of art, but also its political function, commodity value and social relations constructed around it. When a literary text is reproduced the same type of

devaluing occurs. The way one reads a text too, whether it is on a computer screen or in a book, also effects the understanding.

Building his work on that of the poet Paul Valery, who earlier had written about the affects of lithography, photography, and other techniques in changing our relation to images, Benjamin asserts that, "the presence of the original is the prerequisite for the concept of authenticity" (220). In one sense it could be argued that his idea echoed Platonism in that the concept of the original, which could be the idea, is true knowledge gained by remembering; but, more importantly, the idea of an "original" document is something in the forefront of scholarly debates today concerning the Internet.

The texts of various authors have been placed on the Internet for some time now, but at first it was seen as a matter of convenience. However, it has become obvious that many students never have the opportunity or desire to read a work from a book when it is so readily available online. An issue such as this presents two different questions: first, are the students reading the same text as that in the book? and second, if "the medium is the message," (or messenger, depending on where you quote from) as Marshall McLuhan stated, then are computers changing the way students read and disseminate texts while at the same time making the texts available to a wider audience?

The issue can be best looked at through the lens of cultural studies where we see everything produced by our culture as having an effect on it. Considering that computers are offering new ways of viewing and disseminating text, then a new paradigm is developing along with a new way of thought and understanding. The digital revolution was not a gradual evolution like the birth of print. Rather, digital technology burst on the scene and quickly dominated our idea of progression and advancing into a new century. I

am not referring to the acceptance of computer interfacing as much as I am referring to the idea of digital technology itself. Once it had established a presence in the culture, digital technology enabled people to develop new ways of communicating and thus thinking about culture and the contents thereof. More importantly, digital technology opened doors for the way we exchange and preserve ideas, while it also forged a new era of thought processes.

For Benjamin, the ability to reproduce a work of art, in ways similar to how computers can reproduce images and text, destroyed the "aura" of the work. It no longer held the original value when reproduced and was then only a representation of the original. And while I will talk at length about representation in Section Three, because the very idea of representation is so crucial to any debate about the Internet or digital technology, here it is important to remember that once a work has been reproduced its value and authenticity immediately become suspect, while the aura is equally diminished.

However, Benjamin was concerned with more than the aura and representation. Because of the new ability to reproduce art mechanically, Benjamin saw several paradigm shifts occurring, among them "authenticity" (copies could now be reproduced), "uniqueness" (things could now be viewed and owned by the masses), and "permanence" (things could now be changed). The ability to reproduce art with accuracy was, as Benjamin saw it, changing the way people viewed art itself. In essence, the elitism of knowing that one saw the original work was disappearing because reproductions presented quality representations.

Benjamin also argues that, "the situations into which the product of mechanical reproduction can be brought may not touch the actual work of art, yet the quality of its

presence is always depreciated" (221). Benjamin argues that through reproduction the replication of the work could be placed in a variety of contexts that alter meaning: what was once considered unique to a particular work or place could now become the common experience of the public at large; what was once permanent could now be reversible in that it could be modified in the reproduction process or even destroyed altogether. These ideas speak particularly well to two problems in the humanities today: when citing a web address as part of a scholarly work, can we be sure the hyperlink will be accurate in the future? and how can we be sure students cite material from "real" academic sites as opposed to their often cloned counterparts? By looking at the answers to these questions one can see how the web has an inherent ability to evolve and address such issues.

When discussing hyperlinks it is easy to point out that they are often outdated and inaccurate, while an electronic citation is usually only "permanent" if the article being referred to is in print. However, the very nature of electronic citations speak to the idea that articles can be updated and changed. Many educational institutions are now moving literary scholarship projects to the web primarily because of the capability of electronic documents to evolve, as well as because the electronic version somehow encourages revision. In this sense then change is not negative, but rather a positive because of the always developing and open state of discussion concerning scholarly knowledge. And while many scholars may argue that a lack of permanence in not only form but also place in electronic documents is exactly what makes them so dangerous, and thus negative, many others would find the ability to update documents and further modify an electronic destination refreshing and positive in that they offer the chance for an on-going discussion.

As far as finding "authentic" web sites for citing information is concerned, the web constantly brings a sense of reliability into question (although many people probably look at the "edu" in the URL and assume it is accurate, but who is to say that this text has not been tampered with by a third party?). There are many articles dedicated to the accuracy of web pages, but more important is the fact that people who post articles on the web must do so while bearing in mind that it could be read by a much wider audience than immediate peers. This calls to question then the reason behind false information and forces (or should force) students to double check sources, which often never happens with a print source because of the seeming permanence of the work. The necessity of citing sources becomes even more important then because of the many false and misleading representations of information that computer technology, and especially the Internet, can present. At the same time, the idea of audience must still be kept in mind by the writer; however, electronic text has specific features, such as hyperlinks and the ability to quickly change and modify viewing display settings on a monitor, that help both readers and the writer bridge a gap in personalization of the presentation. In this sense then, electronic technology is going beyond the current boundaries in literary studies of the author and reader's relationship to help create new boundaries for electronic technology. The work and its presentation are now as subject to the viewer's ideas concerning presentation as they are to the context in which the author placed the original work.

"Uniqueness" is something the web automatically questions, but answers with savvy. Years ago, in order to read the text of <u>Cases of Conscience Concerning Evil Spirits</u> by Increase Mather, one had to go to the library and order a copy, usually through

interlibrary loan. Today, the web has enabled the text to be viewed by thousands through the simple click of a mouse button and even saved on the hard drive through the "cut" and "paste" functions, which further enhances the sharing of scholarly knowledge. Similarly, web page designers who love to build "unique" pages often steal graphics and even text at will, but will almost always put some original graphic or text on the site. Designers recognize that the Internet and computer technology allows sharing (or depending on how we look at it, stealing) to happen with ease; however, most people still want to add personal touches to their site rather than simply copy an existing one and thus, create their own form of a "unique" domain. For literary studies though, removing the uniqueness of a work brings to mind the issue of originality. Literary scholars arguing over originality seem to sometimes miss the idea that language is a representation of something and thus capable of being used in the same way by various people over and over again. What should be of concern for literary scholars is how technology is allowing original text to be manipulated and presented in a way that detracts from or even changes its inherent meaning (assuming there is one). Yet the "uniqueness" of the work is no longer the text itself then, but the context in which it is viewed. It is this changing mode of context that can also alter the meaning of the text and our idea of "unique."

The context of a work often inadvertently defines its value. If a student were to read an excerpt of a Walt Whitman poem on a personal web site, where the main topic is flowers, the reading would most likely be far different than if the same student read the poem on a literary site such as <poets.org.> At the same time, if a student were to read a personal narrative on a site it would probably offer a much different reading than if the same text were read in a book. It seems that with the book the text is finished, while with

digital text there is always room to expand or subtract. It is this open-endedness of digital text that often prompts the many debates and arguments in literary studies concerning the "value" of Internet publication. Literary scholars are constantly weighing texts to determine their worth, but the Internet and computer technology is forcing them to re-evaluate the way they do this by constantly presenting works in various settings. Somewhere though "value" seems to be defined as a system of measure where the positives outweigh the negatives. However, with the proliferation of digital technology the positives and negatives seem to always be changing, which makes the mark of value for Internet texts all the harder to determine.

Thus, the value of a text is not always definable. As Benjamin states, "works of art are received and valued on different planes. Two polar types stand out: with one, the accent is on the cult value; with the other, on the exhibition value of the work" (224). The production of a text most likely is born from the desire to publicly display it. When print was first invented, the process of book production was a time and monetary consuming task; however, today digital technology makes a text available to a wide audience with almost no additional funding outside the machine the text was produced on. In the same sense, during the early and even modern days of print, editors and authorities often kept certain documents from the public's eye. With digital technology anyone can be a publisher and often only has to answer to himself before submitting his work for the approval of the public. For Benjamin though, it is this lack of approval, or ritual, that in essence destroys the aura of a work of art:

> [F]or the first time in world history, mechanical reproduction emancipates the
> work of art from its parasitical dependence on ritual. To an ever greater degree the

work of art reproduced becomes the work of art designed for reproducibility.

From a photographic negative, for example, one can make any number of prints;

to ask for the "authentic" print makes no sense. But the instant the criterion of

authenticity ceases to be applicable to artistic production, the total function of art

is reversed. Instead of being based on ritual, it begins to be based on another

practice – politics. (224)

In a broader sense, Benjamin was as much addressing politics in his text as he was the

ability to mechanically reproduce art. After all, in the preface he discusses Marx and his

critique of the capitalistic mode of production before stating, "theses about the art of the

proletariat after its assumption of power or about the art of a classless society would have

less bearing on these demands than theses about the developmental tendencies of art

under present conditions of production" (218). Benjamin seemed to be suggesting then

that art and Marxism were relating forces in the age of mechanical reproduction, which

could be argued if one considered how Marxism strives to create similar good for the

masses. However, where the mechanical age of reproduction was in fact making

duplicates of art, for Benjamin the loss of the aura meant the loss of the fundamental

nature of art. It was this loss of art's fundamental nature that Benjamin suggested created

an open door for a new kind of political or at least revolutionary potential for mass art.

This sort of new politics concerning art points directly to its inherent value for the

masses. Many hypertext scholars agree that the democratic nature of electronic text

provides different values for different people. After all, with hypertext the reader is

responsible for how he moves through the system and the order of investigation in a web

environment. As George Landow states in Hypertext:

Hypertext has the potential, thus far only partially realized, to be a democratic or multicentered system in yet another way: as readers contribute their comments and individual documents, the sharp division between author and reader that characterizes page-bound text begins to blur and threatens to vanish, with several interesting implications: first, by contributing to the system, users accept some responsibility for materials anyone can read; and second, students thus establish a community of learning, demonstrating to themselves that a large part of any investigation rests on the work of others. (178-79)

The "work of others" that Landow refers to are people who have previously engaged a topic and established some type of scholarship on it. By looking at digital technology as a means of storing and retrieving data one can see where Landow was correct when he stated, "students thus establish a community of learning, demonstrating to themselves that a large part of any investigation rests on the work of others." The politics of digital technology, and mechanical reproduction for that matter, force users to look to the past and at representations of the original. For Benjamin, these representations had lost the aura of the original and thus were not subjected to the place and time of the original, but still depreciate the value of the original in how they reflect it to the masses. It could be summed up naïvely as appreciation for the original, although Benjamin and others would probably argue that the mode of perception was what should be questioned, for as he stated, "the adjustment of reality to the masses and of the masses to reality is a process of unlimited scope, as much for thinking as for perception" (223).

To an even greater extent the battle of perception, representation, and archiving versus subverting the digital network foreground the struggle over the literary canon. It

is easy to see how Benjamin's ideas concerning the aura of a work and the age before mechanical reproduction beg the ideal of a traditional literary canon. However, as we move further into the digital age there is a shift in the paradigm where the canon is being reinvestigated by authors long forgotten about and who are now being catalogued digitally. We are standing on the threshold of change where old ideals are being challenged and a postmodern construction of new canons are beginning.

One needs to look no further than a codex anthology to understand the limiting nature of paper-bound canons. The scores of anthologies circulating on higher education campuses attest that many authors, who have contributed and influenced the literary landscape, are often omitted in favor of more accessible and well-know writers. Women often go unnoticed or appear in anthologies marginally, while the "heavies" occupy the majority of anthology space. The dawn of the digital revolution provides anthology publishers with the opportunity to accompany the print version with web supplements that can be expanded and updated to infinity. An anthology could now give sufficient space to several works, while supplying background and additional text in a web environment. The aura of a work Benjamin talks about would then in many ways be expanded, or at least changed, and not diminished in that instead of only seeing a reproduction of a work a user could see an entire body as well as investigate background information concerning an author.

Along the same lines, the permanence of the book could be replaced with a range of digital choices where the user could select and construct new canons, or versions thereof, in private. The use of "favorites" in Internet browsers already supports this idea, and while the new canons may never become mainstream they do demonstrate a sole

reader's choice in text dissemination. However, by enabling students to gather additional information about authors, digital technology is also reversing the function of the traditional canon. As Benjamin asserts then, the criteria for the "authentic" is no longer applicable and the foundation for new canon formation is based on politics because of personal preference and traditional values and beliefs. Students of tomorrow should thus have a more active role in canon formation and will be able to interact with the text, sometimes even assisting in the construction, while likely rejecting the permanence and unapproachability of former canons.

It is easy to see that the aura does still have its allure. Scanning the Internet one can find a plethora of sites dedicated to members of the traditional canon, while trying to gain a collection of sites on new or rediscovered authors proves difficult at best. And while the digital age is in its infancy, many hypertext projects still only mirror print in that they have yet to gain new ground on canon formation or mainstream discovery of authors. Naysayers would also argue that the proliferation of digital technology is also aiding in the destruction of the critical panel of voices who worked so hard to define what is unique and worthy. However, what digital technology is doing is expanding the voices of authors who would have otherwise gone unheard, while amplifying the voices of those already listened to.

The downside of this new appreciation for literature due to mechanical reproduction,[1] especially for Benjamin, was the thought that the ability to mass produce will somehow take away from art's inherent value and change its nature. His thoughts often concerned photography versus film, but it can easily be compared to the codex

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[1] Yes, images are gradually taking the place of text, especially in new literature, but literature already established in the canon is currently experiencing a steady increase in awareness and readership.

book and digital text. As Benjamin stated, "when the age of mechanical reproduction separated art from its basis in cult, the semblance of its autonomy disappeared forever. The resulting change in the function of art transcended the perspective of the century; for a long time it even escaped that of the twentieth century, which experienced the development of film" (226-27). This change from self-governing to censored art is almost the exact opposite of what digital technology has done for literature. The digital era has opened up autonomy again while threatening the very basis of traditional scholarship by asserting itself on the public through a non-mediated voice. The value that has been taken away by mass production, and even more so by digital technology, is that the reliability of information is no longer there. Books provide a concreteness where the text will always be; digital technology can be modified, manipulated or changed in a matter of seconds. The continued advancement of digital technology, especially when viewed through the lens of cultural studies, is changing the way we digest information in that we must question, as well as change, our ideas concerning consumption of information. The landscape of literature is changing because the medium we use to read and produce it is changing as well.

Marshall McLuhan asserted that the "medium is the message." If this is then true, the computer and related technology are providing users with new ways of looking at their own, as well as other people's, text while also alluding to a new way of thinking. It can be argued that in good writing, whether it is found in a book or on a screen, the medium in which the text is found disappears. This appears even more evident with computer technology. Through graphics and enlarged displays the user can often "disappear" into a text, only to find himself transported back with the click of a mouse.

That is not to say that one can not "disappear" into a book; however, the virtual environment of a computer predisposes itself to an appeal on the visual and thus, as Stephen Ellis points out in his article "Pictorial Communication," "focusing on the symbolic content has the useful effect of reminding the viewer of the essentially duplicitous nature of a picture scene…" (23). However, even though the scene may be fake, and the viewer is reminded of that, there are still inherent feelings one immediately has when viewing a picture.

For Benjamin, this mass visualization of art is precisely what would, or at least could, destroy it. No longer would art and literature be sacred things, and mass production would change the reaction of the masses toward it. As he states, "the greater the decrease in the social significance of an art form, the sharper the distinction between criticism and enjoyment by the public" (234). The same can be said concerning the value of text on the Internet. With no true mediation, who is to say what is good and what is bad? This brings us back to the canon debate. The perception of text is changing because of the proliferation of digital technology; yet, where are the safety mechanisms to ensure only high quality texts are produced? The answer is there is nothing to stop, from remedial to advanced, writers from publishing a manifesto that is read by thousands and enjoyed by all.

However, will the ability to jump in and out of a text affect the value of a reading? Benjamin certainly believed it would when he stated, "a man who concentrates before a work of art is absorbed by it….in contrast, the distracted mass absorbs the work of art" (239). The Internet is full of distractions, from pop-up adds to the vastness of its resources. When looking at literature through the medium of digital technology there are

virtually thousands of pages one could look at simply by clicking on the mouse. An array of games, toys, chat, and programs await a user who turns on a computer. The book, on the other hand, is a closed entity and the only outside distractions are in the immediate physical vicinity. Yet, while there is no denying the fact that hypertext beckons the user to jump from one page to the next, it also forces the user to develop a complex web of thought processes where inter-connections between works are essential, or at least helpful, in understanding the overall theme.

In "The Rationale of Hypertext," Jerome McGann provides an interesting argument for the use of hypertext in literary study: "hypermedia editions that incorporate audio and/or visual elements are preferable since literary works are themselves always more or less elaborate multimedia forms" (18). And while his examples of Blake and Dickinson are interesting, his reference to the Rossetti Hypermedia Archive (a hypermedia research archive of Dante Rossetti's works) is even more so. As McGann states, "when a book is produced it literally closes its covers on itself. If its work is continued, a new edition, or other related books, have to be (similarly) produced. A work like the Rossetti Hypermedia Archive has escaped that bibliographic limitation. It has been built so that its contents and its webwork of relations (both internal and external) can be indefinitely expanded and developed" (61). This rationale would probably offer Benjamin a chance to retort on the distractions of the mass before a work of art; but, it seems with literature this type of activity clearly has benefits that outweigh any negative consequences in that hypertext does indeed have the ability to infinitely expand, while it could also be argued that it reminds the user that some of the most productive thinking comes from loose associations.

The cultural effects of digital technology will not end with hypertext; rather, the proliferation of computers will most likely signal a dramatic downturn in the number of books published in print form each year. Benjamin's contemplations on mechanical reproduction can serve us well here in that the future of the book and hypertext is unknown, much like the future of film was unknown in Benjamin's time. There are limitless possibilities with technology today: computers that respond to voice commands, digital pens that transcribe notes to a computer, virtual reality books, the list goes on. Yet, the aura of the book seems to always survive.

The codex book will not vanish overnight because of digital technology. Even if electronic libraries someday catch up to cataloguing all the available print titles, there is no reason to think print will disappear. For just as Benjamin eulogized the aura of a work, so do scholars today eulogize the aura of the book. The portability, familiarity, and ease of use it offers are not something society will easily abandon; however, the proliferation of technology makes it that much more clear that a reduction in print is likely to come in the near future while digital text will flourish.

In his essay "The Future of the Book," Sven Birkerts states, "the book will disappear, if it does, because the functions and habits which it is ideally suited will themselves disappear" (190). By stating this Birkerts is admitting that the electronic medium can change the way we read. The basic mode of reading has been thus through the book; yet, computer technology is making it so that we can download books onto palm-sized computers and take them with us – simulating the ease and convenience of the book. However, as computer technology evolves the risk of losing the medium we are comfortable with increases as well.

Echoing McLuhan, one could then indeed say "the medium is the messenger" and realize that reading at least will still be a viable activity on some level; however, as I will discuss in Section Three, it will change in certain degrees. And while the mode of representing alphabetic language may change through time the written record will survive, whether it is through dots of ink on paper or pixels on a screen. Yet, as the representation of words changes so does society's view of the text and the meaning behind it. By better understanding representation then, one can get a closer view of the intent of the author and thus infinitely preserve the aura of the work.

Section Three: The 21st Century "Readerly" Text

Computer technology offers us a new medium in textual production and dissemination. Similar to the change from an oral to a print-based society, this new form of communication has some people worried and others excited. Sven Birkerts claims that we are witnessing the gradual, but steady, erosion of the species itself, while, on the other hand, Steven Holtzman argues that hypertext offers possibilities unlike anything we have known before. For literary scholars, this new form of textual production and dissemination is a watershed of critical issues. Among those issues that stand out the most, the narrative is gaining a majority of the attention.

In Orality and Literacy, Walter Ong states, "more than any other single invention, writing has transformed human consciousness" (78). The act of writing and reading a text is something that is dramatically changing again with the proliferation of computer technology; hence, our consciousness is once more subject to change simply because our methods of dissemination are changing as is the way we produce a text. By looking at Roland Barthes work S/Z, a greater understanding can be gained concerning the benefits electronic text offers over the codex book, while also realizing how the narrative is changing through hypertext writing, and how the signifier and the signified are helping readers visualize a more accurate representation of the "natural" sign.

Not all people would argue that the elements of narration are experiencing the biggest change as a direct result of hypertext. Yet, readers in a hypertext environment are not bound to the linear format of the book; rather, they have the ability to skip in and out of a text, making choices in what to read and what to ignore. Skimming through a text

can be done with the codex book; however, with hypertext the educated reader should realize that by skipping links he is making the text his own in that the author placed those links there with additional information to be discovered by the reader. At the same time, as George Landow states in "Hypertext as Collage-Writing," "linking, the electronic, virtual connection between and among lexias, changes relations and status" (156). In essence, the way one reads a hypertext has as much impact as the context in which one reads it. In hypertext writing, the reader can make up a text as much as the author in that he can go to other pages in a random order. The highly flexible method of reading is not entirely new, but it does present interesting situations for literary scholars, which calls to mind the question: who makes up the text?

Early in S/Z, Barthes makes distinctions between what he calls "readerly" texts and "writerly" texts. As he states, "what can be written (rewritten) today: the writerly...what can be read, but not written: the readerly" (4). Hypertext actually supports both of these functions, although with computer technology the ability to "cut" and "paste" makes it immediately possible to transform any given text into a writerly one, while selecting which link to follow from one page to the next also opens up dialogue. It is this dynamic flexibility of hypertext that makes it so unique, while making it so confusing and liberating at the same time.

Hypertextual systems support writerly texts because their very nature promotes additions to the work on the screen. Through the use of links, hypertextual environments can be expanded to infinity while promoting non-linear arguments. The ability to create a web of information also allows the writer to create several discussions at the same time before arriving at a general conclusion. Books, on the other hand, promote (even force) a

linear progression of an argument – a deviation from this would be not only confusing, but could be destructive as well. There is no room, nor patience on the reader's part, for the argument to jump around from page to page before arriving at a conclusion. The traditional, or "classic" texts as Barthes calls them, force the reader to read pages in a predetermined sequence that the author purposely chose, never allowing room for a commentary or deviation from the pointed argument.

In S/Z, Barthes fragments and comments on the short story "Sarrasine" by Balzac. This sort of interruption, while not unfound in academic writing, was a break from the ideal form of print writing in that he develops several points at the same time, while ignoring conventional methods of discourse. This intentionally multi-layered discussion foreshadows the use of hypertext on the Internet. As Barthes states:

> to interpret a text is not to give it a (more or less justified, more or less free) meaning, but on the contrary to appreciate what plural constitutes it. Let us first posit the image of a triumphant plural, unimpoverished by any constraint of representation (of imitation). In this ideal text, the networks are many and interact, without any one of them being able to surpass the rest; the text is a galaxy of signifiers, not a structure of signifieds; it has no beginning; it is reversible; we gain access to it by several entrances, none of which can be authoritatively declared to be the main one; the codes it mobilizes extend as far as the eye can reach, they are indeterminable (meaning here is subject to a principle of determination, unless by throwing dice); the systems of meaning can take over this absolutely plural text, but their number is never closed, based as it is on the infinity of language. (5-6)

Both the use of hypertext then and Barthes' discussion of "Sarrasine" call into question the part of the reader in the dissemination process. While the text still shows various arguments, the reader is still ultimately responsible for turning the page. However, in a hypertext system, the reader is free from the constraints that the book gives in its linear arrangement of pages and is in essence responsible for the amount and mode of information digestion. This type of freedom resembles Barthes' ideal text, complete with "lexias," or text composed of blocks of text, that allow the user/reader to travel in and out of a discussion at will. Rather than forcing the reader into a predetermined mode of analysis, the reader is free to roam about in a hypertext system and gather information in a random fashion.

Electronic reading seems to shift the focus from the writer entirely to the reader. In a web environment, it is the reader who is responsible for the nature of the argument; it is the reader who has the choice to click on a link or continue reading the text in a linear format, and it is the reader who could comment and thus change the nature of the argument by providing a link from (or in some cases to) the text. This polyvocal form found in any hypertext system automatically lends itself to the idea of a writerly text. The voices asserting influence on a reader of hypertext can be confusing and contradictory at times, but that is also the main benefit of the system – the built in ability to present multiple arguments and thoughts in order to gain a more complete picture of the issue. At the same time, reading through a digital medium provides the user with the ability to switch the font in both size and type, while highlighting and deleting/adding text at will.

However, the book, in all of its glory, cannot be modified the way electronic text can be. It is designed to provide a unified look and concreteness to an argument; it is designed to be read from left to right with deviations usually taking away from the overall argument; and it is designed to be disseminated outside its paperback covers. There are opportunities to write responses to books and refer to them at the same time, but the immediacy of reference that hypertext offers cannot be replicated in the codex book. In Walter Benjamin's essay, "The Storyteller," he states, "by now almost nothing that happens benefits storytelling; almost everything benefits information. Actually, it is half the art of storytelling to keep a story free from explanation as one reproduces it...The most extraordinary things, marvelous things, are related with the greatest accuracy, but the psychological connection of the events is not forced on the reader. It is left up to him to interpret things the way he understands them, and thus the narrative achieves an amplitude that information lacks" (89). Benjamin was referring to the massive dump of information he received each morning from news-sources around the globe, but the problem can be related to books and hypertext. With a book the amount of information is closed and limited, but with hypertext one can grab more information and opposing views almost at will and often through links right on the original page. In this respect, the reader has the control with digital technology, while with print he is at the mercy of the author.

In a virtual, or online, environment, the center of the text actually rests on both the reader and writer. The reader is the one responsible for clicking or not clicking a link and thus altering the mode of traditionally pointed discourse between the author and reader. The writer on the other hand, while ultimately responsible for placing the text online,

does not have the means to point the reader in a given direction (especially in a true

hypertext system where there are multiple links on any given page); yet, the writer does

provide the original words for content. This removal of the writer from the dissemination

process, and promotion of semi-structured information gathering by the reader, points to

the writerly text Barthes describes.

George Landow states in Hypertext:

Electronic linking shifts the boundaries between one text and another as well as

between the author and the reader and between the teacher and the student....it

also has radical effects upon our experience of author, text, and work, redefining

each. Its effects are so basic, so radical, that it reveals that many of our most

cherished, most commonplace ideas and attitudes toward literature and literary

production turn out to be the result of that particular form of information

technology and technology of cultural memory that has provided the setting for

them. This technology – that of the printed book and its close relations, which

include the typed or printed page – engenders certain notions of authorial

property, authorial uniqueness, and a physically isolated text that hypertext makes

untenable. The evidence of hypertext, in other words, historicizes many of our

most commonplace assumptions, thereby forcing them to descend from the

ethereality of abstraction and appear as corollaries to a particular technology

rooted in specific times and places. (33)

Landow's assertion that the boundaries between text and reader shift with electronic text

also clearly supports the idea of a writerly digital text. In addition, he seems to be

suggesting that electronic text is forcing us to reevaluate our old assumptions and beliefs

concerning reading and writing, while we focus on the new electronic text. This assertion echoes Barthes in that the reader and writer are no longer separate in a hypertext system; they are on near equal ground; yet, the reader controls the unlimited flow of information, while the writer controls only the text posted.

Electronic texts do present their problems though: the reader is often confined to a chair, sitting at a desk with eyes straining against the glare of the monitor; the portability is not as easy; and, cost often overshadows that of traditional paperbound books. Yet, electronic text is still something that is gaining ground in all aspects of publishing. Books, especially textbooks, are sometimes accompanied with CD-ROMs or web appendices, while electronic novels are now available from authors such as Stephen King and even Mark Twain. In short, the problems are being overcome and the benefits are being seen. However, as Paul Duguid suggests in "Material Matters," the book will endure; "pencil and hinge survive technological cuts on the strength of their deep social resourcefulness. And for similar reasons, we may find that the simple hinged book will prove as enduring...(they) offer their own deep-rooted and resilient combination of technology and social process and continue to provide unrivaled signifying matter" (64). The signifying matter of the book is something we will not escape for centuries, if ever. And even though the center may be alternating back and forth between the writer and reader with electronic publishing, a base still lies in the text that is present on the page or screen.

As I suggested in Section One, the proliferation of computer technology is gradually reducing *ekphrasis* and bringing us seemingly closer to the true signified, especially when looking at documents on the Internet. The use of pictures to replace text

is a practice that is growing and thus forcing the symbols of representation to not only

modify, but be more accurate at the same time. Jacques Derrida reminds us in "Structure,

Sign and Play in the Discourse of Human Sciences," that language is only a substitute

and signs always defer to other signs. He goes on to assert that meanings can change by

who is reading the text. If this idea holds true with *ekphrasis* and the Internet, the ability

to abolish the alphabetic signifiers and adopt graphics in their place is essentially an

attempt to project a universal idea or meaning to the reader (which could signify that

pictures somehow have an inherent meaning built into them). However, if the graphics

are misinterpreted, then there is another whole set of problems the reader and author must

deal with.

More importantly, though, digital technology's ability to reproduce images is also

changing the way we read and disseminate text. No longer are we confined to just

reading the words on the page; with hypertext the ability to have a sort of dialogue with

the absent author as we select which paths to move through the text is fully realized. As

J. Yellowlees Douglas suggests in "'Nature' versus 'Nurture,'" narrative has in fact

already changed: "many theorists concerned with the social impact of hypertext have

already noted that the technology almost inevitably results in a blurring of the otherwise

clearly demarcated lines between author and reader even in read-only hypertext

documents, since readers are presented with multiple pathways through the text, making

each of their readings through it one realization of the many possible versions, "writing"

the text that they read" (340). This ability to make the text one's own by choosing which

path to take through the discourse is something the codex book, with its linear format,

does not allow. Narratives in a hypertext environment must consider the many different

audiences they will encounter and the way different readers may navigate through the systems.

Barthes was well aware that the reading of a text could provide different interpretations depending upon how one read them. As he states in S/Z:

> literature itself is never anything but a single text: the one text is not an
> (inductive) access to a Model, but entrance into a network with a thousand
> entrances; to take this entrance is to aim, ultimately, not at a legal structure of
> norms and departures, a narrative or poetic Law, but at a perspective (of
> fragments, of voices from other texts, other codes), whose vanishing point is
> nonetheless ceaselessly pushed back, mysteriously opened: each (single) text is
> the very theory (and not the mere example) of this vanishing, of this difference
> which indefinitely returns, insubmissive. (12)

In this sense, even the classic readerly text is made up "of fragments, of voices from other texts, other codes." Barthes, then, while distinguishing between the texts, clearly sees even in the classic text the potential for fragmentation and multiple entry points. More importantly, his acknowledgement of this ability to fragment and enter through multiple places prefigures and supports the idea of hypertext and the new way of narration in an electronic environment.

The type of reading and breaking down of a text that Barthes demonstrates with Balzac's "Sarrasine" is one that demonstrates how possible it is to have multiple entrances to the text. He approaches the work with multiple ideas and creates a text that nearly dwarfs the original story. He does not rewrite the text as it may appear; rather, he opens the several interpretations, or "entrances," and makes the interpretation of a classic

text in general subject to debate. This debate echoes the hypertext debate in that the links present on a hypertext document can sometimes conflict with the apparent main point of the author and thus confuse the reader. However, even with conflicting links, the electronic text is still conducive to non-linear reading and understanding of a text.

Yet looking at electronic text as something that frees the reader from the linearity of the print paradigm is to assert, in essence, paradoxically the primacy of the text's structure and the author's authority. For just as print text forces the reader to follow a given pattern, so does hypertext by prescribing the links available, determining where those links lead, and how many choices will be available on each new page. Hypertext's multiple structures and reader-enabled links allow the reader to read in particular ways just as the classic print does. The difference, however, is how the reader in hypertext can change the meaning and read multiple paths at once, while in print the reader must read the prescribed path first before realizing the potential of other interpretations.

In Hamlet on the Holodeck, Janet Murray explores the new form of cyber-narrative and asserts that digital technology is filling a void in our technologically advanced society. As she states, "part of the impetus behind the growth of the multiform story is the dizzying physics of the twentieth century, which has told us that our common perceptions of time and space are not the absolute truths we had been assuming them to be...We are outgrowing the traditional ways of formulating this experience because they are not detailed or comprehensive enough to express our sense of the pullulating possibilities of life" (34-35). In other words, we need the dynamic capability of hypertext to satisfy our increasing desire for unlimited choice. Through digital technology,

narrative is adapting to a new form of discourse where the reader controls the direction of the story and the fate of its characters.

Barthes' notion of the "death of the author," where he argues that texts are deferred signs and that meaning in the text lies essentially within the reader, makes it clear that the reader of hypertext has as much authority to "make up" the text as the writer. According to Barthes, the text is a place where all cultures and dialogues are focused, from both the author and reader, but it is the reader who ultimately must interpret the meaning of the work. By following links within a hypertext document the reader can disseminate information that piques his interest, while ignoring, or at least only glancing, at pages of information he considers irrelevant. This sort of "hunt and peck" technique of reading, which could be compared to how one reads a magazine or newspaper, makes it that much more important to utilize a signifier that correctly signifies the object the writer wishes to discuss. Looking specifically at some of Barthes' work in S/Z, where he describes the five codes (semic, symbolic, proairetic, reference, and hermeneutic) under which all textual signifiers can be grouped, can help us understand how digital technology is eroding *ekphrasis* and bringing into question our ideas of representation of the signified.

The first code that Barthes identifies is the semic code. According to Barthes, the semic code is "the unit of the signifier" which creates or suggests "connotation" (17). In this sense, the signifier contains something that is inherent in the meaning of the word and something subconsciously the reader would relate to without much thought. A primitive example can be seen in the word "bad." Bad can mean either good or deviant behavior, depending on the context of its use. The connotation is all important here in

that in order for the signifier to identify correctly the signified, the author and the reader must have the same idea in mind. That statement may make the process seem more complicated than it really is, but in essence, the author and reader need to have a somewhat similar set of identifying values in order to understand the connotation. That being said, the author and reader also need to have an understanding of the signifier in that they can rationalize what is being signified.

Hypertext offers an unparalleled ability to utilize a universal signifier (a picture) and more accurately produce meaning for a reader. The absence of the signifier here cuts out alphabetic language and thus reduces the need for *ekphrasis*. The cliché "a picture is worth a thousand words" could then be considered true in that the connotation of the signifier is the signified itself. When Barthes stated that there is a "unit of the signifier" that creates a "connotation" it could be read that he was alluding to the idea of what W. J. T. Mitchell calls the "natural sign." However, the problem with the natural sign is that it does not always provide enough information. As Mitchell states in Iconology, "when the conventionality of language is invoked to make a case for its superiority to imagery, the arbitrary sign becomes a token of our freedom from and superiority to nature; it signifies spiritual, mental things, in contrast to images which can only represent visible, material objects; it is capable of articulating complex ideas, stating propositions, telling lies, expressing logical relations, whereas images can only show us something in a mute display" (78-79). Yet, programmers in the virtual world of computers and related technology seem to gravitate toward the belief that with pictures the connotation is universal because images are generally easy to understand. This could be considered an

acceptable statement, but a confusing picture can lead to a confused viewer just as easily as if one reads a confusing passage of text.

The second code Barthes looks at is the symbolic, which attempts to provide a point of reference to combat any confusion among the semic codes. As he states, the symbolic "lays the groundwork" [for a] "symbolic structure, since it can lend itself to many substitutions, variations" (17). In other words, the symbolic points to something we can relate to and yet provides numerous points of entry for dissemination. The symbolic code could be read to allow the reader an opportunity to understand the signifier with some universal truth attached to it, something appealing to the human condition that everyone understands and can relate to. A good example of the symbolic code can be seen with a cross. This symbol connotes Christianity and a structured belief system; yet, it can also connote anti-Christianity and mortality. However, any way we read the symbol there is a groundwork already laid for interpretation in the symbol of the cross itself.

Digital technology is utilizing graphic symbols to accurately depict visions of the author. By utilizing the groundwork that culture has provided for the image at hand, technology is forcing the disappearance of *ekphrasis* by incorporating graphics where text was once placed. The symbolic that Barthes mentions is then becoming a representation of a culture's identifying images. By stating this I mean that the common images of a culture are becoming the dominate images in support of the disappearance of *ekphrasis*. No longer is there a need to describe the golden arches of a certain restaurant, or the colorful bird that is the mascot of a major network when these are now common images that can best be described with graphics. At the same time, to gain a greater sense

of the "natural sign" it only makes sense to include pictures of the common cultural image.

In regard to the cultural image, Barthes describes the (gnomic) reference, or cultural, code as "the knowledge or wisdom to which the text continually refers" (18); and that forces us to "reference(s) to a science or a body of knowledge" (20). This code, in particular, looks closely at the way in which words can evoke images or link thoughts through a body of knowledge. Barthes uses the example of Sarrasine discovering the truth about Zambinella after referring to him as a "she" while talking with the Roman Prince Chigi. "'Where are you from?'", the Prince asks him. "'Has there ever been a woman on the Roman stage? And don't you know about the creatures who sing female roles in the Papal States?'" This evokes the reference code, Barthes asserts, "History of music in the Papal States" (184). By utilizing certain phrases, entire lexias of thought can be called to mind where identifiable reference points can then be established. It is this code then that is primarily responsible for the composition of a variety of ideas concerning the same text. Each reader brings a variety of backgrounds into the text and asserts different values and meanings on the same words depending on that background.

The idea of bringing different backgrounds into a text and using them to understand a work calls to mind Stanley Fish's essay, "Is there a Text in this Class?" Here, Fish recollects teaching a class in seventeenth century English religious poetry. As his students enter the room, Fish notices a list of names/words on the blackboard that were left there by the previous class: "Jacobs-Rosenbaum, Levin, Thorne, Hayes, Ohman." He adds "p. 43" and tells the class that this is a religious poem and asks them to interpret it, which they proceed to do. What he then goes on to say is that

"interpretation is not the art of construing but the art of constructing. Interpreters do not decode poems; they make them" (32). Virtually any set of words, it appears, can be subject to some sort of meaningful interpretation. Who is the "author" of the poem on the blackboard: the previous instructor? Fish? the students in the class? Concerning hypertext, this discrepancy between author and reader is similarly problematic. In one sense, the author's ability to impose a necessary structure and sequence on a text is undermined as the network of links becomes more and more complex; at the same time, the process of reading involves the active making of links between nodes of text in the same way that "authoring" does. The relation of author and reader is thus made reciprocal: the "accessing" of textual information influences its "production," and not only vice-versa. As Michael Joyce said in "(Re)placing the Author," "Electronic texts present themselves in the medium of their dissolution: they are read where they are written, they are written as they are read" (274).

More importantly, though, as Barthes reminds us with the notion of a cultural code, we are constantly referring to bodies of knowledge for clues to the signified. Computer technology is breaking down the discrepancies that can come from different cultural baggage being brought into a text by offering graphical representations of the signified. *Ekphrasis* is then disappearing because of a need for Mitchell's "natural sign" in order to make interpretation easier. However, how one decides to represent an image can be very crucial to the overall understanding of the idea behind such a representation. For example, reproducing a picture of New York at sunrise with the void of the World Trade Towers in the background could evoke feelings of renewal; however, if that scene were reproduced with a color filter over the lens it could make the feelings very different.

The idea of representation brings us back to Benjamin's essay for if no other reason than to acknowledge that representation is an attempt at reproduction. And as Neil Kleinman discusses in his essay "The Gutenberg Promise," the result of differing representations can sometimes be drastic; "we began to see ourselves in mirror images, finding ourselves caught between possibilities, unable or unwilling to distinguish the 'real' from the 'illusion,' the object of the reflection" (88). The idea that representations are reflections, and not the real images, leaves room for manipulation of the original and a distortion of the "truth." Digital technology, in a matter of seconds, is capable of manifesting and distributing to millions of people various documents that may appear to have the same content and yet are different in subtle ways. This phenomenon can then be seen as troubling for the reader in that the "truth" is harder to distinguish from a misrepresentation.

However, even with a misrepresentation we still see a shadow of the original and a fragment of the author's voice. Barthes might argue that the dissemination of a representation is influenced greatly by the cultural code in that one can bring various issues to task concerning the "new" entity. Concerning digital technology and the disappearance of text in favor of graphics, Barthes might also argue that this falls under the umbrella of the cultural code as well. For if technology is reflecting society in that it offers what we want, then the absence of text is a reflection of our need to disseminate an author's ideas more quickly and accurately. Consider how fragmented is the media workhorse of television. Society seems to want news and entertainment in short, yet meaningful, chunks so they can pursue various activities; digital technology is providing them with a means to break down and separate language in the same way, then, that

television breaks down and shreds events. The lexias that Barthes uses to break down "Sarrasine" could then be seen as fragments of information suspended for digestion, very similar to the fragments of text spliced with graphics that we see on the Internet today. In each case, the representation of ideas that the author put forth is made clear by the fragmentation and piecing together of the text or image. It seems then that breaking things into smaller and easier to understand units is essential in an overall understanding of something.

In Orality and Literacy, Ong reminds us that "we must not forget that episodic structure was the natural way to talk out a lengthy story line if only because the experience of real life is more like a string of episodes than it is like a Freytag pyramid. Careful selectivity produces the tight pyramidal plot, and this selectivity is implemented as never before by the distance writing establishes between expression and real life" (148). If it is true that through digital technology the absent sign is now becoming visible, we should still remain aware of the structure of arguments and the rhetorical demands placed on the reader. For if hypertext does make it possible to link different, or new, points of association, it also has the effect of fragmenting and decontextualizing each thought. The non-linear associations may be more useful, but without making one a principle to the argument it may make the entire discussion arbitrary. The new paradigm in literary studies is indeed partially anchored in the fact that digital text removes the reader from the pointed argument that books provide; rather, in a hypertext environment the reader is free to roam and discover the text in new ways each time it is accessed - inferring meanings as new information is discovered. This new way of viewing/understanding a text and how it is constructed could in fact be considered the

nucleus of the paradigm. Regardless, Barthes provides an excellent starting point for literary scholars and students to think about electronic text and its "true" center. However, the future of this text truly rests in how quickly we can alter our acceptance of information and yet stay cautious to the pitfalls of not understanding or realizing the potential of this dynamic medium.

Conclusion: Not Looking Back, But Cautiously Moving Forward

We are in what Jay David Bolter calls "the late age of print." The new media of digital technology is pushing our interest in the visual beyond the static mode of representation that print presents. To use Wallace Stevens' phrase, "to make plain sense of things," our culture is evolving along with the technology it is producing. For hundreds of years we relied on the codex book to provide our history, entertainment, and scholarship. Now, as we stand at the threshold of a new paradigm in communication technology, we are witnessing the birth of a digital dialect. This new era in textual production is already lending itself to new ways of dissemination and understanding the relationship of the author and reader. And while the future of literary studies will most likely be filled with flashy graphics and dynamic textual presentations where the possibilities of the text are limitless, society can rest assured that the book will survive.

In his afterward to The Future of the Book, Umberto Eco states, "electronic communication travels ahead of you, books travel with you at your speed" (299). The book will survive if for no other reason than because it is a familiar cultural artifact. Its permanence, ease of use, and familiar design were embedded in our culture long ago. The left to right flow of text and structured page break can be seen in almost all printed material - from restaurant menus to stereo instructions. Its compact design and independence from a power source also make it a likely survivor, while the overall durability and visual appeal add to the book's aura. The book is a cultural icon that has been eulogized as well as referenced in every form of entertainment and communication discourse; however, the lure of faster and more visually appealing digital technology will

force the masses to recognize the dynamic possibilities of hypertext while coming to understand its traditionally deviant structure.

George Landow reminds us that in addition to reconfiguring the literary canon and reevaluating the very idea of text, hypertext also deviates from the linear way of reading we are accustomed to in books; yet, "the shift away from linearization might seem a major change, and it is, but we should remind ourselves that it is not an abandonment of the natural" (Hypertext 56-57). Thought is often processed through blocks of information and gathered in a rapid and random fashion. Hypertext is similar in that it allows the reader to skip around, "make the text his own" and gather information in a way that suits the individual. The fragmentation of information that hypertext provides ends the linearity of an argument, but also moves us closer to an oral mode of discourse.

As our methods of communication begin to shift to a new paradigm, computer technology is helping push the visual to the forefront of communication discourse. Hypertext provides authors and editors the chance to place pictures where words once stood and thus alter our methods of perception and visualization concerning a text. However, even though computer technology seems to be championing the visual, hypertext itself seems to also be challenging the traditional role of the reader and forcing scholars to look at the overall value of electronic literature.

This thesis has explored several issues, including the disappearance of *ekphrasis*, the authenticity and value of digital text, and the nature of the narrative, all of which are involved in the debate concerning computer technology and literary studies. And while we struggle to grasp the full implications of the new paradigm of digital technology, the hypertext world continues to change and evolve, thus ensuring the center will never

become fixed and the concreteness of the text will always be subject to question. However, by gaining a better understanding of digital text, students and scholars will be able to alter their discourse in ways that embrace the technology instead of working against it.

There is no reason to believe that computer technology could somehow break society down to such an extent that we will mimic Ray Bradbury's Fahrenheit 451 in that we will each have a book memorized so that literature will not disappear. Rather, computer technology will most likely liberate our minds by allowing us to catalogue things we would have otherwise forgotten and reduce the amount of time we spend looking for such things. Yet people like Mark Slouka want us to believe that we are entering an age where our culture as we know it will slowly disappear and be replaced by one that lacks a foundation in traditional values and beliefs. This apocalyptic vision can easily be seen in "The Fate of the Book," where Sven Birkerts concludes by stating, "we are in danger of falling into a dream that is not ours or anybody else's, that spreads inexorably on the legs of its ones and zeroes" (299).

I have contended that digital text is offering us a new paradigm that has the potential for re-shaping the core ideals/identity of reading, teaching, and writing about literary texts. This new paradigm is born out of the idea that the reader can make up a text and the message of the author can still be disseminated. However, this break from the traditional mode of linear discourse in print is not entirely new. Experiments in print have occurred before where authors attempted to delve into the non-linear method of textual production with the codex book that was akin to our current hypertext. One example can be seen in a small sect of young adult literature books that were published

years ago. Here, readers were allowed to read a few pages in the traditional linear format and then were given the option of jumping ahead several pages if they felt the story should take one direction; or they could simply turn the page if they felt the story should follow the current path. They were also instructed to turn to corresponding pages deep within the text to learn more about characters and settings. This type of a book offered something other books did not: choices.

The choices a reader makes within a hypertext environment define the content of each reading. However, it is the immediacy of hypertext that seems to attract people the most. This immediacy stems from the instantaneous projection from one idea to another, from one document to another, and from one author to another. Hypertext provides multiple texts on the same subject all contained within one entity - the computer.

Hypertext can also provide an immediate commentary that can change by the minute with just the touch of a few keys. An example of this can be seen in the relatively new Blogger pages appearing on the Internet. These dynamic web pages can be updated instantly by the host and are available to wide audiences who regularly check them for information and gossip. This type of information sharing is similar to newsletters; however, with the Internet, Blogs are positioning themselves to contribute to the way we as a culture gather and share information. In essence, Blogs are breaking down the filters and gatekeepers of the publishing world and linking themselves to other web pages to further information sharing, while smashing the thought that one writer or group can control the flow of data about a particular subject.

In the future readers can expect to interact more with the text, following various story lines at once and making several different narratives from one interactive story by

simply choosing different links to follow when asked to make a decision for a character. What this means to literary studies is that methods of assigning value to a text and understanding the author's intention will change. The reader will take a much more instrumental role in textual dissemination, yet the "center" will still elude scholars. With the continued use of technology to produce and read literature a new wave of techno-savvy will appear where literary students and scholars meet in totally digital environments with codex books serving as only reminders for "real" work on the screen. Literature has been exploiting technology for some time by utilizing familiar formats and primarily alphabetic language; now, technology will begin flipping the tables and attempt to use literature in a way to enhance its dynamic characteristics and open up people to new ideas in textual production and understanding.

By now it should be easy to see that computer technology is driving literary studies toward a new era in textual dissemination. Today's technology is helping writers become more clear and fluid with their ideas through the use of graphics; moreover, technology is assisting authors to reinvent the way a narrative is composed while at the same time challenging the ideas of what makes a text valuable. Literary scholars of today have the unique opportunity not only to observe a cultural shift occurring, but to participate in it as well. As Landow states in his conclusion to Hypertext, "contemporary theory can illuminate the design and implementation of hypertext, and hypertext in turn offers theory an empirical laboratory, a means of practice, refinement, and extension, a space, in other words, in which to test imaginings" (203). The landscape of literary studies is quickly changing; yet, the connections hypertext can make have only begun to be realized. We are truly witnessing the birth of a new paradigm.

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