THE DIGITAL AFFECT: A RHETORICAL HERMENEUTIC FOR READING, WRITING, AND UNDERSTANDING NARRATIVE IN CONTEMPORARY LITERATURE AND NEW MEDIA

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DEDICATION

To my committee, whose guidance, suggestions, and good swift kicks in the pants have been invaluable to me. Thank you for being less surprised than I am that I could ever finish this thing.

To Richard, my partner in all things, without whose love, support, assistance, and understanding, none of this would have been possible. *Semper una vadamus*.

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The Digital Affect is an exploration of ways to improve the teaching of reading and writing using digital media and technology. This requires a fundamental reexamination of digital narratives, building on and updating Espen Aarseth's seminal work in *Cybertext* and N. Katherine Hayles' recent work in *Writing Machines*. It also requires a critical appraisal of the technology of the personal computer as an environment in which writers compose – an environment that introduces possibilities while imposing constraints that materially influence the writer's efforts. This exploration is best undertaken, I argue, from the perspective of literacy studies, not literary theory. Rather than assuming the literary nature of digital narratives, my examination of the literacy requirements and effects of digital media and digital environments allows for the construction of a more nuanced and precise typology and genealogy of digital narrative. Focusing on the hermeneutical demands of digital media and environments reveals a narrative tradition that extends back to the earliest days of oral storytelling and that manifests itself not as a generic or historical formation, but rather as a poetical and rhetorical mode in which the narrative material is fragmented and distributed across media and throughout the virtual space of

the story. Probing the hermeneutical act of interpreting digital narratives suggests the operation of what I term the "distributed mode" of composing narrative, an authorial mode I examine in works as varied as Stuart Moulthrop's hypermedia story *Reagan Library*, Italo Calvino's novel *If on a winter's night a traveler*, Godfrey Reggio's film *Koyaanisqatsi*, and Laurence Sterne's novel *Tristram Shandy*. This attention to the hermeneutical requirements of works composed in the distributed mode reveals two important features: first, the inadequacy of the widely-used term "digital literacy" to describe the range of activities undertaken by the interpreter of such works; and second, the inextricability and simultaneity of "reading" and "writing" during the interpretation of digital and non-digital works alike. Throughout *The Digital Affect*, I argue that digital media disrupts and reconfigures our standard literacy practices, presenting an invaluable opportunity to make those practices visible and teachable in literature and composition classrooms.

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PREFACE

When I first began thinking about this project, in 1998, I had already noticed that something odd happened when I read hypertext fictions, such as Michael Joyce's Afternoon, A Story or Stuart Moulthrop's Victory Garden – I had to work a lot harder than usual to make it through them. The stories themselves weren't especially difficult; I certainly had read more challenging prose. But these texts seemed to be working against me, preventing me from *reading* them. The more I read, the more fiercely they seemed to resist my every effort to slip into my usual reading habits and patterns, because I could not rely on the conventions of reading a codex (book-form) text: reading from left to right across the lines of text on a page, following the lines from the top to the bottom of the page, turning the pages in sequential numerical order, progressing one chapter to the next. Because they defied traditional reading conventions, hypertext fictions presented me with no clear guidance as to where I should go next. I know when I am being "bad" with a traditional novel; reading the last chapter to find out what happens to the protagonist may be frowned upon by authors, but the technology of the codex allows these sorts of transgressions against the convention. Hypertext fictions, on the other hand, give no indication of the "correct" way to proceed. The narrative is distributed across a series of nodes, divided into fragments that are connected by hyperlinks, instead of arranged one after the other in a progression from the first page to the last, as in codex texts. Because the hyperlinks establish a conceptual and associative geography for the prose, "forward" and "back" become meaningful only in the temporal sense when discussing hypertext fiction, not in the usual spatial sense.

I eventually realized that part of what was frustrating me was the fact that I was having to work harder than usual to make sense of these stories. When I read most fiction books, I am able to slip seamlessly into the author's narrative world, interpreting the text of the book as I experience it in my mind's eye. In hypertext, however, I had to interpret not only the words on the page, but also my own reading process. I was constantly having to ask myself, what have I learned, what did I know before this, what do I want to learn more about, and how do I think I can find that information? All of these questions took me out of whatever immersive experience I might be having in the texts' narratives. Instead, I became preoccupied with the construction of the narrative that was being formed out of my efforts to read these texts. I was the protagonist in my own narrative, competing against the many nefarious tricks of Joyce and Moulthrop, as I forged ahead in my quest to "finish" these hypertext fictions. My narrative was episodic, filled with countless encounters as I read whatever prose passage was presented to me, attempted to fit it into the narrative framework that I was slowly constructing and revising in my head, and then attempted to find another prose passage that would answer the many questions I had.¹ Sometimes I prevailed, and sometimes I failed. Most times, however, I did not realize whether I had failed or succeeded in my efforts until much later in my reading experience.

What these hypertext fictions – hyperfictions – were forcing me to do was to consciously work through the subconscious strategies for world-construction that I performed every time I read. Usually, these procedures operated at a level of which I had not been aware since childhood, only rarely surfacing during particularly difficult codex passages. At these "what the—?" moments, I have two options: I may ignore my confusion, hopeful that at a later point in

¹ In *Afternoon, a Story*, for instance, there are "539 textual segments with 951 links among them," while *Victory Garden* has "a total of 993 textual segments connected by 2,804 links" (Gaggi 123, 131). Furthermore, each of these 539 or 993 segments might lead me back to a segment I had already read, making the number of segments a patient reader could attempt to read *infinite*.

the text my questions will be answered, or I may stop reading and attempt to reconstruct the moment of my difficulty. This second option might entail re-reading passages, or it might simply require me to devote a few moments to deciphering the many things going on in the text that have caused me such confusion. In any case, "what the—?" moments are few and far between – *except when reading hyperfiction or similar fragmented works*.

This project has its genesis in computerized hyperfiction, but it extends into a bewildering array of other media and forms. Reading contemporary literature, watching contemporary film, in fact, engaging with practically every form of contemporary art, demonstrates that digital media does not have an exclusive claim to fragmentation. Every conceivable artistic field has countless examples of its practitioners moving away from linearity and embracing fragmentation, multiple perspectives, collage, pastiche, and the disorientation of the consumer of the work of art. Labels such as "postmodern" have been deployed with alarming frequency to describe this pan-media movement, but this label in particular fails to take into account that these works were being produced long before postmodernity. Lumping Lawrence Sterne's *Tristram Shandy*, for instance, with Alain Robbe-Grillet's *In the Labyrinth*, ignores the historical formation and context of each work.

Instead, many digital works share a formal, structural basis – which exists within various historical periods, and is not the product of any one – which persists across media and across time. I advance the term "the distributed mode" to describe the structural and artistic conventions that connect these works. The distributed mode, like narrative or drama, is capacious enough to encompass the array of texts that evince it, and is also broad enough to include both fiction and non-fiction works produced in this way. This is an important consideration, as there is a great deal of criticism and theory concerning fragmentation in digital

works, most of which fails to differentiate adequately between fiction and non-fiction. This is largely due to the creation of the Internet and the World Wide Web, with its network of connected "pages." The programming language used to create Web pages, hypertext markup language (HTML), is named for its defining feature – the ability to connect fragments of text on one page with fragments of text on other pages, thus "transporting" the Web user across the "hyperspace" of the Internet.

As "hypertext" became both the programming language used to create the linked web of pages and also the name for the linked pages themselves, early digital literary theorists rarely acknowledged or sought to maintain the very real distinction between non-fiction hypermedia, such as the Web, and hypermedia fiction such as *Afternoon, a Story*. The cognitive demands of each type of work, though, are significantly different. In the first three chapters of this dissertation, I will examine only *fictional* works in the distributed mode, leaving composition of both fiction and non-fiction in the distributed mode for the fourth chapter.

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Chapter One, "The Distributed Mode and its Hermeneutical Problems," challenges the concept of "digital literacy" as fundamentally flawed. Examining the particular affordances of digital media, I argue that, although both multimodality and fragmentation are possible in many different media, digital technology is uniquely suited to facilitate and maximize the effects of each. In this chapter, I examine Stuart Moulthrop's hypermedia work, *Reagan Library*, using its integrated panoramic vistas and prose narration, as well as its fragmentation across a series of textual spaces, to illustrate the properties of the distributed mode. This analysis also demonstrates, importantly, that works in a variety of digital and non-digital media can be composed in the distributed mode. I turn to Julio Cortázar's novel, *Hopscotch*, as an illustration of the distributed mode realized in traditional codex form. Focusing on these two works – one digital, one codex – I develop a series of hermeneutical problems arising from the attempted interpretation of works in the distributed mode, exploring the essentially digital nature of even print works composed in the distributed mode, and providing a more nuanced and intricate understanding of "digitality." From this hermeneutical investigation arises a more nuanced understanding of "literacy" which may be applied to composing or interpreting works in the distributed mode. As I argue throughout "The Distributed Mode and its Hermeneutical Problems," digital literacy comprises a far wider range of works than *digital* suggests, and entails a far wider range of activities than *literacy* is commonly believed to encompass. Only by expanding our understanding of these two central terms can we reach a truly comprehensive and useful vision of digital media and chart a pedagogy for teaching it.

Chapter Two, "Rhetorical Hermeneutics," interrogates the use of rhetoric as a hermeneutical tool. In this chapter, I argue – through an examination of early texts on rhetoric, poetics, and philosophy, as well as of contemporary theories of rhetoric and performativity – that rhetoric and poetics fuse into a single signifying practice in the interpretation of literary works. Thus, as I demonstrate in the second half of the chapter, all literary hermeneutics are essentially rhetorical in nature. Building primarily on the hermeneutical theories of Hans-Georg Gadamer and Paul Ricoeur, and grounding my discussion in examinations of Marc Saporta's aleatoric novel, *Composition No. 1*, and Godfrey Reggio's film, *Koyaanisqatsi*, I construct a rhetorical hermeneutic specifically tailored to the interpretive demands of digital media and works composed in the distributed mode.

Chapter Three, "Master of the Maze: Reading as Godgame, Interpretation as Experience," applies my rhetorical hermeneutic to the problem of reading and interpreting works composed in the distributed mode, exploring the reader's complex process of *enacting* the narrative of the work – a process that combines traditional notions of reading and writing into a seamlessly unified interpretive practice. The rhetorical hermeneutic outlined in chapter two is here applied to Italo Calvino's notoriously difficult readerly novel, If on a winter's night a traveler, and Michael Joyce's no less challenging hypertext novel, Afternoon, A Story, illuminating the literary works as well as the reader's role and actions while interpreting the works. Revisiting the critical trope of the labyrinth frequently deployed by hypertext theorists, I explore the affective power of the labyrinth, arguing that, as in the labyrinth, the reader's actions and experiences are provoked by the affective power of these works. Understanding these works demands, therefore, that we pay full attention to the affective and aesthetic experience of the reader, in addition to critical analysis of the work's narrative. Throughout this chapter, I demonstrate the ways in which affective interpretation, coupled with critical analysis, can be applied to the teaching of literature and can improve the effectiveness of literature pedagogy.

Chapter Four, "Digital Discourse: Composing in and with Technology," describes the theoretical and pedagogical basis for the freshman composition seminar of the same name that I designed and have taught at the University of Pittsburgh. The goal of this course is to integrate contemporary compositional forms with the digital-based self-reflexive and self-aware interpretation demonstrated in the previous three chapters. The resulting pedagogy – based loosely on the work of the New London Group, and utilizing literary models such as Milorad Pavić's novel, *Dictionary of the Khazars* – explores the ways digital technology has affected our modes of communication, and manifests that exploration in a variety of writing media, both digital and non-digital. This chapter describes the course's pedagogy of code-switching from formal discursive modes, such as the traditional essay, to newer, more immediate and personal modes, such as the Web log (blog), and from the unimodal format of prose argumentation to multimodal rhetoric and argumentation. As in the previous chapter, I demonstrate and apply a new pedagogy that allows digital textuality to inform the study and teaching of composition and thus improve the effectiveness of composition pedagogy.

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Throughout *The Digital Affect*, I consistently argue two points: first, that digital media is inseparable from communication practices and arts in the world today; and second, that our classroom practices have not managed to teach the critical awareness of these media and their communication styles, strengths, and weaknesses that is necessary for the student to function as an informed participant in contemporary discourse. Though I may wax a bit rhapsodic about some of the digital works I discuss in this dissertation, I am no wild-eyed radical calling for the replacement of all books and paper with CD-ROMs and tablet computers. For this project, I have deliberately chosen canonical works to examine and discuss, and I have paired each true digital work with a non-digital work to show the commonalities and traditions at work throughout the distributed mode. Theorists of digital media, thrilled by the promise of the new, sometimes forget that productive approaches to current technology do not have to be, or to come from, new sources. Literary and interpretive practices both come from traditions and have long, proud histories behind them. Those histories and traditions are not so easily thrown off – they often can be found at the most surprising times and in the most unlikely places. *The Digital*

Affect is a beginning, a set of approaches and questions that I see needing to be answered, given current trends and research in narrative, interpretation, and pedagogy. I hope it will be seen as provocative without being dismissive of prior work, productive for the stimulation of further research on the many topics it raises, and an open invitation to all teachers and researchers interested in digital-age narratives and composition. Come on in, the virtual water is just fine!

1. THE DISTRIBUTED MODE AND ITS HERMENEUTICAL PROBLEMS

If we want to begin to see ourselves where we are, we will have to find ways to say exactly what we are seeing. (Joyce "New Stories" 170)

Every evocation or exploration of a new discovery demands a new rhetoric, a new terminology. If the newly discovered terrain is described in 'old' terms, they will colonize the new territory by imposing the beliefs they bring with them. (Downing and Sosnoski 100)

1.1. "DIGITAL LITERACY" IS NEITHER

As far as general rubrics go, Digital Literacy is a pretty good one: it is short, it uses common language words that everyone knows; it includes a cultural hot-button word, "literacy"; it features the sexy computer signifier, "digital." And yet, as we use it the phrase has a meaning largely separate from the literal interpretation of its two words. Digital Literacy does not refer to reading and writing digits – the word for that is numeracy. Instead, we mean the reading and writing of materials rendered in the digital media of the computer processor. The fact that we need to modify literacy to the sphere of the computer, or suspicion that the computer modifies the ways we read and write, and hence modifies what we mean by literacy. In either case, the relationship between digitality and literacy is far from stable.

To explore why this is so, it will be helpful to isolate the two terms of the compound signifier Digital Literacy, examining each term as it is used in critical discourse and as it contributes a specific range of meanings and expectations to the set of skills required to demonstrate Digital Literacy. As we shall see, neither digital nor literacy, as they are commonly used, is necessary or sufficient to describe the complex of cognitive and physical experiences and abilities required for someone to be considered digitally literate. Each term conceals as much as it reveals about what actually happens when people engage with digital works, and it will be the project of this chapter to begin to bring to light the scope of what Digital Literacy is and what it requires.

The process of uncovering the hidden mechanisms operating within the umbrella term Digital Literacy will lead quickly to questions of interpretation and understanding – what does it mean to interpret a digital work, what kind of works are to be interpreted, what is the relationship between the author, the reader, and the work, and what understandings of the digital environment are necessary to begin this work of interpretation, to name just a few – questions central to the hermeneutical tradition. As Richard Palmer succinctly explains, "hermeneutics is the study of understanding, especially the task of understanding texts" (8). There is a foundational impediment, however, to interpreting texts, referred to as the "hermeneutical problem": how can one *accurately* interpret texts written by *other* people, potentially living in far distant lands and possibly in long ago times? Hans Georg Gadamer, one of the towering figures in modern hermeneutical thought, notes that the hermeneutical problem is characterized by the fact that "something distant has to be brought close, a certain strangeness overcome, a bridge built between the once and the now." ("Scope" 22). Though Gadamer's focus is on works from the past, Palmer clarifies that hermeneutics is the process by which "something foreign, strange,

separated in time, space, or experience is made familiar, present, comprehensible" (14). The act of building a bridge between Digital Literacy and our "familiar, present and comprehensible" understandings of computer technology and literacy must be performed very carefully, lest the "strangeness" of Digital Literacy be lost, buried under the connotations of traditional print literacy and the now-familiar instrument of the personal computer. In his essay, "The Universality of the Hermeneutical Problem," Gadamer proclaims that "the real power of hermeneutical consciousness is our ability to see what is questionable" (13). This ability, though, remains itself hermeneutical, which means that "what is questionable" is not immediately apparent. The passages from Michael Joyce and David Downing and James Sosnoski that head this chapter each identify in the context of computer technology and communication this hermeneutical tension between ostensible, stable-seeming meaning and the examination and discovery of a more accurate, but, in Frank Kermode's words, "undetected latent sense" (*Genesis* 4).

Joyce writes that "we will have to *find ways* to say exactly what we are seeing" when we look at digital textuality and our relationships with it (170, emphasis added). We must "find ways" due to the limiting effect of our terminologies and habits of thought. Downing and Sosnoski assert that the exploration of any new "territory" demands its own rhetoric and terminology. At the beginning of any such exploration, the only terminologies available are the "old" ones, which Downing and Sosnoski warn "will colonize the new territory by imposing the beliefs they bring with them" (100). When examining a hybrid form of textuality, which digital technology certainly is, considering the hybridization in terms of its constituent, "old" elements using the specialized language and ways of thought developed for them seems an appropriate initial course of action. However, the hybrid is more than merely the sum of its parts. The *ways*

in which the elements are combined, and to what purpose and effect, contribute greatly to the new hybrid gestalt, demanding that not only the assemblage, but each of its constituent parts be reconsidered in its new, recontextualized aspect. Thus, though the old familiar terms and analytics may seem apt, stable, and even comforting when considering a new hybrid form, they ultimately serve to hinder its accurate description and examination.

The old terms and analytics remain instrumental for a brief period, as they indicate needs for new terms and analytics through the tension that arises from the dissonance between actual practice and experience with digital textuality and the inadequate tools at our disposal to describe and explain them. This chapter arises from just such moments of tension and dissonance, and explores the range of activities – constructive and interpretive, cognitive and physiological – lumped together under the broad heading of Digital Literacy, as well as the works that evince and demand such activities. The new terminologies and the new methodologies generated by this exploration will, in turn, point to new questions, which will demand their own terminologies and methodologies. Raising and answering such questions, in other words, is never an end in itself, but always helps us to see ever more clearly what remains questionable.

1.1.1. Digital Dilemmas: Reagan Library and Hopscotch

Stuart Moulthrop's *Reagan Library* was released for public access on the World Wide Web in 1999, and presents an ambitious commingling of textual and visual narrative.² Each lexia (plural: lexias)³ in *Reagan Library* occupies its own page, and consists of a colored banner on the left side of the screen identifying the lexia being displayed, a graphic representation of the

² Reagan Library can be accessed on the WWW at the following address: http://iat.ubalt.edu/moulthrop/hypertexts/rl/

³ The term "lexia" describes a fragment of prose, usually presented as an independent section of narrative. The term was adopted by most theorists of hypertext, hypertext fiction (referred to throughout this paper as *hyperfiction*) and other forms of distributed narrative, following Roland Barthes' terminology from S/Z (13).

location depicted by the current lexia, and a section of prose text. As in most web pages, the reader has the option of clicking on text links within the prose portion of each page. The reader also has the option of clicking on objects depicted within a panoramic vista (created with QuickTime VR) included at the top of each page. Figure 1 shows one of the four opening lexias, the blue "Pavilion."⁴

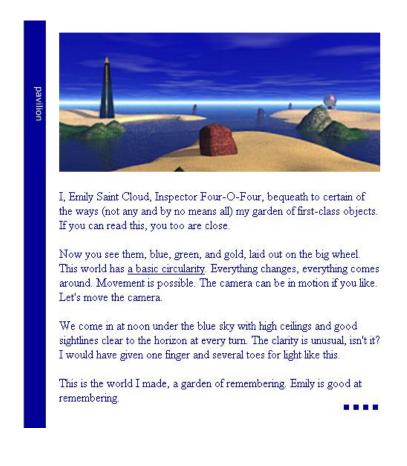


Figure 1: The Blue-Blue Pavilion from Reagan Library.

⁴ Given the difficulty of citing to internal portions of hyperfiction works, I have adopted a standard that attempts to allow the reader to locate quotations quickly and easily. As hyperfiction lexias rarely spread across more than one page, each hyperfictional citation will consist of the name of the lexia in quotation marks. For works such as *Reagan Library*, which duplicate lexia names across zones, I will also include the name of the zone.

In Reagan Library, Moulthrop establishes a set of "zones" and "states" that make up the work, and through which the reader navigates by selecting either prose hyperlinks or graphical objects in the panoramic window included in each lexia. The work is distributed across four zones blue, red, black with blue sky, and black with black sky - each of which contains prose told from a different narrative perspective. Each zone presents not only a different narrator, but also seven different lexia locations. Each of the four zones includes a central space, a "Pavilion," that provides a textual introduction to the zone. Some objects/spaces are duplicated across zones, as in the case of a mysterious cone-shaped object. However, in two of the zones the cone is white, and in two it is black. Similarly, some objects/spaces are unique to one zone. This array of twenty-eight lexias – four zones consisting of seven object/spaces each – is further multiplied by a randomization of prose text that Moulthrop describes as the "state" of each lexia. The first time a reader accesses a lexia, the prose text of that lexia is heavily randomized, largely consisting of phrases from other lexias. As the reader returns repeatedly to that lexia, though, the prose text becomes more ordered, and the random text is replaced with prose that begins to form a coherent unit. The state of the lexia, then, describes its counter-entropic progression from disorder to order, culminating at a fourth state, in which the prose settles into a fixed order.⁵ The reader, then, has not twenty-eight lexias to traverse, but rather 112 separate spaces through which she must progress via hyperlinkages if she wants to read the entire work.

Critics have noted the difficulties peculiar to hyperfiction works, describing "the disorientation problem" (Conklin 38) of being "lost in hyperspace" or suffering from "the frustration of disorientation" (Charney 250) caused by hypertext. Some have gone so far as to describe the state as one of "cognitive overload" (Schmundt 310), which may be so severe as to

⁵ All quotations from Reagan Library, except where noted, are from the fourth state of each lexia.

represent "a disorientation that precludes meaningful freedom" (Gaggi 104-5).⁶ In traditional narrative modes, digression is understood to be the prerogative of the author, and the reader or viewer has the tacit assurance that sooner or later the narrative thread will resume, and that the digression was, however tenuously connected or seemingly unrelated, important to the overall work. In works like *Reagan Library*, however, the reader's responsibility for choosing the navigational method, and thus for calling up the next lexia, easily can result in the sense that somehow the reader has failed (i.e., gotten lost or turned around), and the resulting frustration can be significantly greater than that experienced by the consumer of a work in a more traditional narrative form.

The frustration and lack of information regarding the results of the choices to be made by the reader in the distributed mode cause these works to resemble, spatially and phenomenologically, a labyrinth in which the reader is trapped. In his seminal book, *Cybertext: Perspectives on Ergodic Literature*, Espen Aarseth describes the reader's experiences in the labyrinth of the distributed mode as being a series of aporias and epiphanies. The lack of continuity in distributed narratives – as is provided by the sequential numbering of pages in traditional codex works, or as in the rapid sequential projection of static images in motion pictures – produces a blockage for the reader: after the reader finishes reading a particular lexia, there is no obvious, convention-bound successor to be read. Instead, the reader faces a structural fissure in the text and must choose for herself a way to traverse the gap built into the work. As Aarseth writes, "Aporia here becomes a trope, an absent *pièce de résistance* rather than the usual transcendental resistance of the (absent) meaning of a difficult passage" (Aarseth 91). The resolution of the aporia produces epiphany – the replacement of a lack of text with another lexia. Even when the reader's choice does not result in the resolution of the reader's needs, the

⁶ For more on this, please see Johnson-Eilola 202, Utting and Yankelovich 58, and Schmundt 316.

continuation of the work is itself a resolution of the premature ending represented by finishing a lexia. Thus, in Aarseth's terms, "The hypertext epiphany [. . .] is immanent: a planned construct rather than an unplanned contingency" (92).

In his classic essay, "Irony as a Principle of Structure," Cleanth Brooks argues that this is precisely the way poetry operates. According to Brooks, the multiple meanings of the poetic language create situations in which the reader is unable to determine the single, original meaning intended by the poet. In Brooks' words, "None of these meanings cancels out the other. All are relevant, and each meaning contributes to the total meaning. Indeed, there is not a facet of significance which does not receive illumination from the [ambiguous] figure" (765). Just as the conscientious poetry reader cannot collapse the interpretive options presented by the poem's irony into a single, stable meaning, and so the poem is enriched by the conflicting yet complimentary meanings arising from it, so too does the reader of hyperfiction face an irresolvable problem in attempting to select the next lexia. All possible choices are correct, and so a work in the distributed mode accumulates meanings and interpretations, limited only by the amount of effort the reader is willing to expend in her navigation from lexia to lexia across the web of links.

This effort is different in both scope and amount from the effort expended by readers and viewers of works in more traditional narrative modes. Though books do not read themselves and films do not watch themselves, the greater effort expended by consumers in the distributed mode includes the mechanical and cognitive processes inherent in traditional narratives and adds the need to consciously select the next lexia and to interpret the link itself. Aarseth coins the neologism of "ergodic" reading to describe this new set of activities, "using a term appropriated from physics that derives from the Greek words *ergon* and *hodos*, meaning 'work' and 'path.' In

ergodic literature, nontrivial effort is required to allow the reader to traverse the text" (1, italics in original). The effort required by traditional narratives, especially in the codex platform,⁷ of turning pages, reading sequentially, and employing other codex conventions is, in Aarseth's formulation, not ignored, but subordinated to the actively cognitive work of interpreting the narrative itself. In hyperfiction works, on the other hand, the action of selecting hyperlinks is significant to both the experience of consuming the work and the formal properties of the work being consumed.

The material features of *Reagan Library*, its ergodicity, the mixture of prose text and movable, panoramic image, and the variability built into the prose by the decreasing randomness of each successive state, not to mention the fact that *Reagan Library* is a computer program, coded in hypertext markup language (HTML), QuickTime Virtual Reality, and javascript – that it, in other words, can be experienced only on a computer – all clearly mark the work as being one that requires its readers to possess *Digital* Literacy. The work's prose fragments, though, also require a more traditionally understood literacy; the work's readers, after all, have to *read* Moulthrop's prose.

Reagan Library is clearly a candidate target for investigating Digital Literacy, and hence, digital textuality and literariness – as we shall see, literacy, textuality and literariness are always inextricably linked – but it is the mingling of prose with panoramic, *changeable* images, as well as its weblike structure requiring readers to select their next segment of narrative, that must not be too quickly dismissed or taken for granted. *Reagan Library* is clearly an example of hybrid

⁷ The different forms that distributed narrative may take – hypertext, codex novel, film, computer or video games – are uneasily described as "media." Each medium is actually – or potentially – comprised of several different media. Thus, each form would be more appropriately referred to as a multi-medium, but this is awkward and potentially misleading given the popular usage of the term "multi-media" to describe, among other things, personal computers with advanced graphics and sound capabilities. Instead, I propose the alternate term *platform* to describe each multi-medium. Referring to the codex as a platform allows us to foreground the potential of the form to incorporate both print and illustration, and to make the print itself illustrative through the use of multiple fonts or different colors of ink.

textuality, blending the media and conventions of print literature, illustration, landscape pictorial, computer science, and games of chance in varying amounts and with varying results and effects.

And yet, despite the plethora of media involved, print literature remains an integral part of *Reagan Library*, despite the fears of critics, such as Sven Birkerts, that digital textuality marked the end of print literature. As Birkerts glumly notes, "The displacement of the page by the screen is not yet total (as evidenced by the book you are holding) – it may never be total – but the large-scale tendency in that direction has to be obvious to anyone who looks" (Gutenberg 3). Instead, as Marie-Laure Ryan notes, the hybrid forms of digital textuality allow for new avenues of investigation into even the most traditional print literature. In the introduction to her edited collection, Cyberspace Textuality: Computer Technology and Literary Theory, she writes that "One of the most significant effects of the development of electronic textuality on literary theory in general is that it has led to a rediscovery and critical investigation of print and the Codex book" (10). The notion that theorizing digital textuality may lead to productive new understandings of, in Ryan's terms, "the material support of the text and its expressive potential" of non-digital print literature, is amply demonstrated within the body of critical work on digital textuality and Digital Literacy (10). In their actual practice, the leading theorists of Digital Literacy have constructed, with notable unanimity, a canon of non-digital literary works whose many similarities to digital textuality require further inquiry. The similarities between these paper-bound works and the emerging body of digital fictions are frequently presented as being so significant that they dissolve – or at least blur – the lines separating digital from print textuality. But if print literature is capable of assuming many of the distinguishing features of digital fiction, does that make these codex novels examples of digital textuality? Clearly not, although the

relationship between this new canon of sort-of-digital literature and actual digital works like *Reagan Library* is, in the critical literature, anything but clear.

One of the most commonly discussed sort-of-digital works is Julio Cortázar's novel, *Rayuela*. Translated into English in 1966 as *Hopscotch*, Cortázar's novel follows its protagonist, Horacio Oliveira, an Argentinean expatriate living in Paris, as he searches for meaning in his life. Oliveira's travels, from Paris to Buenos Aires, and his occupations, bohemian ne'er-do-well, door-to-door cloth salesman, circus attendant, and orderly at a mental institution, comprise the bulk of the novel and present an existentialist interrogation of life, love and literature. The novel's reputation, however, is founded as much on its structure as on its virtuosity in composition and perception. The novel is divided into many short chapters, which may be read in either of two approved ways, according to the novel's "Table of Instructions":

In its own way, this book consists of many books, but two books above all.

The first can be read in a normal fashion and it ends with Chapter 56, at the close of which there are three garish little stars which stand for the words *The End*. Consequently, the reader may ignore what follows with a clear conscience.

The second should be read by beginning with Chapter 73 and then following the sequence indicated at the end of each chapter. In case of confusion or forgetfulness, one need only consult the following list:

 $\begin{array}{l} 73-1-2-116-3-84-4-71-5-81-74-6-7-8-93-68-9-104-10-65-11-136-12-106-13-115-14-114-117-15-120-16-137-97-18-153-19-90-20-126-21-79-22-62-23-124-128-24-134-25-141-60-26-109-27-28-130-151-152-143-100-76-101-144-92-103-108-64-155-123-145-122-112-154-85-150-95-146-29-107-113-30-57-70-147-31-32-132-61-33-67-83-142-34-87-105-96-94-91-82-99-35-121-36-37-98-38-39-86-78-40-59-41-148-42-75-43-125-44-102-45-80-46-47-110-48-111-49-118-50-119-51-69-52-89-53-66-149-54-129-139-133-140-138-127-56-135-63-88-72-77-131-58-131-\end{array}$

Thus, the reader is allowed, if not encouraged, to play her own game of hopscotch – rayuela, in Spanish – through the text, leaping from one "square" to another. Cortázar refers to the reader

who follows his path as *el lector cómplice*, the complicit or accomplice reader. If, on the other hand, the reader chooses to read the novel in the conventional way, she, too, is playing a sort of game, this time by thumbing her nose at Cortázar's apparent dare for the reader to engage in a more whimsical consumption of his work. Cortázar refers to this reader as *el lector-hembra*, the female-reader.⁸ In the novel, Cortázar positions Oliveira as the paradigmatic *lector cómplice*, and Oliveira's love interest in Paris, La Maga, as the novel's paradigmatic lector-hembra. Michael Hardin notes that perhaps "given the desire for binaries or the model readers within the novel, [el lector cómplice] has been termed by the majority of critics as the 'male-reader'" (52). Though Cortázar's work was written thirty years before the creation of the Internet and twenty years before Apple Computer began to popularize hypertext through its Macintosh program Hypercard, the "hopping" order established by Cortázar operates in a fashion similar to the hyperlink, sending the reader, for instance, from chapter 2 to chapter 116, forcing the reader to skip over 450 pages (in the paperback edition) to create the "work" as Cortázar invites. This is not so different from the experience of the reader of *Reagan Library*, who has no idea how "far away" one lexia is from another, or to which lexia a particular hyperlink will lead. All the reader of either text knows is that she is following one of the patterns for traversal established by the author.

The material form of Cortázar's novel, a standard codex presentation with pages bound in numerical sequence, as well as the fact that it was written by an international novelist and writer of wide acclaim, clearly mark the work as being one that requires its readers to possess literacy. Furthermore, complex and allusive writing style demands that the novel's readers possess not merely literacy, but a very high level of literate sophistication and skill. Cortázar's "Table of Instructions" further expands the scope of the reader's activity; rather than merely reading the

⁸ Section 1.4.3 discusses the relevance and importance of Cortázar's system of naming his readers.

challenging and intricate prose, the reader also must make conscious decisions about how she will progress through the novel. Regardless of whether she chooses the sequential path (reading chapters one through fifty-six), or the *rayuela* (hopping back and forth as indicated at the end of each chapter), the codex format allows her to change her mind at any time. Thus, though she may read consecutively for several chapters, she may, for instance, decide to hop – either following Cortázar's suggested path or choosing a different chapter altogether – at any time. Thinking through, and then acting on, the choices available to the reader for navigation through *Hopscotch* is a transgression against the accepted conventions of novel-reading, which Cortázar's ardonically acknowledges by having one of his characters ask, "What good is a writer if he can't destroy literature?" (442). Though *Hopscotch* is clearly not a digital work, Cortázar's "Table of Instructions" does provoke something like numeracy in its readers. Cortázar encourages readers to ponder the lengthy string of numbers in an attempt to discover some meaning in the male-reader's ordering.

1.1.2. Codex and Digital: A Tangled Taxonomy

For many theorists of digital textuality and literacy, *Hopscotch* heralds the coming of digital works. Jane Yellowlees Douglas, whose work on Michael Joyce's seminal hyperfiction *Afternoon, A Story* remains preeminent, calls *Hopscotch* and other fragmented codex works like it "print precursors" (55). In her essay "How Do I Stop This Thing," she explains that *Hopscotch* represents a clear predecessor to hyperfiction not only because of its fragmentation, but also because that fragmentation actively works against narrative closure through its "multiple and therefore highly indeterminate endings" (162). George Landow, an early and highly influential advocate of examining poststructuralist and postmodern literary theory in light of

hypertext, and vice versa, refers to *Hopscotch* in a discussion of works he calls "print protohypertext" (*HT 2.*0 38). Linking *Hopscotch* with theoretical works such as Gilles Deleuze and Félix Guattari's *A Thousand Plateaus* and Roland Barthes' *S/Z*, Landow describes print protohypertexts as being works "whose printed versions already divide into sections analogous to lexias" (38, 56). Janet Murray, whose book *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* explored hyperfiction as one of the new and emerging forms of digital narrative, has also written about her experiences teaching courses in digital narrative. In her essay "The Pedagogy of Cyberfiction: Teaching a Course on Reading and Writing Interactive Narrative," she describes the codex and film works she uses as models for her students of digital narratives. She explains that she "turned to books and films that are clear predecessors of electronic interactive stories" (130). Cortázar's *Hopscotch*, she writes, is one of the "obvious alternate choices" for her reading list (160n3).

Stuart Moulthrop, influential both as the creator of hypertext and hypermedia fiction as well as a substantial body of criticism and theory concerning digital textuality, takes a different approach to the link between codex works and digital fiction. In his article, "The Shadow of an Informand: A Rhetorical Experiment in Hypertext," Moulthrop experiments with standard academic prose style, dividing his unilinearly-presented essay into numbered lexias, each with its own links to the other numbered lexias in the work. As Moulthrop explains, he "worked from the assumption that some discourse about hypertext needs to originate in hypertextual form." For Moulthrop, that meant duplicating, as closely as possible, the fragmented, multilinear structure of hypertext, while noting that although the hyperlinked form "cannot be duplicated in print, it may be approximated. The structure of this paper reflects as fully as possible that of the

electronic hypertext from which it was derived" (1).⁹ In translating his essay from the Storyspace environment in which it was composed to a linear, codex-friendly format for publication, Moulthrop resorted to a structure that had been employed thirty years earlier: "The linking scheme employed here was invented by the novelist Julio Cortázar for his fiction *Hopscotch*" (1). Though Moulthrop takes pains to avoid associating *Hopscotch* with a form of textuality that Cortázar could not possibly have foreseen, his claim that Cortázar's "Table of Instructions" approximates hypertextual structure "as fully as possible" within the codex form is striking. Moulthrop here represents the similarity of form as being analogous, but not causal or identical.

Still other theorists combine digital works and non-digital codex texts like *Hopscotch*, labeling the entire group as one of the many subsets of "literature." By labeling hypertext-ish codex works "precursors" to hypertext and "print proto-hypertexts," Douglas, Landow, and Murray position these codex works as belonging with digital works rather than with other paperbound works. Espen Aarseth and Marie-Laure Ryan continue this trend, arguing that the most important aspects of these codex works are, in fact, their computer-like features. For instance, Espen Aarseth's important book on digital textuality, *Cybertext*, is subtitled *Perspectives on Ergodic Literature*. For Aarseth, the wide variety of works he considers in the book all fall under the general rubric of "literature." He notes that *Hopscotch* is one of "the most resonant ergodic experiments and thematizations" (53), referring to its "multicursal topology" of different reading paths (7). By using a broadly inclusive understanding of "literature," Aarseth is able to refer to Cortázar's novel and computer games in the same sentence as examples of "forking text[s]" (64). Furthermore, in *Narrative as Virtual Reality: Immersion and Interactivity in*

⁹ Given the lack of pagination in the online version of Moulthrop's article, as well as his decision to fragment the article into numbered lexias, I have chosen to identify passages from this article by referring to the lexia number of the passage. By doing this, I will also remain consistent with my system for citing to the titles of lexias in digital works.

Literature and Electronic Media, probably the most comprehensive attempt to date to apply narratology to the study of digital narrative, Marie-Laure Ryan also utilizes Aarseth's key term, systematizing Hopscotch under the heading of "ergodic, nonelectronic, interactive texts" (209-210). In Ryan's taxonomy, the only significant distinction between Hopscotch and Reagan *Library* is the codex (non-electronic) format of *Cortázar's* work. In an essay in an earlier book, Cyberspace Textuality: Computer Technology and Literary Theory, Ryan asserts that "the text as constructed (mentally) by the reader" is "always already a virtual object" because of the "complexity of the mediation between what is there, physically, and what is made out of it" ("Cyberspace" 96). Ryan points out that ergodic, electronic texts, such as Reagan Library, add another level of virtuality due to the variability of the lexias that may be displayed on the computer screen. In other words, just as reading a codex work multiple times will produce subtly (or not so subtly) different readings each time, navigating a hypermedia work also will produce subtly (or not so subtly) different materials to read, which will give rise to subtly (or not so subtly) different readings. But, as Ryan notes, "the additional level is not exclusive to electronic texts." Cortázar's Hopscotch is one of two "classical print examples of second-order virtuality" she mentions, although she qualifies this claim by adding that "the additional level of virtuality [the potential for different text to be presented or displayed, to the reader] is greatly facilitated by the electronic medium" (97). Indeed, in her introduction to Cyberspace Textuality, Ryan goes so far as to caution that though "the 'follow the links' idea [of hypertext] can be implemented in print [...], these texts merely break the surface of a much deeper ground" (7). For both Aarseth and Ryan, the differences separating codex works like Hopscotch from digital works like *Reagan Library* are simply matters of degree, not of type.

Other critics, such as Jay David Bolter and Michael Joyce, attempt to recontextualize digital works as being radical examples of experimental, paper-bound literature. In his book, Writing Space: Computers, Hypertext, and the Remediation of Print, Bolter argues that digital fiction merely "refashions" older, more traditional narrative forms such as print. Thus, in a chapter discussing "Interactive Fiction," Bolter discusses seminal hyperfictions such as Michael Joyce's Afternoon, A Story and Stuart Moulthrop's Victory Garden alongside codex works like Hopscotch. Both types of work, according to Bolter, should be considered "interactive," but rather than thinking about them as computerized and computer-like, "interactive fiction belongs in a 'tradition' of experimental literature that has marked the 20th century – the era of modernism, futurism, Dada, surrealism, letterism, the nouveau roman, concrete poetry, and other movements of greater or lesser influence" (138). Michael Joyce takes much the same tack in his book, Of Two Minds: Hypertext Pedagogy and Poetics, arguing that "future interactive fictions, in order to be more open, will appear more closed, i.e., more like current printed fiction than the computer programs we currently consider interactive" (136). For Joyce, an author of both codex literature and digital narratives as well as a critic and theorist of digital textuality, the artistic and aesthetic goal for digital fiction is to move away from the outward signifiers of computer-ness, and instead to imitate the fixedness of the codex form – but without losing any of the computational and text-varying ability of the computer. Elsewhere in Of Two Minds, Joyce explains the desires that led him to experiment with digital fiction. After publishing a paperbound novel, he contemplated purchasing a word processor to replace his typewriter, but:

> What I really wanted to do, I discovered, was not merely to move a paragraph from page 265 to page 7 but to do so almost endlessly. I wanted, quite simply, to write a novel that would change in successive readings and to make those changing versions according to the connections that I had for some time naturally

discovered in the process of writing and that I wanted my readers to share. (31)

Eventually, Joyce describes his ideal "interactive fiction," which looks very little like the digital works he himself has written. Rather, his ideal text closely resembles an as-yet impossible computerized book imagined by novelist Neal Stephenson in *The Diamond Age, or, A Young Lady's Illustrated Primer*.

1.1.3. The Ideal Digital Work?: *The Diamond Age*

Set in the twenty-second century, *The Diamond Age* tells the story of Nell, a young girl forced from her home, who must learn to survive by her wits with the help of a mysterious talking book, *The Young Lady's Illustrated Primer*. The *Primer* is an immensely powerful hand-held computer able to detect the sights and sounds of its surroundings and to interact with its reader with an astonishing level of sophistication. In Stephenson's novel, for instance, Nell reads the following passage in her *Primer*:

A couple of days later, when Belle came back to our cave looking lonely and forlorn, we both did our best to make her feel welcome. Dojo began playing some special games with her, which Belle enjoyed so much that she kept coming back, and believe it or not, after a couple of years of this had gone by, Belle was able to flip me over her shoulder just as well as Dojo. (Stephenson 183)

Nell is delighted by this story of a little female monkey, Belle, who was able to defend herself using martial arts against even an enormous opponent, Dinosaur, who narrates the episode. Nell is so intrigued that she rereads the passage. This time, the *Primer* notices Nell's heightened interest and adapts itself accordingly:

A couple of days later, when Belle came back to our cave looking lonely and forlorn, we both did our best to make her feel welcome. Dojo made a special meal in his kitchen out of rice, fish, and vegetables and made sure that she ate every scrap. Then he began playing a special game with her called somersaults. (Stephenson 182-183)

The second version of the episode begins in the same way as the first, but quickly elaborates on the tale. Just as an expert storyteller would, the *Primer* incorporates its audience's interest level into its narration, passing quickly over certain events and embellishing others. The new information provided by the *Primer* does not move the plot forward. Instead, it provides information that will help Nell to survive alone in a hostile environment. The proper nutritional information and self-defense techniques provided by the *Primer* are immediately put into practice by Nell. In this instance, Nell's actions determine not only the meaning of the text, but at a more basic level, they determine the very text itself.

The *Primer* is structured around the frame tale of a quest in which a fictional Princess Nell must succeed in order to free her brother from a tower prison. The quest forces Princess Nell to solve increasingly difficult puzzles to achieve her goals. As the real Nell grows older, the puzzles become more challenging and more interactively open-ended. While the *Primer* simply presented the initial puzzles to young Nell as narrative, later obstacles require Nell's active participation in order to progress through the story. The tale created by Nell as she reads the *Primer*, then, consists not only of the solutions to the many hurtles placed in Princes Nell's way, but also of the learning process Nell goes through in her attempts to solve each of the puzzles.

In addition to this game-like interaction, the *Primer* adapts itself to Nell's external situation, changing the story to reflect current events in Nell's life. In one scene early in the novel, Nell's mother, Tequila, brings home a new boyfriend, Burt, who physically abuses Nell and her brother. The *Primer* automatically changes its narrative to reflect the entrance of Burt into Nell's life with the addition of a character named Baron Jack, who is mean to Princess Nell

and her brother. Nell apprizes the *Primer* of the real situation by speaking to it, enabling it to further substitute details of her own life for elements of the *Primer's* original tale:

"Sometimes he would burn their skin with cigarettes too," Nell whispered. The letters changed on the page of the *Primer*. "Princess Nell's pee-pee turned red too," Nell said, "because the Baron was a very bad man. And his real name wasn't Baron Jack. His real name was Burt." As Nell spoke the words, the story changed in the *Primer*. (Stephenson 200)

The horrific conditions experienced by Nell and her brother have nothing to do with the plot of Princess Nell's quest, but they are instantly incorporated into the text, becoming a part of the narrative and determining the rest of the tale. The *Primer* recognizes the real danger Nell and her brother are in and advises them through the narration of the quest to get out of their mother's apartment before Burt can seriously injure them. Princess Nell and Prince Harv's escape from their home then becomes a major theme in the *Primer's* tale, a plot development that reflects not the general purpose of the *Primer*, but rather the *Primer's* ability to interact with its reader and to adapt itself to its reader and her best interests.

Like the Young Lady's Illustrated Primer, Michael Joyce's ideal interactive fiction would, he writes, "restore the Homeric situation to the extent that its branching would be driven by (1) previous conditions and (2) detection of audience interests, rather than by direct intervention of the audience into the story" (144). In other words, Joyce's ideal interactive text resembles oral storytelling tradition in that the narrative itself is set and constructed by the performer/author, but the performer/author has the ability to gauge the audience's interests and adapt the narrative to the audience as the tale progresses. Because of this feedback loop between the audience, storyteller, and tale, no two tellings would ever be identical, and the tale itself would always be ideally tailored to satisfy its audience. And, perhaps most satisfying of all, the ideal interactive fiction would avoid the oft-repeated criticism that digital narrative does not *feel* like a book. As many literary critics have pointedly noted, hyperfiction's insistence that the reader constantly consider various linking options and select a meaningful navigational strategy interferes with the pleasures of immersive reading. The strain of contemplating countless "troubled choices" between links forces *New York Times Book Review* critic Laura Miller to groan:

Meandering through the lexias of hypertext works like Michael Joyce's *Afternoon, A Story*, Stuart Moulthrop's *Victory Garden* [...] and even floridly naughty *Grammatron* [by Mark Amerika] is a listless task, a matter of having to choose among alternatives, each of which, I'm assured, is no more important than any other. This process, according to [George P.] Landow, makes me a "truly active reader," but the experience feels profoundly meaningless and dull. (43)

The most persistent complaint, however, is purely phenomenological, and has become known as the "bathtub complaint." Tim Parks approaches this issue obliquely, writing in the *New York Review of Books* that "during our most intense reading we are hardly aware of turning the pages, or of the sounds in distant rooms. The situation is difficult to recreate when the mind is halted by a troubled choice between four links" (51). Parks, a novelist and translator, is distressed that he cannot enjoy the traditional *feel* of a book, that he cannot, in effect, read a digital narrative in the bathtub. The *Young Lady's Illustrated Primer*, however, and possibly also Joyce's ideal interactive fiction, has no keyboard to type, no mouse to move across a screen, and no hyperlinks to identify and select. Though the *Primer* is an incredibly powerful supercomputer, as Stephenson's narrator dryly notes, "it looked exactly like a book" (63). And, owing to the aesthetic philosophy of its creator, it is designed to look and feel like the finest example of English Victorian bookbinding skill. As one of the novel's characters marvels upon being presented with the freshly constructed *Primer*, "If I found it in an antiquarian bookshop, covered with dust, I shouldn't give it a second glance" (106).

1.1.4. Sufficiency and Necessity: The Distributed Mode

The questions raised by all of these theorists, critics and novelists – whether digital works are "literature"; whether digital-ish codex works are "digital"; and whither digital narrative: to embrace the computer or to disguise itself in older forms – are, unfortunately, entertaining and mentally stimulating diversions from the more important issue of how to resolve the tension that these questions reveal between codex and computer. The discourse about codex works that are, in whatever way, important to a theoretical or critical understanding of digital narrative reveals that while digitality is interesting and affecting, it is not *necessary*. Indeed, the critical literature is replete with examples and examinations of codex works that achieve many, if not all, of what are claimed as the defining and identifying features of actual digital works. Appendix A provides a brief bibliography of critical references in digital media theory to frequently-discussed major codex works.

The recurrence of codex works such as *Hopscotch*, Sterne's *Tristram Shandy*, and Pavic's *Dictionary of the Khazars* in theoretical discussions of digital work is unsurprising; as we have seen, many theorists explicitly endeavor to establish a close connection between experimental literature and digital works. What should be surprising, however, is how close that connection appears to be. If the codex form is capable of utilizing structural devices analogous to digital works, capable of achieving the same readerly affect as digital works, capable of exploring identical poetic and narratological issues and tropes, and capable of requiring its readers to possess and employ the same literacy and extra-literacy skills to successfully interpret the work, then Digital Literacy is a distinction without a difference.

When we use the term Digital Literacy to refer to the set of skills needed to be able to successfully create and make sense of certain types of works, it is now obvious that we need not and indeed should not require the works in question to be *digital*. Digitality is a sufficient attribute, but it is not necessary.¹⁰ Therein lies the dilemma for Digital Literacy – if Digital Literacy does not require digital works, and it is clear now that it does not, what are we to call the odd union of digital and digital-ish codex works that seem to share so many fundamental features?

This project has its roots in computerized hyperfiction, but it extends into a bewildering array of other media and forms. Reading contemporary literature, watching contemporary film, in fact, engaging with practically every form of contemporary art, demonstrates that hyperfiction does not have an exclusive claim to fragmentation. Every conceivable artistic field has countless examples of its practitioners moving away from linearity and embracing fragmentation, multiple-perspectives, collage, pastiche, and the disorientation of the consumer of the work of art. Labels such as "postmodern" have been deployed with alarming frequency to describe this pan-media movement, but this label in particular fails to take into account that these works were being produced long before postmodernity. Lumping Lawrence Sterne's *Tristram Shandy*, for instance, with Alain Robbe-Grillet's *In the Labyrinth* and Moulthrop's *Reagan Library* ignores the historical formation and context of each work.

Instead, fragmented, hypertext-like works share a formal, structural basis – which exists within various historical periods, and is not the product of any one – which persists across media and across time. I advance the term *distributed mode* to describe the structural and artistic conventions that connect these works. Espen Aarseth coins the term "cybertext" to describe ergodic literature. In his book of the same name, Aarseth explains that "a cybertext is a machine

¹⁰ Here I am employing both the colloquial and formal logical sense of the terms "necessary" and "sufficient."

for the production of variety of expressions" (3). This definition certainly seems to fit the almost aleatoric arrangement of lexias in digital hypertext, as well as Cortázar's construction of the multiple possible paths through Hopscotch. It also recalls Michael Joyce's desire, mentioned previously, to "change in successive readings and to make those changing versions according to the connections that I had for some time naturally discovered in the process of writing" (Of Two *Minds* 31). As we have seen, though, neither the distributed mode, as I have briefly outlined it, nor cybertexts, in Aarseth's formulation, are exclusive to digital media. Almost as soon as he has introduced the term, Aarseth takes pains to explain that "cybertext is used here to describe a broad textual media category. It is not in itself a literary genre of any kind" (Cybertext 5, emphasis in original), and that "the concept of cybertext does not limit itself to the study of computer-driven (or 'electronic') textuality; that would be an arbitrary and unhistorical limitation" (Cybertext 1). Furthermore, as Aarseth concludes, when considering digital works and the digital-ish codex works, "there is no evidence that the electronic and printed texts have clearly divergent attributes" (Cybertext 70). While I wholeheartedly agree with Aarseth that any consideration of these works must include non-digital forms and media, I disagree with his apparent insistence on the primacy of text to these works. Aarseth's other label, "ergodic literature" is understandable, especially in light of the efforts of other theorists in the field to bind "Literature with a capital 'L," in the words of Sven Birkerts ("Present" 12), to digital works such as Michael Joyce's Afternoon, A Story, and Stuart Moulthrop's Reagan Library, but it ignores many of the features – such as the use of different media within a single work, the changeability and aleatoric nature of the work, and the effect and affect of multilinear and fragmented narratives - that a signifier such as "cybertext" is particularly poised to probe.

A final difficulty with using "cybertext" as a broad categorical descriptor lies in the fact that Aarseth limits "cybertext" to only those texts which "involve calculation in their production of scriptons" (Cybertext 75). This is a reference to the prose presented to the reader (scriptons), which are generated from the prose as it exists in the text (textons). So, as Aarseth explains, in Queneau's "Cent Mille Milliards de Poèms," "there are only 140 textons," (the 140 lines of the poems), "but these combine into 100,000,000,000 possible scriptons" (Cybertext 62). In Aarseth's taxonomy, however, Queneau's poems would not qualify as a cybertext because there is no calculation involved in scripton formation. In *Reagan Library*, though, the decreasingly randomized prose representing the successive "states" in the work generates different scriptons for each of the lexias from the available textons. Thus, many works that might appear to have significant similarities would be classified differently by the cybertext criterion. The ability of a work to change its narrative based on the actions of a reader - as opposed to the ability of a work to display different narrative bits based on the navigation of a reader – is an interesting analytical and aesthetic dimension, but it is not sufficiently significant to become the central factor in a narrative typology.

Marie-Laure Ryan adapts Aarseth's concepts of cybertext and ergodics, devising a hybrid descriptor she terms "ergodic design" in her examination of interactivity in literature. Ryan acknowledges that her definition of ergodic design – "a built-in reading protocol involving a feedback loop that enables the text to modify itself, so that the reader will encounter different sequences of signs during different reading sessions. This design turns the text into a matrix out of which a plurality of texts can be generated" – is practically identical to Aarseth's definition and usage of cybertext. She writes, however, that she prefers "*ergodic*, because *cybertexts* suggests to most people an electronic support" (*Narrative* 206, emphasis in original). The

category of "ergodic design" also makes possible the consideration of non-textual works, such as film, graphics-only digital works, and the non-prose elements of both codex and digital works, as all of these are designed, but may not fit easily into the prose-bound understanding of "text" or "literature." It is unfortunate, therefore, that Ryan devotes very little time to her discussion of ergodic design, treating it only briefly, and only as a means to devise a more precise typology of interactivity.

My proposed category, the distributed mode, attempts to refine the important contributions of both Aarseth and Ryan by focusing on the fragmented nature of the narrative works under consideration. Cybertextuality depends on fragmentation, as the reader's choices in or between certain fragments are what triggers the calculations that determine fragments yet to be seen. Ryan's phrase, ergodic design, suggests both the fragmented nature of the ergodic work and a concern for the mechanics of its creation; this is entirely appropriate. The distributed mode, as a *mode*,¹¹ connotes the style, manner, and design principles governing works created within its purview, as well as the analytical frameworks for interpreting those works. Additionally – as is becoming increasingly important due to the proliferation of fragmented works being composed and consumed via the medium of the Internet – the distributed mode, like narrative or drama, is broad enough to include both fiction and non-fiction works produced in this way. The ecumenical nature of the distributed mode encompasses the compositional and interpretive features common to both fiction and non-fiction."

¹¹ Here I am referring to the Latin meaning of the word ("*modo* – in the manner of, according to the style of, like") although the musical sense is also apt (Traupman 185-6). The classical modes are musical scales with various arrangements of half and whole steps between the tones. The classical modes are: Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, and Locrian. The Ionian mode is best known today as the major scale. The modes were used in early Western music to structure the composition of Gregorian chant, and knowledge of the structure of the modes, especially the final (tonic) and dominant of each mode is essential for analysis of works composed in them.

Thus, neither the digital-ness of Digital Literacy nor the literacy-ness is exactly what it would appear. Literacy is a term that has come to mean a bewildering range of different skills – from traditional notions of reading and writing, to any cognitive operation requiring the perception, manipulation, and production of data, to entire philosophies of demeanor and being-in-the-world. At the conservative end of the spectrum, the definition of literacy as the basic ability to read and write printed alphabetic prose is unable to account for either the range of different media potentially comprising the work, or the range of cognitive activities the reader must perform in order to navigate many works. In other words, the ergodic and multimodal aspects of the work have no place in such a definition. The New London Group – a collective of literacy researchers who began meeting in 1994 in New London, New Hampshire – has proposed a theory of "multiliteracies" that comes closer to accommodating the distributed mode, but still fails to explain or include ergodicity (*Multiliteracies*).

When we use the term Digital Literacy to refer to the set of skills needed to be able to successfully create and make sense of certain types of works, it is now also obvious that we cannot and indeed should not limit this skill set to *literacy*. Literacy is a necessary attribute, but it is not sufficient to describe the skills needed by the consumer to engage successfully with a work in the distributed mode. Therein lies a second dilemma for Digital Literacy – if Digital Literacy requires not merely literacy, and it is clear that it does, what are we to call the odd conglomeration of skills, activities, and cognitive demands required by the would-be consumer of works in the distributed mode?

A possible solution to this dilemma involves expanding the definition of literacy to include more activities and in more diverse situations, so that literacy becomes even more multivalent than in the New London Group's efforts with Multiliteracies. Pursuing this potential

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answer takes us farther along, towards perhaps the middle of the spectrum, literacy has become a secondary signifier for a bewildering number of concepts. We see discussions of computer literacy, math literacy, media literacy, information literacy, and a host of others. It is now becoming common to think of "literacy" as "proficiency," removed from any sort of context and divorced from the particular set of basic skills it traditionally denoted. Also in the mid-region of the spectrum is the idea of literacy as an accumulation of "Discourses." James Paul Gee defines "Discourse" - differentiated from the common meaning of discourse as communication by the addition of the capital letter – as "saying (writing)-doing-being-valuing-believing combinations," "ways of being in the world," and "forms of life which integrate words, acts, values, beliefs, attitudes, and social identities as well as gestures, glances, body positions and clothes" ("Literacy, Discourse" 526). Neither literacy-as-proficiency nor literacy-as-Discourse, however, offers a useful approach to Digital Literacy. Literacy-as-proficiency is so broad in scope that it reduces "literacy" to relative meaninglessness. Literacy-as-Discourse, on the other hand, through its all-encompassing purview, manages to achieve both necessity and sufficiency as a definition of Digital Literacy. Since it describes the "ways of being in the world," any successful activity in the world – such as creating and consuming digital-ish works, or preparing and eating a ham sandwich - would necessarily require Discourse, and Discourse would be sufficient to describe any such activity. But, again, the price paid is meaningfulness. Neither concept enjoys the special or privileged relationship with narrative and composition that would be required to make it a useful approach.

Instead, what is needed is a definition of literacy that is broad enough to encompass all of the activities involved in the consumption and production of works in the distributed mode, but that is also sufficiently peculiar to the demands of distributed narrative to be pedagogically useful. Such a definition, though, cannot be formulated without a thorough examination of three central, interrelated concerns. First, what are the experience and action of "reading" in the distributed mode? Second, how does multimodality affect the work and its interpretation? And, third, what effect does the distributed mode have on "writing?" The following sections of this chapter will explore these questions and the implications their answers have for interpretation.

1.2. THE LIMIT OF LITERACY 1: THE ERGODIC WORK

Answering the question motivating this section, "what are the experience and action of 'reading' in the distributed mode,' requires, first, an exploration of reading, and the reasons behind its quarantine in scare quotes in the framing question. As previously noted, the distributed mode is a way of composing in which narrative meaning is fragmented and distributed across a series of interconnected nodes. In *Reagan Library*, for instance, the blue "Pavilion" screen presents a fragment of narrative prose, a panoramic vista, and a set of graphical and prose hyperlinks, one of which the user must select to be shown any more of the work. The multimedia aspects of works in the distributed mode will be considered in the next section, but even if only the prose from *Reagan Library* is considered, the user of the work does much more than merely read that prose. The process in which she must engage to navigate the work I refer to as *enactment*, a term that attempts to capture the performative aspect of engagement with works in the distributed mode while avoiding the reductive but distressingly common tendency to label all engagement with meaningful narrative works as "reading." Once freed from the limitations of the term "reading," we will be at liberty to explore the action, both cognitive and physical, of enactment, as well as the experience it produces.

1.2.1. Enactment

Poet William Dickey seems instinctively to mistrust the term "reading" when describing the consumption of poetry. For Dickey, the essential problem with "reading" is made more easily visible by the advent of the distributed mode. Dickey asks whether the poem even exists on the page, or whether "the poem becomes real each time it is performed, recited from memory, on a stage, by its author, or experienced in the simulated performance in which we hear the spoken language behind the text we are scanning on the printed page" (149). Dickey's terms are instructive, as he refuses the label "reading," because it would only obscure the "simulated performance" of the reader's cognitive consumption of the poem. In the distributed mode, the structure of a poem itself is initially unknown to the consumer of the poem; as she navigates the lexias of the poem, their order, and thus the meter, stanzas, rhyme scheme, and presentation of lines are all determined in part by the poet and in part by the consumer's navigational path. Poetry, perhaps even more than any other form of narrative in the distributed mode, is hypersensitive to the ordering process resulting from hyperlink navigation, as the navigation alters the form and, hence, meaning, of the poem. Such alterations may be absorbed by the gestalt of the looser structural constraints of other narrative forms, but are immediately apparent and significant in poetry. Dickey writes that in the distributed mode, "the viewer's apprehension of the visual and conceptual shape of the poem is generated in the process of viewing it, rather than appearing as an initial given" (147). Again, Dickey avoids the term "reader," this time substituting "viewer," which, while possibly more accurate, still fails to signify the implications of the cognitive choices made by the "viewer" as she engages in her "process of viewing" the poem.

Brenda Laurel's seminal book, Computers as Theater, adds a vital complication to the "reading" conundrum arising within the distributed mode – positing that the ergodic nature of the distributed mode makes the reader a participant in the action, and thus the mode itself is incapable of being narrative. Instead, Laurel argues, the distributed mode, and all humancomputer interaction, is fundamentally drama. Though I disagree with Laurel that works in the distributed mode cannot be narrative, her point that these works exhibit dramatic elements and dynamics is important. Laurel defines three key differences between narrative and drama: enactment, intensification, and unity of action. Laurel defines enactment in this context as "meaning to act out rather than to read. Enacted representations involve direct sensing as well as cognition. To state it more simply, the stuff of narrative is *description*, while the stuff of drama is action" (94, emphasis in original). Dickey's concept of poetry agrees with Laurel's contention, as the poem is not described, but rather enacted by the consumer's actions among the hyperlinks established by the poet, allowing the poem to arise from the conscious action of the navigator. Ergodics, as the Greek words ergon (work) and hodos (path) indicate, implies activity, not description.

Laurel's second distinction, intensification, refers to the fact that, in most drama:

[...] incidents are selected, arranged, and represented, in general, so as to intensify emotion and condense time. Narrative forms generally employ the reverse process, *extensification*, where incidents may be reported from a number of perspectives and in ways that expand or explode time (for example, perceptions that take only an eye-blink in the "real time" of the characters in a novel by James Joyce or Virginia Woolfe consume whole chapters with perceptual and cognitive detail). The common-sense observation is simply that time has a different scale when you are acting out than it does when you are reading. In Aristotelian terms, this is one of the *formal* differences between drama and narrative. (94, emphasis in original)

This property is the most problematic for some forms in the distributed mode. While computer games and films in the distributed mode do, in fact, intensify emotion by condensing and tightly controlling time, others, such as *Hopscotch* and *Reagan Library*, actually engage in extensification, as Cortázar and Moulthrop allow their works' consumers to move through the work in a variety of different ways. Pacing, in other words, is nearly impossible. While a film director or a traditional novelist can exert forms of control over the time frames in their works, alternating intense passages and scenes to create excitement at particular times, with more relaxed, perhaps contemplative passages or scenes to slow the pace of the work at other times, the navigator of a work in the distributed mode is given the possibility of altering the sequence of the work, and hence, of altering the pacing and the time scale. In this, the distributed mode demonstrates qualities of both narrative (extensification) and drama (intensification), depending on the materiality, structure, and ergodic possibilities of the individual work.

Laurel's third distinction, unity of action, involves "the structure of incidents." She explains that "Dramas typically represent a strong central action with separate incidents that are causally linked to that action, something the neoclassicists called the *unity of action*." Narrative, on the other hand, "tends to be more episodic; that is, incidents are more likely to be quasi-independent and connected thematically rather than causally to the whole" (95, emphasis in original). This distinction would seem to place the distributed mode clearly in the camp of narrative, as the fragmentation of the work into lexias and links makes each lexia into an episode that is, structurally, at least "quasi-independent." However, cognitive demands placed on the consumer by works in the distributed mode generally require that these works be as efficient as possible in reducing the number of characters and settings. *Hopscotch* is set in only three major locations, and the cast of characters is surprisingly small for a novel of its size. Any more, and

the novel risks becoming completely incomprehensible. *Reagan Library* features only four character/narrators, each set in a distinct and easily distinguishable location that is a cognate of the other three locations. In both of these works the incidents are presented in a highly unified manner, even if that unification is not immediately apparent due to the fragmentation imposed by the form.

Laurel's estimation of the distributed mode as being essentially drama, instead of narrative, solves many of the impasses presented by traditional approaches to the distributed mode. On any given day, or for any given session, the works themselves are not *literary*, per se, but *enactments*, performances of the narrative work. Just as actors are constrained in their range of actions when performing a dramatic work – at some point, the work ceases to be the same work that was written by the writer, and becomes something else – so too are the *enactors* of works in the distributed mode constrained in their reenactment of the work. The fact that neither actors nor enactors have absolute freedom enhances rather than diminishes the artistic value of the performance.

One of the most visible differences between being an audience at a performance and enacting a work in the distributed mode, however, is the fact that distributed works are enacted, not for an audience, as in the case of drama, but rather for the enactor herself. Laurel relates ergodic works to dramatic improvisation, as "Mediated improvisations are not performance pieces in the traditional sense. As theater viewed from the outside, the entertainment value of the improvisations was largely mediocre. In contrast, the interactors' experiences were dramatically quite powerful" (191). Mediated improvisation rarely produces the polished, artistic product associated with scripted works, and so is usually less capable of inducing affect in its audiences. The affective experience of the work on the improvisers, however, is profound. In a similar way, the affective experience of watching someone enact a work in the distributed mode is frequently negligible, while the affective experience for the enactor can be profound.

1.2.2. Conventions

Enactment, in the context of the distributed mode, raises many of the issues associated with the so-called reader-response movement of literary theory. If the enactor's actions result in the assemblage of the work – or, at least, the assemblage of that portion of the work experienced by the enactor and, hence, that portion of the work which is, for the enactor, the entirety of the work - then the relationships between the enactor, her enactment, the work itself, and the composer of the work become pressing hermeneutical problems. For the ways in which the enactor interprets the work are influenced, and perhaps even determined, by these relationships. Jonathan Culler concludes, for instance, that "to speak of the meaning of the work is to tell a story of reading" and, hence, "the structure and meaning of the work emerge through an account of the reader's activity" (On Deconstruction 35). In S/Z, Roland Barthes asserts that "the stakes of literary work (of literature as work) are to make the reader no longer the consumer but the producer of the text" (38). Jean-Paul Sartre goes even further in the diminution of the author, writing in "What Is Literature?" that "there is no art except for and by others" (52). And Wolfgang Iser clarifies this asymmetrical relationship between author, work, and reader, stating that the text "offers guidance as to what is to be produced, and therefore cannot itself be the product" (Act 107). Thus, the author produces merely a blueprint for the reader to follow in the construction of a representation of the work. The true *literary* work, then, exists as the average of the work and its realization. As he explains, "the literary work cannot be completely identical with the text, or with the realization of the text, but in fact must lie halfway between the two" ("Reading Process"

956). All of these theories have profound implications for the interpretation of narrative works, but all are grounded in the *cognitive* processes of reading.

Enactment, on the other hand, incorporates these cognitive processes - as well as the cognitive processes required to experience narrative material presented in media other than prose text – and also gives attention to the *mechanical* processes of "reading" in the distributed mode. These processes are manifest as the conventions of navigating works in the distributed mode, conventions which vary substantially from the conventions associated with the codex. In Espen Aarseth's terminology, the ergodic nature of distributed narratives requires the reader to expend "non-trivial effort" in the navigation of the work. The reader of *Reagan Library*, if she wishes to continue reading the work, must engage in an elaborate decision-making process. She must decide what lexia she wishes to visit next, and then must determine how best to achieve that transit. To make those decisions, however, she first must reflect on what she already knows about the narrative, what she would like to learn more about, and what strategies are most likely to result in the successful achievement of her wishes. In his article, "A Poetics of the Link," Jeff Parker contrasts the quality and quantity of navigational practices used in distributed narratives with those used in codex works: "When readers turn the pages of a book, they are getting from point A to point B. It is meaningless, merely a function of the distribution device that is the book, therefore on the whole invisible" (np). Though I hesitate to call the turning of pages "meaningless," Parker's description of the action as "invisible" seems fair. As readers gain facility with the conventions of reading codex works, the thrill of reading turns from excitement over what may be on the next page (as in illustrated books for very young children) to excitement over what may happen next – whether on the next page or in the next chapter.

Turning pages generally becomes a *transparent* action, one that appears so simple and devoid of meaning as to be invisible to critical attention or self-reflection, though it remains in front of us always. Turning pages requires little or no conscious thought – readers ordinarily are not removed from their immersion in the narrative by having to turn the page. This is a fact well known to late-night readers, who promise themselves to put the book down after just "one more page." That one more page stretches into dozens, possibly hundreds, as their enjoyment of immersion in the narrative keeps them reading. Turning pages becomes visible only when the codex itself breaks down or is subverted. A second-hand paperback copy of Tom Robbins' novel, *Still Life with Woodpecker*, illustrates the former:

The romance of new love, the romance of solitude, the romance of objecthood, the romance of ancient pyramids and distant stars are means of making contact with the mystery. When it comes to perpetuating it, however, I got no advice. But I can and will remind you of two of the most important facts I know: (1) Everything is part of it. (275-6)

There the book ends. The second most important fact remains a mystery, perhaps itself an encouragement from Robbins or his narrator for the reader to make contact with the mystery for herself. Of course, the book does not really end like that. Examining my copy closely, I noticed that it was missing its final page. After purchasing a new copy, page 276 may be turned to reveal page 277 and the second fact, "(2) It's never too late to have a happy childhood." The lack of the final page to turn to, and the data that it carries, brings the reader up short, and makes visible the materiality of the page.

Lawrence Sterne's *The Life and Opinions of Tristram Shandy, Gentleman* intentionally subverts the page, with similar results. At one point, Sterne's narrator instructs us that "without much knowledge, you will no more be able to penetrate the moral of the next marbled page (motley emblem of my work!) than the world with all its sagacity has been able to unravel the

many opinions, transactions, and truths which still lie mystically hid under the dark veil of the black one" (III.36 178). Following this, as promised, is a marbled page. The inclusion of a prose-less page of black marbling in the narrative strikes the reader as odd, for it does not accomplish what pages usually do in novels. It does not reveal the world of the narrative to the reader, but rather makes a point to the reader about herself. Later, Sterne instructs the reader to call for pen and ink and to draw the Widow Wadman, "as like your mistress as you can – as unlike your wife as your conscience will let you" (VI.38 368-9). The page following these instructions is, accommodatingly enough, left blank for just this purpose. Again, Sterne subverts the page, making it not a transparent medium for information, but a material, usable and abusable object. But these examples, and others like them, gain their power to disrupt the reading process precisely because they are the exception rather than the rule in codex works of fiction.

The complicated calculations that are required for the reader to navigate the textual spaces of a distributed narrative, like the broken codex or the subverted page, are anything but transparent, and they are the rule, not the exception. They are highly visible and require conscious reflection that is made necessary by the organizational strategies imposed by the distributed mode. In other words, though the "literacy" required for productive engagement with works in the distributed mode includes traditional reading skills, it also requires the enactor to do a host of other things, many of which are conditioned by and dependent on the ergodic conventions of the particular work. These conventions result in a more concrete product – namely, the assemblage of the lexias of the work – than the cognitive processes which allow the reader to (re)construct the narrative mentally as she reads. Thus, the contribution of the composer of the work in the distributed mode is less ambiguous and less contentious than in the writings cited above by Culler, Barthes, Sartre, and Iser, at least at the level of the assembled

work. The enactor assembles the fragments of the work as she is allowed by the composer of the work. She is neither the author nor the composer of the work, although, given a sufficiently large work, she may assemble a version of the work that is unique. In other words, in her relationship with the work, the enactor is much like the *flaneur* or the *bricoleur*, enacting a wandering path through the various lexias, as she assembles her cognitive (re)presentation of the narrative.¹² The relationship between the enactor and the composer, then, is one of ambivalent cooperation - the enactor is both allowed to navigate in certain ways by the work's composer and also prevented from navigating in others. She is "rewarded" by the composer when her navigation results in the satisfaction of her hypotheses concerning the work and its links, and she is "punished" when her navigation results in further confusion and frustration. And, importantly, she rebels against the composer when she rejects the ergodic conventions established for the work - such as reading Hopscotch in an order that follows neither of the endorsed paths, or through altering the programming code of a digital work such as Reagan Library. "Hacking," as such tampering is called in computer circles, is one response to the sense of frustration and disorientation that can result from the fragmented style of the distributed mode, and it raises an important question about the relationship between the enactment and the work as it was composed.

¹² With respect to the winding, often looping path that the nature of links and linked fragments often forces the enactor to take, she resembles the *flaneur*. Susan Buck-Morss explains that the flaneur wandered "in the relatively tranquil shelter of the arcades" of nineteenth century Paris, where "he practiced his trade of not trading, viewing as he loitered, the varied selection of luxury goods and luxury people displayed before him" (102). However, with respect to the enactor's need to consume the fragments she encounters, she is more like the purposeful *bricoleur*, who assembles works of art by cobbling together found materials.

1.2.3. Aporia/Epiphany

The digital environment of the computer allows Stuart Moulthrop to prevent his readers from having as wide a degree of reading freedom within Reagan Library as the codex reader has within that form.¹³ The enactor of *Reagan Library* has no choice but to follow the hyperlinks established by Moulthrop, progressing through the work via any number of combinatorial pathways, but always within the system established by Moulthrop.¹⁴ In the case of both *Reagan* Library and Hopscotch, however, the reader is left in much the same existential state, free to choose from a possibly bewildering number of navigational options, with no indication provided by the author which option would satisfy the reader's textual and narrative desires.¹⁵ Silvio Gaggi describes the reader's dilemma, writing that "The complexity of the web and the possibility of having to make decisions without sufficient information regarding where any choice may lead can result in a disorientation that precludes meaningful freedom" (104-5). The freedom provided by the codex platform, and the more constrained freedom offered by the computer platform, can thus be seen not as libratory, but as constricting, binding the reader in a web of decisions to be made on the basis of too little information. Given the enactor's latitude in selecting her navigational pathways, the possibility of altering the digital work or of

¹³ The codex reader, for instance, has the ability to move throughout the work as she desires. Movement through digital works often requires the enactor to find and activate certain hyperlinks. In addition, the hyperfiction software Storyspace allows the work's composer to impose "guard fields" that prevent the enactor from reaching certain lexias until she has accessed certain others. In this way, the Storyspace composer can prevent his enactors from reading the ending first, so to speak. The codex composer has no such mechanism at his disposal.

¹⁴ Another important aspect of the analysis of the programming artistry underlying computerized works, to which I alluded above, involves the ability of the experienced Internet user to "hack" computerized works – to interfere with or alter the work or system. Such readers can hack the system, circumventing the limiting hyperlinks by typing in the Internet address of the lexia they wish to access next, regardless of whether there is a link to that lexia on the current page. More advanced readers can also hack the work directly, accessing the underlying code and altering it in any way they may see fit. These hacks illustrate yet another way that the material condition arising from the computer platform differs from that of other platforms – although other platforms may be similarly hacked or altered once digitized, as demonstrated by film director Kevin Smith's unauthorized reediting of George Lucas' *The Phantom Menace*, renamed *The Phantom Edit* and distributed to wide acclaim via the Internet.

¹⁵ Though Cortázar does, of course, offer guidance about the "proper" option for navigating the novel (through his "Table of Instructions"), the reader has no real assurance that hopscotching will result in greater narrative satisfaction. As it contravenes codex reading convention, it may rightly be assumed to result in greater narrative *frustration*.

contravening the conventional ordering of a codex work (as by flipping to a different page at will), and the lack of narrative coherence initially presented by the distributed mode, the hermeneutical problem of the relationship between the enactment and the work it is enacting arises. Is there any way to expect or to require the enactment to remain faithful to the work being enacted? In other words, does enactment necessarily entail "wrong" interpretation?

The reader of *Hopscotch* has no idea whether hopping from chapter 2 to chapter 116 will provide more information or less about Oliveira's relationship with the ephemeral figure of La Maga, or of her son, Rocamadour. Oliveira tells us that "I don't want to write about Rocamadour, at least not right now, because I would have to get so much closer to myself, to let everything that separates me from the center drop away" (15). Would hopping more than 450 pages provide the space and time needed for Oliveira to feel comfortable enough to explain the tortuous relationship between himself, La Maga, and her son? Or does the next chapter, chapter 3, begin to fill in the pieces of this puzzle? Which path should the reader choose?

The reader of *Reagan Library* might feel that selecting the visual object hyperlinks – clicking on the image of the black obelisk on the left side of the panoramic view in the blue "Pavilion," for instance – is likely to move the reader to the blue "Obelisk," and thus might allow the reader to continue her investigation into the figure of Emily St. Cloud. The Obelisk is shared, however, by both the blue zone and the black-black zone, and selecting it transports the reader to the black-black "Obelisk," thus frustrating the reader's expectations just as Cortázar frustrates his reader's expectations by making chapter 116 a digression on the nature of narration.

The aporia-and-epiphany effect of the distributed mode, however, presents a possible resolution to the narrative indeterminacy and confusion experienced by the enactor. As each

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aporia is replaced with the epiphany of an additional fragment of narrative, the enactor must undertake a rigorous project of narrative construction. The enactor's constructions are, in my formulation, (re)constructions both as an acknowledgment that it is the enactor constructing the narrative for herself as she navigates the work, and as an acknowledgment that the enactor is reconstructing a narrative that originally was created by someone else. As the enactor is provided little guidance as to the (re)construction of the narrative, she is left to assemble the fragments she encounters more or less as she sees fit, but not without some logical constraints. Each new lexia that contradicts her provisional (re)construction forces her to modify her "free" play in the narrative to make allowances for the new, conflicting data. In this, the distributed narrative seems much like what Umberto Eco names the "open work."

In *The Role of the Reader*, Eco explains that an open text is one that "not only calls for the cooperation of its own reader, but also wants this reader to make a series of interpretive choices which even though not infinite are, however, more than one" (4). The link structure of the distributed mode establishes a high, but finite, number of "interpretive choices" for the reader to make. The links also create an open-ended system, in which there is no definitive beginning, middle, or end. The reader, however, is not free to construct closure in any way she pleases. Eco is careful to specify that open texts do not grant their readers free license to do to the text whatever form of damage, *pace* Barthes,¹⁶ they wish. Eco clarifies that "You cannot use the text as you want, but only as the text wants you to use it. An open text, however 'open' it be, cannot afford whatever interpretation. An open text outlines a 'closed' project of its Model Reader as a component of its structural strategy" (9). Thus, the reader really is constrained in her

¹⁶ As Barthes explains in his book, *The Pleasure of the Text*, "Thus, what I enjoy in a narrative is not directly its content or even its structure, but rather the abrasions I impose upon the fine surface: I read on, I skip, I look up, I dip in again. Which has nothing to do with the deep laceration the text of bliss inflicts upon language itself, and not upon the simple temporality of its reading" (11-12).

(re)construction, first in her attempt to make sense out of something that, she supposes, made sense to its creator, and second in her attempt to render that sense in terms that are relevant to her. And so, to construct a mental version of the work, the enactor must interpret both the work and her own enactment and interpretation. The interpretation and critique of the enactor's enactment and interpretation is necessary in order to enact well, and it is also frequently invoked, as the enactor experiences frustration and wonders what she is doing "wrong."

1.2.4. Self-Awareness

Enactment in the distributed mode, therefore, is about the discovery of patterns, linkages, themes, and threads spread across a possibly vast array of textual nodes, and with varying degrees of obviousness. Enacting and interpreting in this environment is an active process, requiring a good deal of self-conscious thought and effort. Furthermore, as already noted, the lack of an apparent controlling narrative can induce anxiety in the reader and frustration as she attempts to reconstruct the work into its assumed original unity that has been, she may believe, fractured intentionally by the author.

In his book *The Philosophy of Rhetoric*, I.A. Richards argues that "Words are not a medium in which to copy life. Their true work is to restore life itself to order" (133). This claim is countered by James Seitz in *Motives for Metaphor*, where he notes that "While I have no wish to dispute that language can provide a sense of order and harmony, Richards seems here to forget what he has recognized so perceptively earlier on – namely, the potential of language [. . .] to create dissonance and anomaly as well as consonance and design" (45). "Dissonance and anomaly" are apt descriptors for distributed narrative, which even Stuart Moulthrop, one of its most distinguished practitioners, calls "a technology of trauma" ("Traveling" 75). It is, however,

precisely this potential for trauma that makes the distributed mode a powerful tool for literacy pedagogies, and which suggests answers to the hermeneutical problems of the relationships between enactment and self-knowledge, and between enactment and reading as it is traditionally understood.

In their introduction to *Hypermedia and Literary Studies*, Paul Delaney and George P. Landow assert that "Since the essence of hypertext lies in its making connections, it accustoms students to make connections among materials they encounter," and that "Hypertext also helps a novice reader to learn the habit of nonsequential reading characteristic of more advanced study" (22). The plentitude of paths presented to the enactor in the distributed mode may, as Hilmar Schmundt points out, cause "cognitive overload" in the reader as she attempts to order the disparate elements of the narrative, and may cause her to feel "lost in hyperspace," but it also forces her to interrogate her own reading practices. Indeed, it is this double interrogation – of the work and of her own reading strategies simultaneously – which overloads the enactor in the distributed mode, and which allows for the conscious consideration of cognitive activities that are usually performed on an subconscious level while reading.

Trauma, however, no matter how pedagogically useful, brings with it risks. In his article, "Reading Hypertext: Order and Coherence in a New Medium," John Slatin makes the important point that:

> The more cryptic the link or node identifiers are, the harder it is for the reader to predict the results of activating a particular link. The harder it is to make such predictions, the greater the likelihood that the reader will simply opt out of the process in frustration. And even if the reader does go ahead there is no guarantee that s/he will know the place when s/he gets there. (164)

For George P. Landow, one of the pioneers of criticism and theory regarding hypertext, this frustration should be viewed as a sign of success rather than failure. In his seminal theoretical

work, *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology*, Landow quotes at some length Morse Peckham's philosophy on the disruptive duty of art. Peckham argues that "Art offers not order but the opportunity to experience more disorder than any other human artifact, and . . . artistic experience, therefore, is characterized . . . by disorientation" (85). This is, perhaps, counterintuitive for the literary critic, used to the worldordering operation of traditional narrative. Peckham, however, is convinced that:

The artist's role is to create occasions for disorientation, and . . . the perceiver's role to experience it. The distinguishing mark of the perceiver's transaction with the work of art is discontinuity of experience, not continuity; disorder, not order; emotional disturbance, not emotional catharsis, even though some works have a cadential close. (85)

The consumer of art is rewarded for enduring such disturbance, Peckham argues, because "Art is the exposure to the tensions and problems of a false world so that man can endure exposing himself to the tensions and problems of a real world" (85). Though Peckham's theory does explain the appeal of some types of disorienting art, such as the experimental novel and many works in the distributed mode, his dismissal of art that may offer consolation or an intentionally pleasurable experience instead of disquietment makes Peckam's a poor choice for a general theory of art.

In my own experiences teaching the distributed mode to undergraduates at the University of Pittsburgh, the disorientation produced by these works does, indeed, represent a productive site of learning and self-reflection. My students bear out Delaney and Landow's contention that the burdens placed on the enactor by the distributed mode can enhance the enactor's ability to read –even to read traditional printed codex work – self-consciously and critically. At the same time, though, Slatin's warning about the frustration arising from the enactor's attempted engagements with the distributed mode is a valid concern. The resistance expressed by my

students is invariably, if less so than I would like, ameliorated by the multiple methods of expressing and presenting narrative material available to digital works such as *Reagan Library*. The inclusion of graphics, audio files, video clips, and other modes of representation thus potentially provides a more welcoming point of entry to a difficult work. These modes, however, also require their own careful consideration.

1.3. THE LIMIT OF LITERACY 2: LOGOCENTRISM AND THE MULTIMODAL WORK

Although, as we have seen, non-digital works can be composed in the distributed mode, the range of media made available by computer technology allows for radical alterations in the form and content of the narrative work. From a hermeneutical, or interpretive, perspective, the ability to include non-prose material in narrative reveals an important problem to be considered: what is the relationship between language and narrative meaning? Early personal computers lacked the memory and processing speed to present much more than prose text on a screen, but modern computers have no problem simultaneously displaying prose text and video clips, and playing music. In addition, haptic control devices, such as Logitech's iFeel mouse, allow programmers and composers to include the sense of touch in their works, causing the mouse to buzz, vibrate, and pop in the user's hand in response to whatever is happening on the screen. As the Web site for the Immersion Corporation, the producer of the software that translates the embedded code into "force feedback," explains, while playing a computer game with a haptic mouse "you can experience the pulsing power of casting a spell, or the tug of ripping a tree out of the ground."

hyperlink on a Web page or over the buttons on the toolbars for popular applications such as Microsoft Word.

Prose text, audio files, video files, images, and haptic response are all examples of modes of representation, and the computer, by integrating these and other modes, is a multimodal platform. As the distributed mode is itself a set of *ways* of composing and enacting works, so too do the representational modes entail different ways of composing and enacting meaning. As James Paul Gee notes, in multimodal works mixing prose text and images, "the images often communicate different things from the words" (Video 14). Not only do images and words often convey different things, but they do so in sometimes radically different ways. In the brief introduction to Moulthrop's *Reagan Library* earlier in this chapter, it was necessary to include a figure (figure 1) depicting the Internet browser screen displaying the blue "Pavilion." Displaying figure 1 was necessary, rather than merely the conspicuous exercise of screen-capturing software, because the blue "Pavilion" is more than the prose included on the page and, indeed, the work itself is far more than the collected prose comprising it. Obviously, the interactive panoramic vistas at the top of each page, in addition to the colored bars at the left side of the page, also convey meaning. Not only do the objects and locations revealed in the panoramas convey meaning about the narrative work, but also the ability to view the environment in 360° suggests meanings to those who view the work. A literacy of multimodal works, then, must take into account both the variation in meanings conveyed across modes, and the variation in the ways by which the modes convey those meanings.

1.3.1. Logocentrism

In his book *Literacy in the New Media Age*, Gunther Kress further develops the idea of the distribution of meaning across different modes, asserting that "*The world told* is a different world to *the world shown*" (1, emphasis in original). In a subsequent passage, Kress explores the ramifications of this difference, writing:

If two modes – say, image and writing – are available and are being used for representing and communicating, it is most likely that they will be used for distinct purposes: each will be used for that which it does best and is therefore best used for. Two consequences arise: one, each mode carries only a part of the informational 'load'; no mode fully carries all the meaning. Two, each of the two modes will be used for specialized tasks, the tasks which are best done with that mode. As a consequence writing is no longer a full carrier either of all the meaning, or of all types of meaning. (21)

Kress's conclusions about multimodality point to the need for a dramatic shift in our understanding of meaning and the way it is conveyed and understood. First, Kress's argument suggests the pedagogical need for a method for integrating and interpreting the various messages of the various modes in a given work. Even in canonical codex works, examples of multimodality are not unknown. We have already seen, for instance, the ways in which Sterne incorporates the visual mode in his novel *Tristram Shandy*, achieving effects not possible through the mere use of prose text. Similarly, W. M. Thackeray was commissioned for both prose and steel plate etchings and woodcuts illustrating his novel *Vanity Fair*. Though many modern editions of the novel omit the images, they offer commentary on the prose, and hence convey meaning integral to the work.¹⁷ Second, Kress presents a model in which the modes are not merely used for rhetorical purpose, but possess intrinsic rhetorical qualities. Aristotle defines

¹⁷ An example of this occurs at the end of chapter 7. The chapter ends with Becky Sharp in a carriage riding to Sir Pitt Crawley's town house. Thackeray includes a small woodcut of a young girl (far younger than Becky) sitting on the floor, assembling a house of cards. The reader is left to infer the relationship between the image and the narrative.

rhetoric as "an ability, in each [particular] case, to see the available means of persuasion" (*Rhetoric* I.2.1355a, 36). The modes, in Kress's view, each possess individual means and abilities of persuasion. The traditional rhetor was expected to match his argument to both the topic at hand and his audience. Knowing which mode to use to convey a particular message, as Kress suggests, merely updates the ancient rhetorical tradition. Third, Kress states that written language is no longer the sole transmitter of meaning and, importantly, that language no longer is the transmitter of "all kinds of meanings."

It is this point that speaks most directly to the question of the relationship between language and narrative meaning. If language is unable to transmit "all kinds of meanings," then there are certain meanings that language cannot "carry." These meanings are presumably to be transmitted through the deployment of other modes besides language, which means that the modes exist not merely as ornament or illustration to print language, but as coequal media for the construction and communication of meaning. In our increasingly visual culture, this may not appear noteworthy, but as Kress points out in an essay in the New London Group's book on Multiliteracies, "At the moment our theories of meaning (hence our dominant theories of cognition) are entirely shaped by and derived from theories founded on the assumption of the dominance of language. Meaning is in fact identified with 'meaning in language'" ("Design" 159). Nowhere is the idea that meaning is inextricable from language as visible as it is in the field of philosophical hermeneutics, especially in those theories developed from the works of Martin Heidegger and Hans-Georg Gadamer.

For Heidegger, language was not a medium for communication, but rather the ontological basis for the existence of all things. In his *Introduction to Metaphysics*, Heidegger writes that "words and language are not the wrappings in which things are packed for the commerce of

those who write and speak. It is in words and language that things first come into being and are" (13, qtd. in Palmer 135). In other words, Heidegger inverts the expectation that language was constructed to describe the things of the world. The things of the world exist in language before and above all utterances of or about them. It is this reversal that leads to Heidegger's famous pronouncements that "language 'speaks us,' not vice versa" (qtd. in Collins and Selina 150), and "language is the house of being," (qtd. in Palmer 135). For it is language that exists and acts, not things or people. As Richard Palmer summarizes, Heidegger believed that "man does not invent language any more than he invents understanding, time, or being itself" (153). All four are irreducible ontological grounds from which existence and man's sense of being in the world arise, and which allow and condition man's experiences in the world.

Hans-Georg Gadamer, one of Heidegger's students, accepts the primacy and importance of language, but adopts a more cognitive approach to the issue of language and being. As Gadamer explains in *Truth and Method*, "language characterizes our human experience of the world in general" (456). Thus, it is not that being arises from language, as in Heidegger, but rather that our ability to experience the world is dependent on language. Whereas Heidegger denies that language is a medium, Gadamer embraces the idea, writing that "It is from language as a medium that our whole experience of the world, and especially hermeneutical experience, unfolds" (457). This allows Gadamer to conclude, as he writes in his essay, "The Universality of the Hermeneutical Problem," that "language is the fundamental mode of operation of our beingin-the-world and the all-embracing form of the constitution of the world" (3). Thus, the world is constituted by language, but not because of the ontological function of language, as in Heidegger. Instead, the world is constituted by language because we understand the world, and our understanding is constituted by language. This associative model of the linguisticality of the world finds its strongest enunciation in Gadamer's conclusion, in the final section of *Truth and Method*, that "Being that can be understood is language" (474).

Heidegger and Gadamer suggest that the only answer to the question of the relationship between language and narrative meaning is that narrative meaning can only exist and be understood by and through language. And yet, this is a profoundly troubling for those who create and enjoy non-prose works. Both Heidegger and Gadamer consider and enjoy visual art, and yet neither gives a satisfactory explanation for the exact relationship between language and the non-prose arts. Gadamer takes up the task of theorizing the interpretation of modern - by which he usually means abstract and non-representational in the traditional sense - art, but refuses to think of the works as being anything other than language. Indeed, his solution is to determine that modern art is "speechless language," not because it has nothing to say, but because, like the stutterer, it "wants to say too much at once and is unable to find the words to express the pressing wealth of things [it] has on [its] mind" ("Speechless" 83). This speechless language, Gadamer explains, expresses "a meaning that cannot be unlocked" ("Image" 75). Having seemingly positioned modern art as expressing a meaning that is hermetically sealed, and hence uninterpretable, Gadamer proceeds to interpret the meaning of modern art as being "the rejection of meaning rather than its expression" ("Art" 101). Even if we accept Gadamer's thesis that painting is a language which expresses the sense that "there is no meaning," we are still left with the dilemma of why painters would go to such trouble to create so many different works all expressing the same four-word meaning. Or, alternately, if we adopt Gadamer's presupposition that modern art expresses a language which is too full of meaning to be intelligible, we are still left with the question of how and what that language means. In short, we are left with the realization that the modality of visual art conveys meaning in ways that are so fundamentally different from language that the two are incomparable.¹⁸

Cognitive researchers, such as Claudia Brugman (Story of Over), Antonio Damasio (Descartes' Error), George Lakoff (Women, Fire), Eve Sweetser (Etymology), and Mark Turner (*Literary Mind*), reject the notion that language is the fundamental basis for either existence or human thought. Turner explains that the fundamental unit of cognition is not linguistic, but imagistic. He refers to this unit as an "image schema," which he defines as the "skeletal patterns that recur in our sensory and motor experience. Motion along a path, bounded interior, balance, and symmetry are typical image schemas" (16, emphasis in original). Turner's examples of image schemas are instructive, as they demonstrate concepts that are describable with words, but which also are able to be experienced and understood without words. Long before a toddler has the vocabulary to express "balance," for instance, she will experiment with achieving it and experience its attainment and failure countless times. Simple image schemas, such as balance and motion along a path are, according to Turner, combined to form more complex image schemas, such as walking. When combined with a simple image schema such as a ball, the resulting image schema becomes a story (13.) These stories are combined to form parables, which Turner defines as "the expression of one story through another," and, more specifically, the "projection" of one story onto another to create meaning through narration (7). Parables, in turn, are combined to form narratives, which, Turner argues, are fundamental to the cognitive processes of prediction, evaluation, planning, and explanation - in other words, to the entire range of cognition (20).

¹⁸ While I agree with Gadamer that we all possess a facility for interpreting and understanding non-prose art forms, I disagree with his position that our understandings of art are necessarily language-based. In fact, Gadamer's limit-case of abstract art may demonstrate that art and language are not merely incomparable, but *incompatible* in any meaningful way.

Common sense suggests that narratives are built out of language, and that as we acquire and become proficient with more complicated language, we are able to construct more complicated narratives. Turner argues exactly the reverse, explaining that the brain's functioning suggests that language is not prior to narrative, but "follows from these mental capacities as a consequence; it is their complex product" (168). For Turner, then, and the other cognitive researchers exploring image schemas, the relationship between language and narrative meaning is causal, but in the opposite direction from that proposed by the philosophical hermeneuticists. Though Turner relates his ideas to works of prose narrative, the concept of image schemas is equally applicable to the other representational modes. If the mind functions narratively, which, in turn, allows for the development of language through which to express those narratives, so too might the other modes develop from the mind's ability to think in this way.

Gunther Kress's final sentence in the passage quoted earlier, that language "no longer" can express the entire range of expressible meanings, asserts the need to study and understand the non-prose modes as being fully capable of expressing meaning, even narrative meaning. The multimodal nature of works in the distributed mode demonstrates the ways in which non-prose modes signify narrative content. Unless we believe that these modes are somehow new, though, Kress's assertion also indicates that these modes have always had the capacity to express meaning. From the prehistoric cave paintings at Lascaux to DaVinci's *The Last Supper*, from the statuary of ancient Greece to the giant mobiles of Alexander Calder, we see that this is certainly the case, which reveals Kress's "no longer" to be polite, but incorrect. Rather, language has *never* been able to express everything expressible – nor has it been able to express in the same *ways* or with the same *effects* as other modes. This realization casts the relationship between language and narrative meaning in a new light, and one that demands an interpretive

theory able to engage with the various modes *on their own terms*, rather than merely as other instances of language.

1.3.2. Text-ism

This need for a theory of multimodal interpretation, however, raises the hermeneutical problem of the relationship between the interpreter and the object under interpretation. Expressing the same desire as the hermeneutical characterization of the entire realm of understandable being as language, it has become fashionable of late to consider the entire realm of understandable being as constituting "texts," thus positioning interpreters as "readers" pondering the multitude of "books" that comprise all of reality. The proliferation of the notion of "text" as the universal container of all meaning allows literary scholars to lay claim to and theorize a broad range of human interactions and artifacts, but it disfigures these phenomena even as it offers insight into them. Elizabeth Bergmann Loizeaux and Neil Fraistat summarize the effect of the shift to "text," writing that "Semiotics, which has done so much to allow us to see sign systems in relation to one another and to make interdisciplinary work possible, nonetheless tends to homogenize difference so that everything appears to behave like language" (Loizeaux and Fraistat 6). Despite their potential similarities, at the essential level film does not behave like print, and discourse does not operate in the same way that a written narrative does. The 1980s yuppy television melodrama, *Thirty-something*, consciously played on this distinction in advertisements for the show, proclaiming, "It's just like your life, only with better writers."

Derridean *agent provocateur* Gregory Ulmer notes that the distinction is not just at the level of the operation of the text, but also includes the materiality and the media potential of the text's platform:

The enabling fiction that carried literate study from a national literature to a global culture – the theoretical proposition that the world is a text – has been put into crisis by the increasingly obvious fact that the world is a text and a picture (to retain this reductive shorthand). Actually, it is a text and a picture and a soundtrack. (244)

Works like *Reagan Library* demonstrate the importance of this consideration, as they are fundamentally reliant on the author's ability to establish meaningful connections between the various media used in the work.

The spread of the "text" meme brought with it the spread of the word "reading" as the universal descriptor for the consumption of "texts." Thus, we now "read" everything from books to shopping malls for their semiotic codes. This is deeply problematic, not least of all when considering the distributed mode. The semantic shortcut represented by the verb "to read" now reifies the "textual" nature of the object being "read," even when the object is no more textual than the process of experiencing and analyzing it resembles reading. Gregory Ulmer spells out a major implication for this, arguing that the increasingly canonical field of "media literacy" itself is undermined by the rhetorical action of the term "literacy." According to Ulmer, "Media literacy makes sense when our only tool is the book. The strategy is in the terms themselves: impose book models on the alien forms and practices emerging within the new media" (245). The distributed mode, with its positive fetishization of media promiscuity and hybridization, is especially vulnerable to the colonizing imperative implicit in the term "literacy."

The "reader" of *Reagan Library* does indeed read the prose sections of the work, but she must also *look at* the panoramic view, *visually analyze* the arrangement of image and text on the Web page, and attempt to *predict* where the prose and object links will take her as she *enacts* the work. Other works of art composed in the distributed mode, like Terry and Gabrielle Braun and the London Sinfonietta's hypermedia symphony, *3-D Music*, require their enactors to *listen* to

the music of the symphony and to *watch* the motion of various objects rendered in the virtual space of the work.¹⁹ Referring to the enactor's activities with *3-D Music* as "reading" or to the work itself as a "text" is both completely misleading and antagonistic to any efforts to achieve a deep understanding of the work and of its mode of enactment and interpretation.

In his well-known essay, "From Work to Text," Roland Barthes explores the cognitive and phenomenological processes of reading, arguing that while all written materials are *works*, only those that produce rich imaginative realizations in the mind of the reader are Texts. As Barthes writes, "the work is normally the object of a consumption," but "the Text (if only by its frequent 'unreadability') decants the work (the work permitting) from its consumption and gathers it up as play, activity, production, practice" (161, 162). Or, to put it more plainly, the work exists as a musical score which must be performed - or, enacted - in order to come to its full expression as Text. Obviously, as Barthes argues and as my own emphasis on enactment indicates, the mental re-presentation of the work is of vital importance and interest. However, as a multimodal art form, the distributed mode presents us with an interesting alternative. If these works are (through the digital representation of data) uniquely able to use hybridization to present narrative and nonfiction information in multiple modes, then they are certainly no longer texts. In Reagan Library, for instance, the panoramic vistas convey different information than the prose passages, but each is vital to constructing an understanding of the work as a whole. In many games, such as Rand and Robyn Miller's Myst, sound cues are essential for understanding the game environment, for solving puzzles, and for progressing to other portions of the game. Rather than reifying a supposed supremacy of the prose in these works – as the label "text" does

¹⁹ *3-D Music* can be accessed on the WWW at the following address: http://www.braunarts.com/3dmusic/. In this work, the reader becomes an explorer, using her mouse to move through a series of virtual spaces, while sections of the Brauns's symphony play. The sections of music played are determined by the explorer's location within the space of *3-D Music*, and by the actions of the explorer as she manipulates objects such as spheres and crystalline pillars. Only by exploring the entire virtual space, and by manipulating all of the objects provided, can the explorer gain the complete experience of the symphony.

– I propose that we move "From Text to Work." The unimodal medium of text, even when supplemented with illustrations, is, in the distributed mode, supplanted by multimodal media, each of which produces a different but simultaneous re-presentation of the work as a whole.

It is not Barthes's ideas in this instance to which I am opposed; rather, it is his terminology. The use of "text," even in this highly mediated sense, recirculates and perpetuates the linguistically imperialist tendencies of "text" (as referring to all interpretable phenomena), "reading" (as the process of consuming these "texts"), and "literacy" (as the skills needed to "read," interpret, and output these "texts"). Instead, by rejecting the term text except in reference to works of alphabetic prose writing, the relationship between the interpreter and the work becomes clearer. The work is revealed, by the very openness of the term, to be multimodal, and the enactor of the work is thus required to effect a multimodal interpretation using various senses beyond mere sight and alphanumeric character-recognition.

1.3.3. Sense and Sensorium

The more open relationship between the work and its interpreter – open in the sense of multimodality and a more fully engaged sensorium, not in the sense that Umberto Eco uses to refer to indeterminate texts (*Role*) – reveals, however, yet another hermeneutical problem. Given the potentially multimodal nature of works in the distributed mode, how is the interpreter to effect the integration of those modes and the meanings they convey?

In her book, *Writing Machines*, N. Katherine Hayles argues for an analytical practice she names "media specific analysis" (MSA). Initially presented as being ideally suited to the interpretive needs of multimodal digital works, "MSA moves from the language of text to a more precise vocabulary of screen and page, digital program and analogue interface, code and ink,

mutable image and durable mark, computer and book" (Hayles 30-1). Hayles argues against limiting MSA solely to computerized works, explaining that "If we restrict the term hypertext to digital media, we lose the opportunity to understand how a rhetorical form mutates when it is instantiated in different media" (31). Thus, for Hayles, the multiplication of the media inherent in the distributed mode is no hindrance to the rhetorical analysis of them. By tying MSA to rhetorical analysis, Hayles also reiterates Kress's assertion that modality is inherently rhetorical. Indeed, the multiple media at play in *Reagan Library* enhance the affective power of the work, as the number of different rhetorical devices available to Moulthrop is limited only by the number of media deployed in the work. Furthermore, as the number and type of media deployed in any given distributed narrative is dependant on the creator of the work, and by the limitations of the medium in which the work is being composed, not the work of art itself, any comprehensive analytical strategy for distributed narrative must follow something like Hayles's MSA. Hayles grounds MSA in the materiality of the work, explaining:

Materiality thus emerges from interactions between physical properties and a work's artistic strategies. For this reason, materiality cannot be specified in advance, as if it preexisted the specificity of the work. An emergent property, materiality depends on how the work mobilizes its resources as a physical artifact as well as on the user's interactions with the work and the interpretive strategies she develops – strategies that include physical manipulations as well as conceptual frameworks. In the broadest sense, materiality emerges from the dynamic interplay between the richness of a physically robust world and human intelligence as it crafts this physicality to create meaning. (32)

In other words, a medium-specific rhetoric for distributed narrative would not be a set of interpretive or evaluative rules, but rather an approach to the constantly shifting body of works whose inherent flexibility requires a similarly flexible and nuanced hermeneutic.

1.4. THE LIMIT OF LITERACY 3: THE COMPOSED WORK

Hermeneutics is usually thought of as the set of interpretive strategies and skills used to make sense of difficult texts. More specifically, hermeneutics may be thought of as what we do when we *read* a difficult prose text. The original forms of hermeneutical analysis all involved reading: interpreting scripture, legal code, and, eventually, poetry and literature. And yet, if we believe, as many of us do, that writing is a valid and important method of interpretation and analysis, then writing, too, is a method for achieving understanding. This view of writing disputes the belief that writing exists to record and allow the transmission of analysis and interpretation that has already been generated. Of course, some writing does this, but it is important to remember the moments when, during writing, a new thought occurs to the writer. Equally stunning is the moment in which the writer re-reads her work and discovers an idea that she had not been aware of. Despite the common view that writing is merely the record of previous cognition, writers know that through the action of writing, of putting down thoughts in written form, new connections are formed and reveal themselves in the written work. This may not occur as often as we would like, but writing becomes *exploration* often enough that the interpretive power of writing cannot be dismissed or discounted. Of course, if writing is an analytical tool, then it is, quite properly, hermeneutical. Hans-Georg Gadamer's definition, cited at the beginning of this chapter - that "something distant has to be brought close, a certain strangeness overcome, a bridge built between the once and the now" ("Scope" 22) – also applies to writing. The writer interprets, and thus brings into personal understanding, something distant, strange, and difficult. As we have seen, however, the context of the distributed mode invariably presents complications to the easy understanding of common literacy- and narrative-related concepts. Specifically, the

ergodicity and multimodality that revealed the inadequacy of "reading" and "text" as labels, here show "writing" to be a misnomer.

1.4.1. Composing

Seen through the lens of the distributed mode and its multimodal works, "writing" is a term much in need of clarification. As mentioned previously, Moulthrop's creation of Reagan Library required him to work within multiple modes of representation. By doing this, he is no longer, strictly speaking, an author. Instead, he becomes an author/artist/programmer hybrid. Referring to his constructive process as writing is, plainly, neither accurate nor sufficient. Imagine the ridiculousness of claiming that someone has written a painting or a video clip. Instead, I propose a serious return to the concept of composition. As we commonly use it, composition refers to a wide variety of creative activities: we compose symphonies, letters to friends, paintings; we analyze the composition of sculptures, film scenes, and even chemical In all of these fields, composition refers to the intentional invention and substances. arrangement of materials. In our own writing, and the writing we ask our students to create, we attempt to harmonize our argument with the form in which we present it. I am not advocating a return to the dogmatic days of process writing; instead, we need to acknowledge that our cultural and technological moment is changing the nature of composition, whether we like it or not. Digital media make it easy to incorporate visual, audio, and animated material into our "written" communications. Thinking about composition as a recursive process of multimodal invention and arrangement keeps our notions of what composition is firmly grounded in our earliest rhetorical traditions, while also allowing us to include other modes of communication within the rubric of composition, without misrepresenting what we are doing.

The New London Group's Multiliteracies pedagogy is an excellent conceptualization of the needs of composers, enactors, and readers in multimodal environments. The Group refers to their pedagogy as one of "multiliteracies" because, they write, it engages with "the multiplicity of communications channels and media" as well as with "the increasing salience of cultural and linguistic diversity," thus combining multimodality with multiculturalism²⁰ (Cope and Kalantzis 5). Briefly, the centerpiece of the Multiliteracies pedagogy is the concept of "Design," which the Group uses to designate the process of multimodal composition as well as the strategies and structures employed to compose. Design, in the Multiliteracy pedagogy, makes use of "Available Designs" to compose a new work, referred to as "the Redesigned," which is the product of existing traditions and forms of composition even as it is a unique assemblage of modes and meanings (New London Group 22-23). The Group's theory of Design allows for recursive invention and arrangement, coupled with the composer's intent – that which motivates the Design – in both the process of Design and in its aftermath. As they write, "in its turn, the Redesigned becomes a new Available Design, a new meaning-making resource" (New London Group 23). The recursive nature of the Redesigned becoming new Available Designs which allow for the composition of new Redesigned compositions, and so on, points to a fundamental interrelation between enacting, reading, and composing.

As the Group explains, Design is not limited to composers. Instead, "Listeners and readers encounter texts as Available Designs. They also draw upon their experience of other Available Designs as a resource for making new meanings from the texts they encounter" (New London Group 22-23). The point here is that, as readers gain experience reading, they become

²⁰ The New London Group is clearly concerned with the issues raised by Brian Street and others under the rubric of the New Literacy Studies. In their desire to ensure that their Multiliteracies pedagogy contributes to the "design of [better] social futures," they avoid the trap of what Street terms the "autonomous' model of literacy," in which literacy is seen purely "in technical terms, treating it as independent of social context" (Street 5). In the context of the distributed mode and of Digital Literacy in general, the "autonomous' model of literacy" is a widespread, but not incontrovertible, perspective. See: Wysocki and Johnson-Eilola ("Blinded") for an incisive critique of this tendency.

better readers. What is noteworthy about this conclusion, however, is the level of clarification allowed by the redefinition and specialization of the terms used by the Group. The processes in which readers and enactors engage as they read and enact works are parallel to the process by which composers Design their works. The process of consulting the mental storehouse of other, similar works to guide and structure the interpretive act underway is identical. The Group seems to hold that the Redesigned becomes a new Available Design "in its turn," or, after the Redesigned composition is completed. I believe this is overly cautious. In reading and enacting, the reader and enactor is constantly comparing new data presented by the work against the storehouse of data, including that which has just been read and enacted. The pre-existing data is, in multiliteracies parlance, a set of Available Designs, ready to be deployed or modified as new data and new interpretations of the work require. In the same way, Redesigned compositions give rise to new Available Designs even in the process of composition. As design elements produce favorable or intended results, the composer may – and should – recycle and reinterpret those design elements, so that they may be further improved and made even more effective in the present composition and in later composing. Composers, as they enact their works, in other words, must interpret their own composition.

In the distributed mode, the fragmented nature of the works results in a series of nodes connected by links. Links, as has been noted previously, cross liminal spaces between the narrative material of the nodes, and may themselves function as conveyers of narrative meaning.²¹ In the distributed mode, the absences between the narrative fragments also gain a positive semiotic value. In other words, the empty (devoid of explicit narrative material), liminal space traversed by the hyperlink in the distributed mode is made into a positive signifier, whose

²¹ The semiotic potential of links will be discussed in a forthcoming article. For more on this, Nicholas Burbules's essays, "The Web as a Rhetorical Place" and "Rhetorics of the Web: Hyperreading and Critical Literacy," are excellent resources.

meaning must be interpreted by the consumer of the work. The distributed mode, then, is also distinguished by the fact that works created thereby are importantly *present* even in their most As we have already seen, the distances between enacting, reading, and absent spaces. composing are not so vast. For practical purposes, the distributed mode shortens that distance to negligibility. As the enactor navigates the work, she is faced with links which may or may not suggest narrative material connecting the narrative fragments they bridge. Regardless, the enactor is required to "compose" tentative narrative material to make sense of the progression and relationship of narrative fragments. This process of composition, though almost certainly never physically incorporated into the work, becomes a part of the narrative enactment. In Barthes's essay "From Work to Text," he announces that the mental construction of the work "requires that one try to abolish (or at the very least to diminish) the distance between writing and reading, in no way intensifying the projection of the reader into the work but by joining them in a single signifying practice" (162). The enactor, in other words, does not become the "author" of the work, but is instead joined metaphorically with the original composer to compose the enacted narrative.

1.4.2. Multimodal Composition

The relationship between the enactor and the original composer of a work – a fundamental hermeneutical problem – becomes clearer when considering multimodal works. The compositional function of the enactor in a prose-only text closely resembles the efforts of the work's composer, and, hence, may suggest an overly aggrandized role for the enactor. In a multimodal work, like *Reagan Library*, on the other hand, the limits and roles of this relationship are more sharply defined.

In *Reagan Library*, the lexias blend prose text with panoramic graphics, as seen in figure 1 above. One of the effects of this integration is to strengthen the enactor's sensation that each lexia does not merely represent a physical location, as narrative does, but actually presents that location for the direct observation of the enactor. The blue "Pavilion" lexia, for instance, is not merely titled "Pavilion"; it gives the impression that it *is* the Blue Pavilion, with graphics and text merged to form a unified, spatialized semiological construction. To read the text of the "Pavilion" lexia, or of any of the other twenty-seven lexias, the reader also must "travel" (using hyperlinks) to the "physical" location of the lexia. Increasing the sensation of physicality in the text, the graphic in the top portion of the screen is actually a panoramic vista, able to display a 360° view from the location of the current lexia. Using the mouse, a reader can pan left, right, up, down, and may zoom in or out of the image, and thus is able to appreciate the entire vista from the location of the lexia.

As the enactor navigates from lexia to lexia, the narrative connections between the lexias, the states, and the zones, are only partially explained. To create a sense of narrative wholeness, the enactor must tentatively compose, based on her interpretation of the work and of her own enactment, a great deal of connective material. She cannot, however, compose new panoramas or alter the material form of the work. Though her interstitial composing may resemble the prose text – if her composition takes the form of language, that is – it cannot resemble the other modes employed by Moulthrop in *Reagan Library*. The enactor's additional narrative material is thus revealed to be another *mode* of narrative meaning, necessitated, though not provided, by the work's composer. This mode is the result of the enactor's integration of all of the modes employed by the work's composer, as well as her interpretation of the narrative content of those modes.

The New London Group lists five representational modes in their model of multiliteracy, and a sixth mode which they refer to as "multimodal integration" (New London Group 25-26).²² The sixth mode is relevant to composers as well as enactors, as multimodal works require both roles to perform this level of meta-compositional analysis. For the enactor, integrating the different modes of representation, their different contents, and their different ways of representing their meanings is a high-level cognitive task. The composer, on the other hand, must analyze the intended work, construct a design for its composition, and then effect and revise the design. The freedom afforded by digital media – the ability to compose multimodal works quickly, easily, and inexpensively using personal computers - may well overwhelm the would-be composer. As previously noted, the freedom to navigate through the lexias of works in the distributed mode is easily interpreted not as freedom at all, but as a paralyzing lack of guidance and security. The New London Group's notion of Available Designs is here quite useful, as it suggests that the composer is never entirely abandoned in a labyrinth of available modes and messages. Instead, she has the security of utilizing established, comfortable Designs, and the freedom to experiment with them as she sees fit. Additionally, the Group notes that even prose-only compositions are already multimodal, as written prose text is itself a visual phenomenon. Furthermore, they note:

> Desktop publishing puts a new premium on Visual Design and spreads responsibility for the visual much more broadly than was the case when writing and page layout were separate trades. So, a school project can and should properly be evaluated on the basis of Visual as well as Linguistic Design, and their Multimodal relationships. (New London Group 29)

²² The five modes identified by the New London Group are: Linguistic Design, Audio Design, Spatial Design, Visual Design, and Gestural Design. See "A Pedagogy for Multiliteracies" (25-30) for more on this.

This is perhaps obvious to anyone who has given writing assignments with minimum page limits to undergraduate students. Our students are increasingly becoming expert at desktop publishing formatting, as they manipulate fonts, font sizes, margins, and line spacing so that their work appears to satisfy the required number of pages. Many of our students now have worked with computers since they started elementary school. If our students are already comfortable experimenting with visual design – and most of them are – then it is time to incorporate multimodal composition in our assignments and in our expectations of what college-level writing should be.

1.4.3. Form and Compositing

One important consequence of multimodal composition is that it entails the production of meaning through different representational logics.²³ Not only is the composer free to combine modes to best convey her meanings, but she is also free to experiment with form. The distributed mode is predicated on the notion that multilinearity is a valid affective and communicative form. For the composer, shifting from unilinear argumentation, to which much argument- and thesis-driven writing is supposed to aspire, to a distributed format can be a liberating experience. The distributed mode seems unparalleled in encouraging connective, associative analysis and composition. The need to link fragments causes composers to consider not what point *should* come next, but what points *might* come next, and *why*. This follow-up question, why should those points come next, is a strong indicator of the analytical utility of the distributed mode.

²³ The New London Group refers to the semiotic systems and styles of the different modes as "grammars," noting, however, the uncomfortableness of the term, and acknowledging the pejorative connotation of the term, as well as its linguistic inference (20). I prefer the term "logic" to describe the ways in which the modes operate and are structured, as it avoids these issues.

Multimodal distributed composition also presents the composer with a range of affective options. Moulthrop's creation of the illusion of physical presence in each of the lexias of *Reagan Library* strongly reinforces the sensation that each link results in actual travel, reinforcing the spatial metaphor of navigation implicit in the mode. The spatialization achieved by Moulthrop also suggests the experience of playing a graphical computer game such as *Myst* or Syberia. In these games, the player assumes the identity of an on-screen avatar and moves her through a series of lushly rendered environments. The sense of immersion in a fully-realized world is one of the most appealing features of these games. Moulthrop acknowledges, in the "Introduction" to Reagan Library, that the work is game-like. Further, he indicates that the distinction is unimportant, except to "Idiot Questioners" (most likely academics) who insist on the categorization and segregation of such works. He writes: "Now a word from our Idiot Questioner. Is this 'fiction' or is it a 'game?' Exactly. As one of the inmates says: 'The world is what you see and where that takes you.' And where would that be? You'll find out" ("Introduction"). The work is inherently ludic, an affective mode that may be uniquely suited to the distributed mode.

The concept of a "ludic work" raises the question of whether the work serves as a game played *with* the enactor or played *on* the enactor. Cortázar's *Hopscotch*, for instance, seems to do both. Cortázar originally titled the novel *Mandala*, the wildly complex and usually circular images representing man's understanding of the universe, used to assist in meditation. Cortázar changed the name to *Rayuela* (*Hopscotch*) before publication, perhaps explicitly signaling the ludic intention behind the work. The change from *Mandala* to *Rayuela* also indicates a different perspective toward the novel – no longer viewing it as a model of the world, but rather as a game to be played within the world. One game Cortázar plays on his reader is readily apparent in the

"Table of Instructions" – an endless loop established by Cortázar as the male-reader hops from chapter 131 to chapter 58 which directs the reader to hop back to chapter 131. As Michael Hardin makes clear, "If one takes the novel seriously *as a game* – and the switch in title from *Mandala* to *Rayuela* suggests that we should – then the female-reading is the only one which provides a possible winning move; it allows the actual reader to exit, which in this novel constitutes victory at the simplest level of playing" (51, emphasis in original). The endless loop is a classic trap in computer programming, as computers follow instructions – even bad instructions – without deviation. But in a ludic novel, does deviating from the rules – such as exiting the recursive loop – cause the enactor to forfeit the game?

Another game played on the enactor involves the denigration of the enactor. *Hopscotch* presents two sanctioned methods of progressing through the work, and yet the reader who chooses to read straight through, from chapter 1 to chapter 56, is later described in the novel as a "female-reader" and is denigrated. Morelli, a novelist in *Hopscotch*, writes, in what is described as "an exceedingly pedantic note," that he aspires:

To attempt [...] a text that would not clutch the reader but which would oblige him to become an accomplice as it whispers to him underneath the conventional exposition other more esoteric directions. Demotic writing for the female-reader (who otherwise will not get beyond the first few pages, rudely lost and scandalized, cursing at what he paid for the book), with a vague reverse side of hieratic writing. (396)

Of course, the true female-reader (*el lector-hembra*) would never know about this insult, as it is included in chapter 79, well beyond the "end" of the female-reader's version of the novel.

Cortázar also seems to play games *with* his enactors, one involving the title itself – *Hopscotch*. Further, Cortázar plays with the idea of hopscotch with his accomplice-readers (*el lector cómplice*). Using the hopscotch reading order, the so-called male-reader eventually reads

every chapter in the book except chapter 55, in which Talita returns to her lover, Traveler, and tells him that Oliveira kissed her. Is this chapter the playground square in which the hopscotch pebble is placed, and in which the player is forbidden to land? If so, the chapter is far too important to ignore, and the male-reader is tempted to read the chapter in violation of the rules of the game, a temptation made stronger by the very rules that she will transgress if she reads chapter 55.

The fragmented form of the distributed mode, and the multimodal support offered by digital technology, allow easy experimentation with affect and strategies for communication. This is a definite benefit when viewed from an expressivist perspective, but poses significant challenges from a pedagogical one. The challenges of teaching multimodal composition, for instance, are significant. As teachers already know, unimodal prose writing is difficult to master, and difficult to teach. Encouraging teachers of composition to branch out into uncharted territory may, therefore, seem cruel and unnecessarily distracting. However, as "writing" becomes increasingly multimodal – as the ubiquity of personal Web pages, blogs, emoticons, and PowerPoint's complete dominance in the sphere of business writing, indicate – our pedagogies will have to adapt.

In the next chapter, I set forth a rhetorical hermeneutic designed to accommodate the expanding pedagogical needs of twenty-first century digital literacies. The two chapters following explore the pedagogical application of this rhetorical hermeneutic in the fields of reading and composition instruction, respectively. The hermeneutical problems identified in the present chapter and expanded upon in the second, are, in the third and fourth chapters, contextualized in the setting of the literature and composition classroom.

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2. RHETORICAL HERMENEUTICS

We are what we think. All that we are arises with our thoughts. With our thoughts we make the world. (Buddha, The Dhammapada 3)

Where, indeed, but to rhetoric should the theoretical examination of interpretation turn? (Hans-Georg Gadamer "Scope" 24)

2.1. COMPOSING IN FRAGMENTS

This chapter is devoted to developing a hermeneutic capable of interpreting the fragmented and disjointed works of the distributed mode. This section, "Composing in Fragments" introduces the main works under consideration in this chapter, arguing for the essentially rhetorical nature of fragmentation, and hence, of the fragmented works of the distributed mode. The second section, "Rhetorical Performances, Estrangement, and the Politics of Affect," examines the concept of rhetorical hermeneutics from contemporary and ancient perspectives. This section continues the discussion from Chapter 1 of the distributed mode as an inherently rhetorical form of artistic production, comparing the rhetorical strategies employed by composers in the mode to the "*Verfremdungseffekt*" of Bertolt Brecht's Berliner Ensemble, and then exploring the affective and pedagogical uses of alienation effects in the distributed mode. The third section, "Conformation: The Work of Constructing the World of the Work," describes the multiple

processes involved in rhetorically interpreting works in the distributed mode. The final section of this chapter, "Rhetorical Hermeneutics and Conformation," reexamines the major theories of hermeneutics within the context of this rhetorical hermeneutic, focusing on the agency of the interpreter.

The distributed mode utilizes fragmentation not merely to alienate enactors, but also to represent more faithfully the shifting dynamics and relations between interconnected items and ideas. Similarly, this chapter, specifically the third section, has been written in an explicitly fragmentary and distributed manner. The elements of the rhetorical hermeneutic of conformation operate recursively, cooperatively, and often seemingly simultaneously. Describing them as a sequence of steps performed by an enactor would, therefore, fundamentally misrepresent these processes. I encourage you to exercise your navigational ability here and throughout this work to seek out discussions of materials when and as you decide you need to learn about them, to best configure your own understanding.

2.1.1. Fragmenting Film: The *Qatsi* Trilogy and *Baraka*

In the previous chapter, I discussed examples of the distributed mode from the platforms of the print codex and hypermedia. The distributed mode also operates in film, as several films from the past few decades attest. In 1983, Godfrey Reggio's groundbreaking meditation, *Koyaanisqatsi* – which features no acting, dialog, or narration – matched images of nature and of human civilization with a haunting score by minimalist composer Phillip Glass to depict "life out of balance" (the translation from Hopi of the film's title). Although *Koyaanisqatsi* presents its material in a linear fashion, with no opportunity for the viewer to "jump" to other filmic lexias, the film is nevertheless an example of the distributed mode because of the demands it places on

its viewers. Just as enactors of hyperfictions such as *Reagan Library* or novels such as *Hopscotch* must navigate across the hyperlinks – inventing a rationale and explanation for the hyperlink, and attempting to weave the disparate lexias into a coherent narrative whole – the viewers of *Koyaanisqatsi* must invent rationales and explanations not only tying the seemingly random images captured by Reggio to Glass' soundtrack, but also tying each combination of sounds and images to the sounds and images that precede and follow.

The film's opening, for instance, shows cave paintings of humans, while a men's chorus chants "koyaanisqatsi" over and over. The viewer may know the translation of the Hopi word, in which case she, presumably, would attempt to reconcile the still, and beautiful, image of the cave painting with the aural message, "life out of balance." The connection is far from obvious. From the cave painting, the action shifts suddenly to a tremendous explosion of fire, rendered in extreme slow-motion, but accompanied by the same bass chant and pipe organ arpeggios. Eventually, the image is revealed to be the firing of gigantic engines lifting a rocket off the ground, presumably into outer space. The next images show a desert landscape of bizarrelyeroded rocks, and the music changes to a series of slow, sustained tones carried by string instruments, with a slow arpeggio descant outlined by clarinet. With no sign of human presence, the eerie red rocks are difficult to identify – they could as easily be located on Mars as in the American Southwest. The transition from the rocket to the barren landscape gives credence to an other-worldly interpretation, but only momentarily, as the landscape is gradually revealed to be, indeed, the desert Southwest of the United States. The procession of images and music continues throughout the film's 87 minutes, sometimes at a rate too quick for conscious reflection, and the viewer is left to try to make sense of it all. In this, the action of the film on the viewer is nearly identical to that of the distributed mode in other platforms.

The title of the film, *Koyaanisqatsi*, provides the viewer with her only extra-contextual assistance in making sense of the disjointed and fragmented nature of its narrative. "Life out of balance" is a relatively straightforward polemical message, and helps the viewer to organize what she sees and hears. This message is developed in the two sequels to the film, *Powaqqatsi: Life in Transformation* (1988) and the conclusion to the trilogy, *Naqoyqatsi: Life as War* (2002). A related film, *Baraka* (1992), was directed by the cinematographer of *Koyaanisqatsi*, Ron Fricke, and continues the narrative style of *Koyaanisqatsi*. Like the original film, *Baraka* takes as its title a non-English and unfamiliar word: this time the language is Sufi and the term means "a blessing" or "the breath or essence of life from which the evolutionary process unfolds." *Baraka* represents a refinement of the innovative elements of *Koyaanisqatsi*, and is arguably at once more beautiful, more affecting, and more challenging than the earlier film.

Films in the distributed mode share many of the game-like qualities of the ludic novels described earlier. Each of these films presents itself as a riddle to be untangled and intuited by the viewer, a test of the viewer's shrewdness, and a display of the director's cleverness. As there are no definitive answers, however, the riddles become exercises in solipsism – each viewer's interpretations are, within the long-argued and still unresolved limits of interpretation common to all acts of reading, equally valid. The ludic novel and, now, the ludic film, play games either with or on their audiences; meanwhile, hyperfiction establishes a labyrinthine space in which enactors may feel they are trapped in a comparable textual game. Discussing the ludic aspects of these works, however, begs the question: if all of these "textual" works in the distributed mode are game-like, are games correspondingly and significantly textual? Ultimately, is the distributed mode so innately ludic that its game-like aspects render it unsuitable for "serious" analytical work and theory?

2.1.2. Fragmenting the Folio: *Composition No. 1*

In 1963 Simon and Schuster published a translation of an exceedingly odd French novel. Marc Saporta's *Composition No. 1* consisted of 150 unnumbered and unbound pages, enclosed in a cardboard box. Each page was entirely self-contained and independent of the rest. Sentences did not bleed from one page to next, nor was their any indication in what order the pages *should* be placed. Quite to the contrary, Saporta included the following introduction to his work:

The reader is requested to shuffle these pages like a deck of cards; to cut, if he likes, with his left hand, as at a fortuneteller's. The order the pages then assume will orient X's fate.

For time and the order of events control a man's life more than the nature of such events. Certainly there is a framework which history imposes: the presence of a man in the resistance, his transfer to the Army of Occupation in Germany, relate to a specific period. Similarly, the events that marked his childhood cannot be presented in the same way as those which he experienced as an adult.

Nor is it a matter of indifference to know if he met his mistress Dagmar before or after his marriage; if he took advantage of Helga at the time of her adolescence or her maturity; if the theft he has committed occurred under cover of the resistance or in less troubled times; if the automobile accident in which he has been hurt is unrelated to the theft – or the rape – or if it occurred during his getaway.

Whether the story ends well or badly depends on the concatenation of circumstances. A life is composed of many elements. But the number of possible compositions is infinite. $(Saporta np)^{24}$

Saporta's work features an unnamed protagonist, here referred to as "X," whose life (as narrated,

at least) seems to consist of a surprising number of parallel situations. The work describes X's

 $^{^{24}}$ Due to the lack of page numbers and the aleatoric ordering of the work, I abandon the "np" – no page number – convention for citation. Instead, I will provide the entire page each time I quote from *Composition No. 1*.

relationship with the German governess hired by his mother when he was sixteen or seventeen, as well as the announcement that X's wife will hire a governess for *their* small children. The narrative also describes X's wife, Marianne, his mistress, Dagmar, and the two thefts committed by X – one for the French Resistance, the other to pay off personal debts. These events, overtly repetitive and frequently described in similar terms, are fragmented into mere moments of narration and shuffled together to form a collage of the events and impressions of X's life.

2.1.3. Figuring the Fragments: Juxtaposition, Interpretation, and the Kuleshov Effect

In the 1920s, Soviet filmmaker Lev Kuleshov performed a series of experiments with juxtaposition in film editing. In the most famous, Kuleshov explains:

I created a montage experiment which became known abroad as the "Kuleshov Effect." I alternated the same shot of [well-known Soviet actor Ivan] Mozhukhin with various other shots (a plate of soup, a girl, a child's coffin), and these shots acquired a different meaning. ("In Maloi" 200).

The alternation of physical objects – which bore no relation to Mozhukhin or his performance – inspired Kuleshov's audience to assume the existence of a causal connection between the shots. Mozhukhin, followed by a shot of a bowl of soup, and then returning to Mozhukhin, caused the audience to interpret Mozhukhin's expression as one of hunger and longing for the soup. The juxtaposition of the images in the Kuleshov experiment resulted in the metaphoric ascription of meaning where none was intended. The image of the soup exerted a metaphoric power over Mozhukhin, arguing that Mozhukhin's expression was the *result* of the soup.

A second experiment performed by Kuleshov involved spatial relationships and editing. Kuleshov provides a thorough description of this later, more complex experiment:

Khokhlova is walking along Petrovka Street in Moscow, near the central department store; Obolensky is walking along the Moskva River embankment (about two miles away). They see each other, smile, and begin to walk towards one another. Their meeting is shot at Prechistensky Boulevard, which is located in an entirely different part of town. They shake hands in front of the monument to Gogol, turn around, and what should they see but the White House! - for at this point, we cut in a segment of the American film The White House in Washington. In the next shot they are again on the Prechistensky Boulevard. They decide to leave and ascend the enormous stairway of the Cathedral of Christ the Savior. We filmed them and edited the sequence, as a result of which they are seen climbing up the stairs of the White House in Washington. We screened this part of the film, and it was clear to everyone who saw it that the central department store stood on the bank of the Moskva River, that Prechistensky Boulevard was located between the department store and the Moskva River, and that on the boulevard was the monument to Gogol, with the White House standing directly opposite it. For this we used no trick photography, no double exposure - the effect was achieved purely by the organization of material, through its cinematic treatment. This scene confirmed the immense possibilities of montage, which turned out to be so powerful that it could radically alter the material itself. (Art 137)

In this experiment, juxtaposition also creates a causal relationship between the shots, but not in the same way as with the bowl of soup. This experiment demonstrated that film audiences, when shown people or objects in motion followed by a new location, assume that the people or objects have traveled to the new location, even when, as above, the locations in question are not connected as depicted.

The Kuleshov effect predicts that juxtaposition does more than merely "shock" or amuse audiences. Instead, juxtaposition *affects* the material so juxtaposed. Through juxtaposition, the *post hoc, ergo propter hoc* logical fallacy is instantiated in the filmic sequence, causing the bowl of soup to become the motivation for Mozhukhin's expression, and locations miles apart to be mentally rearranged to conform to an imaginary contiguity.²⁵ Both of these experiments by Kuleshov point to a two-step and two-layered interpretive requirement imposed by fragmentation and juxtaposition; they demand the enactor interpret the individual fragment both as itself and as an element in a larger chain of signifying items. At the same time, the experiments also suggest the active role played by enactors and audiences in the construction of the narrative work. Finally, the Kuleshov effect reveals the inherently rhetorical nature of fragmentation and juxtaposition.

Roland Barthes, in his eponymous work, *Roland Barthes*, provides evidence that the affective power of fragmentary works reaches not only the works' enactors, but their composers as well. Barthes explains:

I have the illusion to suppose that by breaking up my discourse I cease to discourse in terms of the imaginary about myself, attenuating the risk of transcendence; but since the fragment (haiku, maxim, *pensée*, journal entry) is *finally* a rhetorical genre and since rhetoric is that layer of language which best presents itself to interpretation, by supposing I disperse myself I merely return, quite docilely, to the bed of the imaginary. (95)

There are, as usual for Barthes, several interesting points in this short passage. First is Barthes' admission that he employs the fragmentary form in an effort to control the meaning of the text by taking the text out of the realm of the imaginary. Barthes hopes that his readers, when faced with independent fragments, will be prevented from interpreting the text, and will allow him the power to construct his autobiography as a purely denotative object, free from the meddling of its readers' interpretations. This would have been, if successful, an example of the apex of rhetorical power – the ability to control absolutely the interpretive faculties of his audience through communication. Barthes' second interesting point is his concession that the independent

²⁵ *Post hoc, ergo propter hoc* is a Latin phrase meaning: "after this, therefore because of this." It refers to the logical mistake of confusing sequence (this follows that) for causality (this is caused by that).

and self-sufficient fragment – as opposed to a unified work that is fragmented after being composed – is, after all, a purely rhetorical genre, as the enactor is required to "interpret" the text, thus subjecting it, potentially, to all manner of connotation and misinterpretation. In the absence of completion or wholeness, the enactor is left to interpret the bits she is given to the best of her ability. Stuart Moulthrop's idea of the distributed mode as a "technology of trauma," cited in the previous chapter, here gives rise not merely to affect, whose deployment and inducement is a classic rhetorical concern, but also to interpretation, which Barthes also connects to rhetoric. Finally, Barthes himself is manipulated into the "bed of the imaginary" by his own use of the rhetorical device of fragment, an interestingly effective display of persuasion.

In the following section, "Rhetorical Performances, Estrangement, and the Politics of Affect," I turn to a number of contemporary and ancient theorists of rhetoric to establish the bases from which my rhetorical hermeneutic develops. First, and most importantly, interpretation is fundamentally rhetorical in nature. This is supported by close attention to Aristotle's *Rhetoric* and *Poetics*, as well as the Platonic dialogues, which reveal the second fundamental claim: the inextricability of rhetoric from both poesis (the traditional view of rhetoric as a generative *technè*) and poetical interpretation (rhetoric as a hermeneutical *technè*). "Rhetorical hermeneutics," thus, is revealed not as a type of hermeneutics specifically concerned with the discovery and understanding of tropes and labeled with ancient Greek terms such as "bdelygma," "hysterologia," or "prozeugma."²⁶ Rather, the third claim asserts that rhetorical hermeneutics denotes the centrality of affect – achieved through the use of rhetorical strategies, and understood through the interpretation of those strategies – to the interpretive process. In

²⁶ In his indispensable *Handlist of Rhetorical Terms*, Richard A. Lanham defines these terms in the following ways. Bdelygma is an "expression of hatred, usually short. As Emilia to Othello: 'O gull! O dolt! / As ignorant as dirt!' (*Othello*, V, ii)" (29). Hysterologia occurs when "a phrase interposed between a preposition and its object: 'I ran after with as much speed as I could, the thief that had undone me' (Peacham)" (89). Prozeugma is, of course, "a type of Zeugma in which the verb is expressed in the first clause and understood in the others: 'Pride oppresseth humility; hatred love; cruelty compassion' (Peacham)" (126).

rhetorical hermeneutics, then, affect is seen not as antithetical to critical awareness and interpretation, as may be presumed, but rather as an integral part of interpretation and a complementary force to critical analysis. The final sections of this chapter, "Conformation: The Work of Constructing the World of the Work" and "Rhetorical Hermeneutics and Conformation," explore rhetorical hermeneutics and its implications for literary analysis.

2.2. RHETORICAL PERFORMANCES, ESTRANGEMENT, AND THE POLITICS OF AFFECT

The passage from Roland Barthes, quoted above, suggests that interpretation is a nested series of rhetorical performances. First, the work itself is a rhetorical object, acting upon and influencing the interpreter. Second, since, as Barthes says, "rhetoric is that layer of language which best presents itself to interpretation," the act of interpretation is inherently rhetorical. Steven Mailloux, in his book, *Rhetorical Power*, argues this second point as part of his theory of rhetorical hermeneutics. Mailloux writes that "academic criticism, like other interpretive practices, is rhetorical through and through, from the macro-structures of the institutionalized discipline, discussed in this chapter's first section, to the micro-practices of critical readings, analyzed in the last" (50). Though Mailloux is specifically concerned with the realm of academic literary criticism, which he sees as inscribed within the institution of the academy and constrained by the rhetorical tropes and practices of literary discourse, he agrees that all interpretation, even outside the academic setting, as a form of "rhetorical action, attempts to convince others of the truth of explications and explanations" (15). Here, I would add that before an interpreter can convince others of the truth of her explication, she must first convince

herself, making the rhetorical action of persuasion first an internal and personal act, before it can be deployed in a public arena.

I raise the issue of the rhetoricality of interpretation to point out the essential redundancy of the concept of rhetorical hermeneutics. If hermeneutics is the study and practice of interpretation, and if interpretation is inherently rhetorical, then there would appear to be no need to specify or contemplate a *rhetorical hermeneutics*. However, when considering the development of hermeneutics from the nineteenth century work of Friedrich Schleiermacher and Wilhelm Dilthey through the twentieth century theories of Hans-Georg Gadamer and Paul Ricoeur, the centrality of rhetorical action and of affect to the interpretive processes is conspicuously absent. By retaining the modifier "rhetorical," I hope to foreground this centrality, as it is vital to understanding the affective hermeneutical demands imposed by works in the distributed mode.

2.2.1. Rhetorical Performances and World Creation

Mailloux's examination of Mark Twain's *The Adventures of Huckleberry Finn* amply supports the second half of the nested series of rhetorical performances mentioned above – not only is the interpretive act a rhetorical performance, but the work being interpreted is, as Mailloux shows, also a rhetorical performance. Unambiguously, Mailloux asserts that "To investigate the novel's rhetoric is to unfold its complicated nature as ideological performance" (69). In the case of *Huckleberry Finn*, that ideological performance centers around issues of racism and slavery. What is particularly interesting about the rhetorical power of narrative performances is their ability to affect interpreters far removed in time and space from the original audiences of the work. In rhetorical terms, the *kairos* of Twain's 1884 audience – the "circumstances obtaining at

the moment of oration," in Susan Jarrat's terms (11) – is markedly different from the *kairos* of a contemporary audience reading *Huckleberry Finn*. Classical rhetorical understandings would predict that this change in *kairoi* would reduce or prevent the effectiveness of the rhetorical act, but this is not necessarily the case with narratives such as Twain's novel.

Mailloux explains that Twain's novel maneuvers its readers into judging the moral and ethical positions of its characters, rather than merely observing their actions and dialogue. As Mailloux writes, *Huckleberry Finn* "continually asks its readers to take on the role of critical audience observing a series of staged debates and speeches. In these dramatized arguments, readers both witness rhetorical power in the narrative and experience its effects in the act of reading" (60). Mailloux points to the novel's early, humorous treatment of racism, and the novel's problematic resolution. Interpreting the ending requires readers to reassess their earlier interpretations of the novel's beginning and middle, in an attempt to reconcile the book's rhetorical project. As Mailloux points out:

Reading the text has created the problem insofar as readers have been persuaded to take the earlier humorous critiques of racism seriously. As a result, they must decide whether the ending shows Twain's ideological retreat or his political realism, whether it contradicts his earlier attack on racism or deliberately represents the impossibility of the ex-slave's freedom. (98)

The rhetorical action of the novel implicates the reader during interpretation, as every act of interpretation requires the reader to take a position. Each position, then, can be called into question by later rhetorical acts, requiring the reader to form not only new interpretative positions, but to attempt to reconcile these new positions into a rhetorically persuasive and coherent master interpretation.

This is crucial to understanding not only Twain's novel, but all novels. Mailloux concludes that, "In a sense, it simply does not matter whether the interpretive and evaluative

problem is resolved in Twain's favor or not. The fact that the problem appears at all testifies that the novel works, not as a formal unity, but as a rhetorical performance in which the reader must participate in order to read at all" (98). Whichever decision the interpreter reaches – whether she agrees that Twain's ending supports his anti-racist rhetoric or contradicts it – the reader has to reach *some* conclusion in order to make sense of the novel. For Mailloux, concerned with the ideological play of narrative, a work like *Huckleberry Finn* is an ideal work to discuss, as its constitutive elements address the still-relevant problem of institutionalized racism. However, as we shall see, all narratives – regardless of their overt political and ideological messages – are composed of elements that must be interpreted. Once interpreted, these elements frequently come into conflict with the work's other elements, requiring the interpreter to reinterpret the work's assemblage of narrative elements to construct a rhetorically satisfying and coherent gestalt interpretation.

David Kaufer's work with rhetorical hermeneutics helps to explain the rhetorical function of narrative. Kaufer's work recuperating rhetoric from its mistaken identity as a purely productive methodology, and instead showing how rhetoric is best understood as a design art, leads him to conclude that rhetoric and narrative are more intimately connected than is traditionally assumed. As Kaufer explains:

Rhetoric is not the application of language to define external situations. It is rather the application of language to bring about a world, a cast of characters, and a contest to the listener's here and now. The speaker's job is to have the audience associate the near future with the historical world that contains the characters and contest that best fits the speaker's interests as he or she understands them. But this is a world that must be carefully designed to adjust the audience to the speaker's purpose and vice versa. To design it, the speaker must rely on a battery of tools taken from the toolkit of rhetorical design. (269)

The beauty of Kaufer's formulation is that is explains, effortlessly, the operation of political rhetoric in both ancient and contemporary settings, as well as the rhetorical operation of narrative in both ancient and contemporary settings. Mailloux's theories of the rhetorical performance of Twain's Huckleberry Finn are here explained as Twain's successful creation of an internally inconsistent world, in which easy dismissals of racism are challenged by the tougher demands of institutionalized racism. Rhetoric, as Kaufer notes, is far more than merely a "theory of argument." Instead, "argument is a tactical action that is taken only when a speaker's description of the world is interrupted and when the speaker resorts to argument in order to overcome the interruption and to resume the telling" (272). Again, the economy with which Kaufer explains both the operation of political discourse and narrative discourse is impressive. By revealing argumentation to be the failure of rhetoric rather than its raison d'être, Kaufer explains the phenomenon of the didactic narrative, and why it fails to aesthetically satisfy its interpreters. Narratives that descend into didacticism fail in their primary rhetorical role of world-creation, and so resort to argumentation to convey their rhetorical-narrative content. Though it may seem odd to refer to the rhetorical-narrative content of a work of literary art, in the following section I will briefly demonstrate how the history of rhetoric and poetics itself supports just such a convergence.

2.2.2. Aristotle's Rhetorical Poesis and Poetical Rhetoric

In application, the twin disciplines of rhetoric and poetics are difficult to disentangle. Coleridge's famous poetic ambition, "to transfer from our inward nature a human interest and a semblance of truth sufficient to procure for these shadows of imagination that willing suspension of disbelief for the moment, which constitutes poetic faith," speaks to this trouble (*Biographia* 388). For Coleridge, the writing [*logos*] of his contributions to the *Lyrical Ballads* would need to be persuasive enough to provoke in his listeners not merely the willingness to engage in a particular cognitive process, but the actual enactment of the suspension of disbelief. Coleridge's agenda, in other words, is to move his readers to action based on his reputation as a poet [$\bar{e}thos$], his skill in the poems themselves [*logos*], and his ability to convey the human interest [*pathos*] of his creations – the three areas of rhetorical study, applied here to poetics in service and fulfillment of what Coleridge calls the "poetic faith."

Even in this example, though, my discussion of the interpenetration of rhetoric and poetics reinstates the ideological and conceptual separateness of the two disciplines. Roland Barthes summarizes the dichotomy between rhetoric and poetics in his essay, "The Old Rhetoric: An Aide-Mémoire":

Aristotle wrote two treatises which concern the phenomena of discourse, but they are quite distinct: the *Technè rhétorikè* [*Rhetoric*] deals with an art of everyday communication, with public discourse; the *Technè poiétikè* [*Poetics*] deals with an art of imaginary evocation; [. .] these are, for Aristotle, two specific ways of proceeding, two autonomous "*technai*"; and it is the opposition of these two systems, one rhetorical, the other poetic, which in fact defines Aristotelian rhetoric. (20-1)

And yet, despite Barthes' conviction that the two works take as their subject discrete forms of discourse, the two fields of discourse actually overlap to a considerable extent. Aristotle defines rhetoric as "an ability, in each [particular] case, to see the available means of persuasion" (*Rhetoric* I.2.1355a, 36). This is glossed in Plato's *Phaedrus* as "a method of influencing men's minds by means of words, whether the words are spoken in a court of law or before some other public body or in private conversation." Though Plato's concern is not the similarities between rhetoric and poetics (he is more intent on illustrating the differences between rhetoric and philosophy), he follows Socrates' "general definition" of rhetoric with a telling question: "And is

not some art involved whatever the importance of the subject under discussion?" (261, 73, emphasis added). Plato emphasizes the artfulness and artifice employed in rhetoric, contrasting that with the scientific pursuit of philosophy. Indeed, as Aristotle writes, there is no specialized field of technical knowledge that could constitute the study of rhetoric: "But rhetoric seems to be able to observe the persuasive about 'the given,' so to speak. That, too, is why we say it does not include technical knowledge of any particular, defined genus [of subjects]" (*Rhetoric* I.2.1355a, 37). Aristotle titles his treatise on rhetoric the Technè rhétorikè, the art of rhetoric (Rhetoric 23), positioning it in opposition to, and possibly as being superior to, the scientific disciplines. Susan Jarratt describes rhetoric as "a meta-discipline through which a whole spectrum of language uses and their outcomes as social action can be refracted for analysis and combination" (Jarratt 14). The meta-disciplinarity of rhetoric, through which it is able to find the persuasive in any given topic, problem, or field of learning, is, of course, highly reminiscent of the meta-disciplinarity of fiction-writing and poetics. As a skilled rhetor does not need to be an expert in agriculture to be able to argue persuasively for certain agricultural policies before the Senate, neither does Sophocles need to be an expert on statecraft to write Oedipus Rex. But beyond these operational similarities, Aristotle's *Rhetoric* and *Poetics* themselves explicitly demonstrate the overlapping of the two fields.

In Aristotle's codification in *Poetics*, for instance, tragedy is understood to be comprised of six constitutive elements: "Every Tragedy, therefore, must have six parts, which parts determine its quality – namely, Plot, Character, Diction, Thought, Spectacle, Song" (VI.7, 62). The first two are universal characteristics of fictional works, and need not be discussed much here.²⁷ The last two are especially interesting for the study of works in the distributed mode, due

²⁷ By focusing explicitly on fictional works, I am attempting to exclude lyrical poetry from this analysis, as the particularities of the form raise specific problems that are not germane to the present study.

to the form's ability to incorporate graphics and sound into the work in a truly spectacular and song-filled experience. Though these spectacles and songs are not identical to those contemplated by Aristotle, they are analogous, and will be considered at a later point in this chapter. It is the middle two parts that are especially relevant for any discussion of rhetoric and poetics, as diction and thought are shared terms in both disciplines.

Aristotle explains, in *Poetics*, that thought "is required wherever a statement is proved, or, it may be, a general truth enunciated" (VI.6, 62). Though literary scholars and readers across the ages have turned to literature to find just this – the evocative and powerful statement of universal truths – Aristotle's bald statement about the logical and argumentative power of drama still seems to be out of place in the *Poetics*. Aristotle himself apparently recognizes this, as he refers his readers to the *Rhetoric* for further instruction:

Concerning Thought, we may assume what is said in the *Rhetoric*, to which inquiry the subject more strictly belongs. Under Thought is included every effect which has to be produced by speech, the subdivisions being – proof and refutation; the excitation of the feelings, such as pity, fear, anger, and the like; the suggestion of importance or its opposite. (XIX.1-2, 93)

Although thought "more strictly belongs" to the field of rhetoric, it is still an essential element of tragedy, and hence an essential element of Aristotle's poetics. Interestingly, it is under the category of thought that Aristotle includes all of the affective power of tragedy – its ability to evoke the cathartic pairing of pity and fear, as well as anger and "the like." In the *Rhetoric*, and in a similar vein, Aristotle goes so far as to claim that "The emotions [*pathē*] are those things through which, by undergoing change, people come to differ in their judgments and which are accompanied by pain and pleasure, for example, anger, pity, fear, and other such things and their opposites" (II.1.1378a, 121). Both texts, supposedly representing different practices, establish the elicitation of emotion in an audience as a central premise. In the *Poetics*, Aristotle discusses

the need to conceive of dramatic action and dramatic dialogue as being essentially identical because, he writes, "it is evident that the dramatic incidents must be treated from the same points of view as the dramatic speeches, when the object is to evoke the sense of pity, fear, importance, or probability" (XIX.3, 93). The actor, here, is cast in the role of the orator or rhetor.

When describing the third part of tragedy, diction, Aristotle blurs even more the border between rhetoric and poetics. In the *Poetics*, Aristotle explains that, "as regards Diction, one branch of the inquiry treats of the Modes of Utterance. But this province of knowledge belongs to the art of Delivery and to the masters of that science. [...] We may, therefore, pass this over as an inquiry that belongs to another art not to poetry" (XIX.4-5, 94). Though the provinces of diction, utterance, and delivery belong to another "art" - as Plato referred to rhetoric in the *Phaedrus* – they are still central to the construction and understanding of the dramatic forms. Delivery is central not merely to poetics, but also to rhetoric, as Aristotle – and centuries of elocution instruction in the rhetorical handbooks produced since the Rhetoric - makes clear. Delivery, he writes, "has the greatest force, but has not yet been taken in hand" (III.1.1403b, 217-8). This happened because, according to Aristotle, "originally, the poets themselves acted their tragedies. Clearly there is something like this in rhetoric, as in poetics" (Rhetoric III.1.1403b, 218). As the actor assumes the role of rhetor when declaiming dialogue on stage, so too does the rhetor assume the role of actor when he orates. Aristotle explicitly concedes in the Rhetoric that "Whenever delivery comes to be considered it will function in the same way as acting" (III.1.1404a, 219). Since rhetorical and dramatic delivery are indistinguishable, Aristotle finally simply refers his readers in the *Rhetoric* to the relevant passages in the *Poetics* for more information (III.1.1404a, 220). Thought and diction are such fundamental aspects of both rhetoric and poetics, according to Aristotle, that mastery of either discipline requires research

and practice in the other, and makes the placement of either aspect into only one discipline or reference book impossible. For although both thought and diction "belong" "more strictly" to the field of rhetoric, his discussion of poetics is incomplete without them.

Returning to the earlier discussion of the rhetorical process of narrative world creation, we now can see that Kaufer's theory of the role of rhetoric traces its lineage back to Aristotle's codification of rhetoric as a frequently-poetic art, and that Mailloux's theory of the rhetorical performance of narrative derives from Aristotle's vision of poetics as a frequently-rhetorical art. Combining the two yields a more complete understanding of narrative as a deeply political and rhetorical enterprise, and rhetoric as an essentially narrative pursuit, allowing a truly rhetorical hermeneutic to utilize both aspects of the rhetorical-poetical narrative confab.

2.2.3. Performativity and Politicization

In the previous section, I cited a passage from Roland Barthes that argued: "it is the opposition of these two systems, one rhetorical, the other poetic, which in fact defines Aristotelian rhetoric" (20-1). By now it should be apparent that this opposition is more conceptual than practical. While Aristotle did, apparently, see fit to write separate treatises on each system, labeling each differently, he also acknowledged the similarities and overlap between the two. Later in his essay, Barthes explains that rhetoric and poetics ceased to be separate categories by the Middle Ages: "The fusion of Rhetoric and Poetics is consecrated by the vocabulary of the Middle Ages, when the poetic arts are rhetorical arts, when the great rhetoricians are poets" (21). The blending of the rhetorical arts and the poetic arts is easily comprehended by, and is predictable based on, the mutual topics and practices shared by the "two" fields as set forth in the *Rhetoric* and the

Poetics. For Barthes, this unification of rhetoric and poetics marks the end of Aristotelian rhetoric and the beginning of a new practice, literature:

The last stage of Aristotelian rhetoric: its dilution by syncretism: Rhetoric ceases to be set in opposition to Poetics but becomes a transcendent notion which we should today call "Literature"; it is no longer exclusively constituted as an object of instruction but becomes an art, in the modern sense of the word; it is henceforth both a theory of writing and a thesaurus of literary forms. (26-7)

Barthes identifies the assimilation of rhetoric by poetics, resulting in the creation of the poetical form of literature. Modern and postmodern theorists, however, have identified signs that the assimilation went both ways, that poetics was also absorbed by rhetoric, and that the two have become so hopelessly intermingled and contaminated that it is no longer possible to say where rhetoric ends and poetics begins. Theories of performativity and politicization, in particular, address the indivisible nature of contemporary rhetorics/poetics.

Theories of performativity, such as Judith Butler's well-known work with gender and identity performance, are predicated upon a notion of personal performance that is, at all times, also political. In her essay, "Imitation and Gender Insubordination," Butler explains that "gender is not a performance that a prior subject elects to do, but gender is performative in the sense that it constitutes as an effect the very subject it appears to express" (1521). This performance of gender, in which the subject is created through its own representation of "itself," reifies and strengthens the "causal or expressive sequence that the heterosexual norm produces to legitimate itself as the origin of all sex" (1525). In other words, the social *nomoi* [community-specific customs and laws] enforce what Butler labels "compulsory heterosexuality" (1519), which irresistibly *persuades* the individuals within the society to adopt and *perform* certain externalized gender roles, as if they were actors on a stage. These roles serve a double (at least) purpose – actually *constructing* the identities that they are widely thought to make simply visible and, at the

same time, reinforcing the *political* dominance of heterosexual normativity. Regardless of the sexual orientation of the individual, according to Butler, his or her gender performance, scripted by the *nomoi* as carefully as any Athenian tragedy, exerts a persuasive political message in all directions. The poetical and the rhetorical fuse indistinguishably, not as abstract and arcane discursive disciplines, but as the lived experience of every person. The feminist motto, later adopted by the gay rights and gay studies movements, that "the personal is political," is again vindicated.

Theories of performance are not the only loci of the contemporary conflation of rhetoric and poetics: the foundational ideas of postmodernism also rely on a rhetoricized poetics and a poeticized rhetoric. In her book, The Politics of Postmodernism, Linda Hutcheon explains that postmodernity means "there is no directly and naturally accessible past 'real' for us today: we can only know – and construct – the past through its traces, its representation" (113). Hutcheon is here asserting that, in order to understand the past, and in understanding the past achieve a full and meaningful understanding of the present, the postmodern individual must resort to pastiche and parody. The implications of this statement are monumental, but unsurprising given the previous discussion: in order to form a political position, the postmodern individual must resort to imitation, to poetics. Thus, in postmodernity, political agency is predicated upon poetic skill. This is not dissimilar to Butler's assertion that political effectiveness is dependent upon poetic skill in effecting the roles of externalized gender. Similarly, Hutcheon asserts that "Postmodern art cannot but be political, at least in the sense that its representations – its images and stories – are anything but neutral, however 'aestheticized' they may appear to be in their parodic selfreflexivity" (3). Locked in a vicious circle, postmodern art cannot be other than political, and postmodern politics are dependent on artistry. And yet, of course, once art and politics become

fatally entangled, each loses its ability to serve as an independent critic of the other.²⁸ In Hutcheon's terms, postmodern political criticism "is a strange kind of critique, one bound up, too, with its own complicity with power and domination, one that acknowledges that it cannot escape implication in that which it nevertheless still wants to analyze and maybe even undermine" (4).

If, in postmodernity, it is impossible to separate poetics from rhetoric in either political discourse or artistic production, then the question remains, why construct a hermeneutical *rhetoric* for works in the distributed mode? Barthes asserts that "all our literature, formed by Rhetoric and sublimated by humanism, has emerged from a politico-judicial practice," and that it is "in those areas where the most brutal conflicts – of money, of property, of class – are taken over, contained, domesticated, and sustained by state power, where state institutions regulate feigned speech and codify all recourse to the signifier: there is where our literature is born" ("Old Rhetoric" 92-3). The thought that literature has such violent and agonistic origins should dismay only those who view literature as being apart from the viciousness and venality of life, pertaining instead to the realm of the Platonic ideals and High Culture. Throughout the *Poetics*, Aristotle describes drama as *depicting* struggles, while in the *Rhetoric* the rhetor is described as publicly *engaging* in struggle.

Works composed in the distributed mode partake of the struggles of contemporary life, and persuade their enactors to engage in hermeneutical struggles of their own – struggles that mirror the personal and political struggle to make sense of the random events of everyday life. Furthermore, works in the distributed mode actively engage in the struggle to teach reading,

²⁸ This is readily demonstrated in contemporary politics by the opposition mounted by conservative religious organizations to the acceptance of funding from the Bush Administration's Faith Based and Community Initiative, documented in Parent, "The Office of Faith-Based and Community Initiatives: An Ongoing Case Study of American Belief, Symbol, and Ritual." *Journal of Ritual Studies* 17.1 (2003). 19-31.

providing a revolutionary arena in which student and instructor can meet as virtual equals to share reading strategies and to become better, more critical, and more self-aware readers. In *The Theory of the Novel*, Georg Lukács establishes a typology of literary forms that is tied to the cultural and societal formations of the times in which the forms arose. Tracing the development of "the great and timeless paradigmatic forms of world literature: epic, tragedy, philosophy," Lukács connects the material social and psychological conditions of artistic production to the artistic product (35). He concludes that "The novel is the epic of an age in which the extensive totality of life is no longer directly given, in which the immanence of meaning in life has become a problem, yet which still thinks in terms of totality" (56), and he awaits the new art form that will be responsive to the new world. The distributed mode is just as closely tied to the times and culture from which it arose. The affective, political, and active aspects of classical rhetoric, tied, as they necessarily must be, to the more aesthetic aspects of poetics, allow for the new hermeneutical understandings of literary form and of literacy that the distributed mode makes possible to come into being in their most powerful and revolutionary state.

2.2.4. Awareness through Estrangement

By framing the rhetorical project as one of constructing persuasive narrative worlds, David Kaufer is able to conclude that "the rhetor is an architect of the social world" (270). In this, Kaufer echoes Percy Shelley's famous pronouncement in his "Defense of Poetry" that "poets are the unacknowledged legislators of the world" (765). If rhetors are, indeed, able to present persuasive models of what is, what may come to be, and what should come to be, then they are, indeed, the designers of both the world now and the world to come. In the same way, the rhetorical function of narrative presents persuasive worlds waiting to be interpreted and brought

into being in the consciousness of the interpreter – actions which may profoundly affect the interpreter's worldview. The fragmented, highly rhetorical, and often highly disorienting structures of works in the distributed mode suggest the rhetorical performances of the Berliner Ensemble, where Bertolt Brecht's idea of *"Verfremdungseffekt"* offers a glimpse of what Susan Jarratt later would refer to as the *nomoi* [community-specific customs and laws] and the *kairoi* [the circumstances obtaining at the moment of an oration] that produce, and are produced by, the distributed mode.

Brecht's earliest written explanation of what he means by "Verfremdungseffekt" appears in his essay, "Alienation Effects in Chinese Acting." Brecht writes that the goal of the alienation effect in epic theater is to prevent the spectator "from feeling his way into the characters. Acceptance or rejection of the characters' words is thus placed in the conscious realm, not, as hitherto, in the spectator's subconscious" (15). Brecht later explains that "Any empathy on the spectator's part is thereby prevented from becoming total, that is, from becoming a complete self-surrender. An admirable distance from the events portrayed is achieved." The purpose of the alienation effect is, ultimately, to cultivate "an observing, watching attitude" in the spectator ("Chinese Acting" 17). Ideally, the spectator at one of Brecht's plays is unable to immerse herself in the action on stage, and instead is all but forced to consciously analyze the drama, experiencing the production critically and from "an admirable distance" instead of losing herself in the events and identifying with the characters.

The enactors of works in the distributed mode, too, find themselves held at arm's length from the narrative events. The immersive state of reading codex fiction or watching films is perpetually forestalled by the fragmented structure of distributed works. No sooner has a reader become intrigued by the narrative presented in a lexia, then she must stop thinking immersively about the narrative, and must instead think critically about her progress through it. She must assess her own state of knowledge about the events in the lexia and in the work as a whole (to the extent she has explored the narrative world), she must determine her own needs for further information, and she must evaluate the navigational options available to her.

For Brecht, estrangement should result, in part, in the dismantling and reconstruction of identity, producing a new, socially-aware modern subjectivity. Brecht writes against the universalizing tendency of drama, explaining that drama generally depends on empathy generated by the audience for the characters on stage, resulting in everyman and everywoman portrayals with whom every audience member can identify. This is, in Brecht's view, completely ahistorical, as it denies the historical differences between the time and social milieu being presented on stage and the time and social milieu of the audience. The aim of the alienation effect, Brecht writes, is "the *historification* of the events presented" ("Chinese Acting" 20), thus reversing the loss of history furthered by traditional drama. Because audience members were forced to think their way through Brecht's epic theater, they never could forget the essential differences between the time of the play and their own time. The competing historical and social milieus could not, Brecht hoped, be conflated. By foregrounding the differences between the setting in the audience, Brecht hoped to foster critical awareness of both the past and the present that would be necessary for social change and improvement.

Since the time of Brecht's experiments with epic theater, the cultural shifts lumped under the heading of postmodernity have suggested to many theorists that Brecht's main problematic – societal change, brought about through the gift of historical awareness – is itself problematic. The difficulty of establishing a connection with the past is a central preoccupation with theorists of postmodernity. Fredric Jameson, for instance, begins his extended exploration of

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postmodernity by stating: "It is safest to grasp the concept of the postmodern as an attempt to think the present historically in an age that has forgotten how to think historically in the first place" (*Postmodernism* ix). Jameson concludes that, as postmoderns, "we are condemned to seek History by way of our own pop images and simulacra of that history, which itself remains forever out of reach" (*Postmodernism* 25). Brecht's concept of using historical consciousness to effect societal change becomes impossible when historical consciousness itself is argued to be an impossibility.

Jameson's conclusion, that the only way left for our attempts at regaining a sense of history is through our own self-made pastiche of pop culture and pseudo-history, affirms Linda Hutcheon's belief that pastiche is the defining artistic form of postmodernity. In the distributed mode, pastiche is both a formal and a substantive element. The hyperlinked, fragmented structure of many of the works in the distributed mode lends itself to the inclusion of multiple media, and to the construction of lexias in different media. This is especially visible in digital works, given the computer's facility with hyperlinking and multimodality. Shelley Jackson's distributed narrative, Patchwork Girl, a retelling of Frankenstein from a female monster's viewpoint, links lexias comprised solely of prose to graphical lexias that contain no prose at all. In 3D Music, the narrative world is a virtual space of rooms connected by tubes.²⁹ The "reader" of the work is able to move through the spaces at will, manipulating objects such as spheres and blocks in the spaces. As the reader moves through the spaces and manipulates the objects, her actions cause the computer to play different sections of a contemporary symphony. In Patchwork Girl, 3D Music, and Reagan Library, multiple media are combined in a pastiche that contributes to the overall structure of the work, as well as to the narrative itself. Even in digital

²⁹ *3D Music* is a WWW distributed musical narrative by Terry and Gabriella Braun and London Sinfonietta, which can be accessed at the following address: http://www.braunarts.com/3dmusic/.

works that feature only prose, such as Stuart Moulthrop's *Victory Garden*, textual pastiche is a major element. Passages from actual news broadcasts, quotes from books of critical theory, and references to real celebrities are not extra-narrative ornaments, but important narrative elements.

2.2.5. Critical Awareness

Brecht's audiences, as well as the enactors of the distributed mode, are prevented from *losing* themselves in the action of the drama or narrative. Moreover, while Brecht's audiences were intended to find *historical consciousness*, distributed narratives intend their readers to find their own particular *reading strategies and styles*. As Frank Kermode points out in his book, *The Sense of an Ending*, "it is ourselves we are encountering whenever we invent fictions" (38-9). In this case, the reader's hyper-awareness of what she has read, what she is reading, and what she wants to read next to best answer her questions about the narrative, makes visible the usually transparent reading strategies she employs every time she reads.

Kermode also argues that "It is not expected of critics as it is of poets that they should help us to make sense of our lives; they are bound only to attempt the lesser feat of making sense of the ways we try to make sense of our lives" (3). The self-awareness arising from enacting works in the distributed mode turns the reader into a critic. Distributed narratives inspire a fascinating series of nested awarenesses, both of the self and of the text. To begin to engage in the process of narrative (re)construction, the reader must gain a *critical* awareness of the text, which is a requirement that all but the most challenging codex fictions and films refrain from imposing on their non-academic readers. To be able to navigate the work, the reader must gain a critical awareness of her own reading process. Differentiating what she knows, what she suspects, and what she knows to be wrong, forces the reader to connect her critical awareness of the work with her critical awareness of her own actions and cognition while reading. Furthermore, to refine her narrative (re)construction and her navigational skill, the reader must gain a critical awareness of the outcomes of her own actions and cognition. In other words, the reader forms expectations and assumptions that allow her to navigate the text and to construct her provisional narrative, and these assumptions and expectations will sometimes be correct, and at other times incorrect. To improve her chances of finding the information she wants, and to gain confidence in her provisional narrative, she must evaluate her own evaluation of the text to determine whether there are patterns underlying her successes and failures. These patterns, then, must be incorporated into a meta-strategy for reading the text. The hermeneutical circle moves from the text to the reader and back again, each time demanding a new level of critical awareness of the object being read, and the subject doing the reading.

2.2.6. The Distributed Mode and the Politics of Affect

Postmodern theory assumes that the past is forever out of reach, that the present is a constantlyshifting procession of cultural artifacts appropriated from the cultural consciousness, subconscious, and dimly-recalled memory, and that the future is knowable only in the sense that it will be much like the present, only *more so*. In this setting, the cultural conditions (to say nothing of the technological conditions) necessary for the establishment of the distributed mode as a viable form of artistic (and hence, political) expression are clearly manifest. Lukács, in *The Theory of the Novel*, longs for a new world in which the individual can coexist with society, and in which society is able to *incorporate* the individual into a community without *assimilating* her into an individuality-crushing collective (144-5 *et passim*). The tension between the whole and the parts, here rendered on the level of the individual, is also cited by Jameson. In writing about the Westin Bonaventure Hotel in Los Angeles, Jameson notes that the confusing postmodern architecture of the hotel "has finally succeeded in transcending the capacities of the human body to locate itself, to organize its immediate surroundings perceptually, and cognitively to map its position in a mappable external world" (44). The connection between mapping the body in space and the reader's mapping of her progress through the non-space of the distributed narrative should be clear, but Jameson puts an even finer point on his observation about postmodern embodiment and proprioception:

> It may now be suggested that this alarming disjunction point between the body and its built environment [...] can itself stand as the symbol and analogon of that even sharper dilemma which is the incapacity of our minds, at least at present, to map the great global multinational and decentered communications network in which we find ourselves caught as individual subjects. (44)

While the shopper searching in vain for a particular boutique at the Bonaventure may become unintentionally lost (the Bonaventure was designed to make shopping easier, but, Jameson reports, exactly the opposite has occurred), the distributed mode intentionally sets out to create this sense of lostness, this affective attack on the reader's sense of a secure and ordered narrative world that book critic Laura Miller found so disturbingly lacking in distributed narratives in the last chapter.

The reader is not helpless, though, even when firmly in the clutches of the most affectively powerful and discomfiting work in the distributed mode, as her narrative impulse works to counteract the cognitive dissonance created by the fragmented narrative. And it is in this conflict, this *agon* between reader and text, that the distributed mode's politics of affect is most clearly visible. If the postmodern world is itself fragmented and "unmappable," then it seems unarguable that the distributed mode is structurally a deeply realist, deeply mimetic art form, as the non-spatial but spatialized lexias replicate the hyperspatial arrangements of postmodern life. In interacting with works in the distributed mode, the reader enacts not merely a model of reading, she also enacts a model of the world and of her conscious interaction with it. Given the *kairoi* and *nomoi* of postmodernity, distributed narrative can be seen as engaging in the political struggle to redefine human interaction with texts, and to inculcate in the minds of its readers an explicit and visible critical awareness of their own reading strategies, and of the strategies that readers deploy to attempt to make sense of complicated and ambiguous texts. As the texts and the world-situation of postmodernity share certain similarities, these hermeneutical strategies also can be employed in navigating the hyperspaces of postmodern life, which makes the political scope of the project of the distributed mode not merely textuality and textual study, but the realm of human life and interaction itself.

2.3. CONFIRMATION: THE WORK OF CONSTRUCTING THE WORLD OF THE WORK

The moment when one first begins to read, enact, or view a work is filled with tension. The work, as yet, has no understandable form or structure, the characters are largely unknown and motivated by as-yet mysterious drives and fears, and the resolution is still very far away. As the interpreter progresses through the work, however, structure begins to fall into place, characters reveal themselves, and the teleology of the work, its sought-after resolution, coalesces and steadily approaches. The processes by which all of this is accomplished are far from simple.

I label these hermeneutical processes described here *conformation*, referring to the work of the enactor to construct a mental representation of the narrative, *i.e.*, the world of the work. The world of the work is the product of the enactor, and yet constrained by the work itself. As the name suggests, then, the work of conformation is the effort to bring the enactor's constructed

world of the work into conformity with the revealed content of the work itself. Conformation, as will be explained, is an inherently *ludic* process whereby the *enactor* performs *enactment* and *interpretation* on the *work* to produce the *world of the work*. Enactment and interpretation are both complex processes, whose individual components will be discussed in detail (enactment includes *encounter*, *navigation*, and *configuration*; interpretation includes *macro-analyzation*, *micro-analyzation*, and *resonance*).

2.3.1. Nomad Games

In their book, *A Thousand Plateaus*, Giles Deleuze and Félix Guattari propose a typology of spaces both real and metaphysical, labeling space either *striated* or *smooth*. Cities are examples of striated space, areas in which the territory is marked out, organized, divided into parcels, and each parcel given an identifier and a purpose (482). Smooth space, on the contrary, is more like a desert, an area in which points and specific locations are less important than the totality of the territory (*ibid*.). As Deleuze and Guattari write, "In striated space, lines or trajectories tend to be subordinated to points: one goes from one point to another. In the smooth, it is the opposite: the points are subordinated to the trajectory" (478). In striated spaces, one goes from point A to point B to reach point B; in smooth spaces, one traverses points A and B to achieve motion. The inhabitants of smooth spaces are nomads, in Deleuze and Guattari's terminology, occupants of the entire territory who are constantly moving and thus able to perceive the constant evolution and transformation of themselves and the land around them, instead of fixing themselves and their space into stable states.

Though the example of the desert as a smooth space would seem to imply that smooth spaces are fundamentally homogeneous, Deleuze and Guattari argue that this is not the case. As they write, "Homogeneous space is in no way a smooth space; on the contrary, it is the form of striated space" (Deleuze and Guattari 370). Though sameness would help to dissipate the locational and ideological power of points within the space – as in the striated space of a city, with its differentiated downtown, arts districts, shopping centers, and suburbs – smooth spaces are filled with emergences rupturing any semblance of uniformity. The lack of imposed regimentation allows new ideas to cross conceptual and ideational boundaries, resulting in what Deleuze and Guattari call "nomad science," a constant birthing of new, unexplained, possibly unexplainable thoughts (363 *et passim*). Nomad thought is, they explain, unexplained and unexplainable because it is the product of the distributed "rhizome" nature of smooth space, since "any point of a rhizome can be connected to anything other, and must be" (7), thus allowing combinations of spaces and ideas impossible in striated space.

Smooth space and nomad science, however, can neither exist without nor independently of striated space. As Deleuze and Guattari write, "the two spaces [smooth and striated] in fact exist only in mixture: smooth space is constantly being translated, transversed into a striated space; striated space is constantly being reversed, returned to a smooth space" (474). As smooth space is constantly being "translated" into striated space, and striated space becomes smooth, the two merge and blur, creating hybrid spaces out of the flux. Deleuze and Guattari explain that:

As a general rule, a smooth space, a vectorial field, a nonmetric multiplicity are [sic] always translatable, and necessarily translated, into a 'compars': a fundamental operation by which one repeatedly overlays upon each point of smooth space a tangent Euclidean space endowed with a sufficient number of dimensions, by which one reintroduces parallelism between two vectors, treating multiplicity as though it were immersed in this homogeneous and striated space of reproduction, instead of continuing to follow it in an 'exploration by legwork.' This is the triumph of the *logos* or the law over the *nomos*. But the complexity of the operation testifies to the existence of resistances it must overcome. (373)

Several important points need to be extracted from this passage: first, that smooth space is translated into striated through the superimposition of an ordered, "Euclidean" grid. It would follow, then, that smooth space is reclaimed from striated by the destabilization of the structural grid supporting it. Second, striated space is the symbolic realm of the logos, the power of language and the letter (McComiskey 81), whereas the smooth is the realm of the nomos, translated from the Greek variously as "democratically derived custom-law" (Schiappa 10), "community-specific customs and laws" (Jarratt 11), "A self-conscious arrangement of discourse to create a politically and socially significant knowledge" (Jarratt 60), and "laws and policies," though specifically the laws and policies of the rhetor's immediate environs (McComiskey 81). Harkening back to the terms of classical rhetoric, Deleuze and Guattari present the logos as imposing its will through language as law, whereas the *nomos* is individual and particular, determined by the unique confluence of time and space, and thus must be perceived and detected constantly.³⁰ Finally, the "complexity" of the transformations from smooth to striated and vice versa illustrates that such translation is not without resistance, that inertia and the inherent difficulty of the process impede such changes. This last point is especially relevant to the study of interpretation.

As mentioned earlier, the initial access to a narrative is frequently characterized by tension and uncertainty. The interpreter is confronted with an initially confounding set of characters and situations, while lacking knowledge of the relationships between them necessary

³⁰ In classical rhetoric, of course, the expert rhetor (who was almost always male) was expected to adapt his *logos* to the particulars of the *nomos* in which he found himself speaking. By careful observation of the *nomos* and of his audience, the rhetor would be better able to persuade his audience, and thus to impose his will.

to interpret or understand the work. In this, the interpreter is presented with what appears to be an expanse of smooth space, a heterogeneous mixture of eruptions and irruptions, which will have to be tamed, translated into the orderly structure of striated space for the interpreter to achieve resolution and closure. She initially feels like a nomad, wandering the uncharted and untamed wilds of the undiscovered narrative, lacking even the most basic of guides to the narrative space in which she finds herself. As Deleuze and Guattari note, "It is true that nomads have no history; they have only a geography" (393). As they later note, "All history does is to translate a coexistence of becomings into a succession" (430). This is precisely what interpretation, in one of its aspects, attempts: to translate a series of narrative becomings into a coherent and causally-connected succession, which the interpreter may then understand. At that point, the translation is complete, and what seemed the vastness of smooth space has been reclaimed as regimented and interpreted striated space.

But there is more to it than a simple one-to-one process of smooth-space reclamation. The narrative work is *always* heavily striated. Regardless of the intent or the experimental nature of the work, the composer's efforts always effect striation. Indeed, it is one of the most important and difficult tasks of reading, viewing, and enacting to discover, interpret, and understand the "plan(e)" of striation, the organizing principle of the work (Deleuze and Guattari 265 *et passim*).³¹ Deleuze and Guattari describe plane(e)s as being "structural or genetic, and both at once, structure and genesis, the structural plan(e) of formed organizations with their developments, the genetic plan(e) of evolutionary developments with their organizations" (265). Put simply, the plan(e) is both the underlying structure of a work, in which the entire world of the work is arranged and packaged, as well as the structure of the work which allows for the

³¹ In his note on the translation of *A Thousand Plateaus*, Brian Massumi comments that in French, "the word *plan* denotes both a 'plane' in the geometrical sense and a 'plan.' [....] Where both meanings seem to be present (as in the discussions of the *plan d'organisaton*) 'plan(e)' has been used in the translation" (xvii).

generation of the world of the work in the consciousness of the interpreter. As such, the plan(e) of the work is of the utmost importance to interpretation, and yet, as Deleuze and Guattari write, the plan(e) "is always inferred. [...] This opens the way for all possible interpretations". They conclude: "Life plan(e), music plan(e), writing plan(e), it's all the same: a plan(e) that cannot be given as such, that can only be inferred from the forms inferred from the forms it develops and the subjects it forms, since it is *for* these forms and these subjects" (*ibid.*, emphasis in original). The plan(e) of a work is most visible in its absent spaces, in the connective tissue holding the various elements of the work together and allowing these various elements to form a unified whole capable of giving rise to a world. As Barthes realizes in *Roland Barthes*, the interstitial rationale of the composition of a work – especially visible when considering a fragmented work composed in the distributed mode, but no less true for traditionally composed narratives – is always fundamentally tacit, and therefore only comprehensible through the action of interpretation.

In traditional narratives, convention suggests to interpreters that their patience will be rewarded with the revelation of a sufficient amount of narrative material to deduce the work's plan(e) and allow the work's world to resolve in narrative closure. In the distributed mode, however, that suggestion is muted, as an aleatoric and enactor-driven navigation through the work seems to make such resolution impossible. In the last chapter, I quoted *Salon* and *New York Times* book critic Laura Miller's dissatisfaction with the "feel" and navigational conventions of hyperfictional examples of the distributed mode. Her unhappiness, however, did not end there, but also encompassed this lack of narrative closure and structure. As she comments, "Hypertext is sometimes said to mimic real life, with its myriad opportunities and surprising outcomes, but I already have a life, thank you very much, and it is hard enough putting

that in order without the chore of organizing someone else's novel" (43). Her colleague, senior book critic for the *New York Times*, Michiko Kakutani, expounds on the dissatisfaction caused by the distributed mode's attack on traditional narrative plan(e)s:

In the end, one of the oddest arguments advanced by hypertext proponents is that hypertext is lifelike, that it captures the randomness, arbitrariness and repetitiousness of life. Do we really need a more lifelike art? Once upon a time, in the pre-hypertext past, art aspired not to imitate life but to shape it, intensify it, imprint it with a single person's vision. It represented an individual's attempt to find order in chaos, a pattern in the carpet. Hypertext smashes that old conception of art: the artist is dead, it suggests, and the rug is patternless – the reader alone is left to make sense of a senseless world. (42)

Both critics have a valid point: the process of discovering the plan(e) of the work in the distributed mode is a startlingly different experience than that of traditional narrative, but it is neither futile (as Kakutani suggests) nor gratuitous (as Miller suggests). Rather, the process is inherently ludic.

In the previous chapter, the ludic nature of works in the distributed mode was a frequent concern. In that chapter, the question of whether the works were playing games *on* their enactors, or *with* them, pointed out the hermeneutical problem posed by the ludic, namely, what is the relationship between play and enactment? Further, we may well ask whether the same relationship holds between play and reading and viewing. In Marc Saporta's *Composition No. 1*, for instance, the boundaries between enacting, reading, and play are, even on the surface, extremely porous. The work's introduction, mentioned previously, famously begins with the invocation of a game of cards: "The reader is requested to shuffle these pages like a deck of cards; to cut, if he likes with his left hand, as at a fortuneteller's. The order the pages then assume will orient X's fate." While not everyone would classify the fortuneteller's art as a game *per se*, the mythic proclivity of Fate to play with human destiny is here transferred to the enactor,

whose shuffling, like the spinning of Fate's wheel, will "orient X's fate." The very act of shuffling Saporta's pages, configuring the work so that it may be read, a pre-navigational enactment of the work's material structure, is indistinguishable from the set-up to an ordinary game of cards.

Koyaanisqatsi approaches play differently, experimenting with the play of images, a visual analog to wordplay. As I mentioned earlier, in the film's first scene, the camera pans slowly across a series of primitive paintings depicting early humans. From this ancient milieu, Reggio makes the transitions to early man's greatest achievement, fire. Slowly, the billowing, raging fire is revealed to be the product of a rocket being launched. The surprising transition between ancient and space-age technology via the image of fire is clever and effective, and sets the tone for later juxtapositions. The scenes immediately following the rocket launch, in fact, depict a barren, alien-looking red landscape – a credible vision of Mars, or some other distant planet. The audience is thus presented with the opportunity to engage in play alongside Reggio – the images are not of Mars, but of the terrestrial desert Southwest of the United States, but by imagining that the rocket has taken the audience to a distant planet, the audience is able to participate in a highly ludic metaphor. By agreeing with Reggio's assertion that the desert mesas, plateaus, and canyons *are* extraterrestrial, the full power of metaphor is unleashed.

In his book *Motives for Metaphor: Literacy, Curriculum Reform, and the Teaching of English*, James Seitz argues that metaphor is best understood as operating not at level of comparison, but at the level of equivalence (7). In this example from *Koyaanisqatsi*, the Mars/Arizona equivalence works on at least two levels: the level of causation, and the level of play. As mentioned earlier in this chapter, the Kuleshov effect suggests that juxtaposing an image of a mode of transportation with a new location will result in audiences constructing a causal connection between the two – the rocket in the second scene took us (or at least a camera) to Mars in the third scene. Seitz argues that "metaphor ignores the ordinary rules governing the ascription of names; rather than keeping names and things in their proper places, it brings them together in unusual discursive combinations" (36). As Kuleshov noted, causality in these scenes results from the metaphoric properties of montage. In effect, Reggio's montage makes the implicit claim that the landscape is the destination of the rocket, metaphorically conflating the actual content of the landscape with the unexpected content of outer space. The tension between these two meanings may strain the bounds of an audience's credibility, but, as Seitz writes, "Simply put, metaphor *must* strain if it is to produce new relationships and not merely describe those that are already taken for granted" (37). The new relationship between the locations gives rise to the second level of metaphor active in these scenes, the ludic level. At the level of game, the audience members who choose to play along are rewarded with the opportunity to fully revel in the equivalence of the two locations – an equivalence made far more powerful than its analogs in prose by the majesty and mastery of Reggio's images and the alien cadences of Philip Glass' score. Just as sharp wordplay can be a delight to sparring interlocutors and audiences alike, the interpretive and cognitive conflict between accepting the Martian interpretation and recognizing the terrestrial nature of the images adds the frisson of complicity in a game whose purpose the audience does not know.

Hans-Georg Gadamer writes that the work of art inherently and always operates as play, reflecting its origin in what he calls "the exuberance and superabundance of life" ("Play" 130). Gadamer cites Johan Huizinga's seminal *Homo Ludens: A Study of the Play Element in Culture*, which argues that play is "a *significant* function – that is to say, there is some sense to it." In fact, Huizinga argues, "In play there is something 'at play' which transcends the immediate

needs of life and imparts meaning to the action. All play means something" (1, emphasis in original). Huizinga's ideas of something being "at play" in play that "transcends" ordinary life is an appealing concept for Gadamer, who holds that "the play of art is a mirror that through the centuries constantly arises anew, and in which we catch sight of ourselves in a way that is often unexpected or unfamiliar: what we are, what we might be, and what we are about" ("Play" 130). In other words, the significant function of play allows those participating in play, in the play of the work of art, to gain knowledge of the world and of the self in ways that surpass ordinary experience.

For Huizinga, this transcendence was an integral part of play, quite apart from art. As Huizinga writes, play involves "a *stepping out* of common reality into a higher order" (13 emphasis in original). Huizinga is very specific, however, that this higher order is not a hallucinatory replacement of the real world, but rather the creation of a new space entirely. Huizinga uses the example of a child's play to illustrate the "higher order" realized through play:

The child is quite literally 'beside himself' with delight, transported beyond himself to such an extent that he almost believes he actually is such and such a thing, without, however, wholly losing consciousness of 'ordinary reality.' His representation is not so much a sham-reality as a realization in appearance: 'imagination' in the original sense of the word. (14)

Huizinga also explicitly ties literariness and narrativity to play, a connection that will be central to Gadamer's understanding of art and interpretation. As Huizinga writes, "Poesis, in fact, is a play-function" (119). Gadamer is wholly supportive of Huizinga's metaphor – for both men, engaging with and interpreting the work of art is not *like* play, it *is* play.

Gadamer adapts the notion of a higher order separate from ordinary reality, arguing that by engaging in play or in interpretation, the player and interpreter is subsumed in the process. Gadamer explains that in play, neither player is as important as the game itself being played. The game, however, is not merely being played, but is itself playing the players. Gadamer notes that "all playing is being played. The attraction of a game, the fascination it exerts, consists precisely in the fact that the game masters the players" (TM 106). At this point, Gadamer espouses a quasi-ascetic and zen-like dymanic – for only players or interpreters so played by their games and their works of art, who surrender themselves to being played, are capable of experiencing the transcendency of art or games. In Gadamer's estimation, "absorption into the game is an ecstatic self-forgetting that is experienced not as a *loss* of self-possession, but as the free buoyancy of an elevation above oneself" ("Problem" 55).

Gadamer's "ecstatic self-forgetting" is an inspiring, and potentially quite intimidating, metaphor for interpreting the work of art, but its extremism renders it a questionable model for more quotidian engagements with literary and narrative art. For that, I advance a definition and theory of games and play developed more than thirty years after Huizinga's *Homo Ludens*. In his book, *The Grasshopper: Games, Life and Utopia*, philosopher Bernard Suits simplifies and distills previous work on games and play, arriving at the following definition:

[T]o play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by rules, where the rules prohibit more efficient in favor of less efficient means, and where such rules are accepted just because they make possible such activity. (34)

Suits' definition of play has four components, each of which is relatable to narrative interpretation. The first element is what Suits refers to as a "prelusory goal," that is, the "specific state of affairs" that the players attempt to effect. For most players, this goal is to win the game, whatever that means within the constraints of the game. For some players, though, the goal may simply be to lose by only a certain number of points. In any case, the prelusory goal is a goal that exists prior to the initiation of the game, and that motivates the players' actions during the

game. The second element is the "lusory means," the way in which game play is performed, and includes equipment, the game's initial situation, and the features that make up game play. The third element is termed the "constitutive rules," because they constitute the game *qua* game – an activity made artificially more difficult than absolutely necessary. The constitutive rules are the specific features of ludic rules that establish the *obstacles* with which the game players must contend. In other words, while many activities may have rules governing their performance, it is the gratuitously "inefficient" character of the "constitutive rules" that helps to transform a rule-governed activity into a game. The final element is what Suits terms the "lusory attitude," the mindset that allows the player to cheerfully submit to competition against an opponent or opponents through an intentionally inefficient method.

Gadamer posits a clear parallel between interpretation and the ludology of Huizinga's *Homo Ludens*. Carrying the pattern forward in time, the homology between interpretation and Suits' theories of play is even stronger. When engaging with a narrative work, as Suits would suggest, the interpreter must *intend* to engage with that work, and must have, therefore, a "pre-enactive goal" of interpreting that work. Even the most hypnotic and seductive media, such as ambient music or television, are not absolutely irresistible. The conventions of reading, of viewing, of navigating, and of listening constitute the "enactive means" for engaging with narrative works. Narrative conventions and tropes themselves form an effective set of "constitutive rules," as the entire range of narrative stylistics and interpretive strategies developed to make sense of them attest to the basic incomprehensibility of others. In *A Thousand Plateaus*, Deleuze and Guattari make the following provocative assertion:

Speech communities and languages, independently of writing, do not define closed groups of people who understand one another but primarily determine relations between groups who do not understand one another: if there is language, it is fundamentally between those who do not speak the same tongue. Language is made for that, for translation, not for communication. (430)

Their conclusion is inescapable – language is necessary because communication is so very difficult, if not, ultimately, impossible. Recalling Suits' category of the "constitutive rules" of play – the elements that impose unnecessary obstacles in the path of the players, and thus transform the activity into play - recasts the role and value of difficult language. The more artistic, the more complex, the more convoluted a narrative becomes, the more explicitly the narrative itself espouses the properties of play. This is precisely what we see when we consider the difficult narratives of the nouveaux romans, and the labyrinthine prose of theorists such as Deleuze and Jacques Derrida. Finally, the "enactive attitude" is that which explains why the enactor is willing to pick up a book or watch a film or navigate through a hypernarrative. As Suits argues, "The attitude of the game player must be an element in game playing because there has to be an explanation of that curious state of affairs wherein one adopts rules which require one to employ worse rather than better means for reaching an end" (38). The "enactive attitude" - which is also, of course, precisely a "ludic attitude" - also explains the peculiar mindset that allows a reader to perform the real cognitive work of constructing the narrative within her own consciousness. In Huizinga's model, play is a "realization in appearance." This phrase also goes a long way toward describing the cognitive results of reading and of engaging with narrative material in any media – the interpreter envisions the narrative, constructing what I will term the world of the work, while still remaining more-or-less cognizant of the ordinary reality around her.

Earlier in this section I argued that the initial contact with a narrative gave rise to the sense that the interpreter was exploring a narrative smooth space, undifferentiated by structure and an imposed regimentation. In the early stages of interpretation, the interpreter is left to

engage in nomad thought, attempting to draw inferences and connections without sufficient information or understanding of the work, guided more by intuition than by experience. A masterful narrative will heighten this sense of nomadicity to avoid obviousness or boredom on the part of the interpreter. Thus, though the interpreter strives throughout the work to decipher the disguised plan(e) of the work, and thus to reveal the work's true affinity with striated space, the difficulty of this task, coupled with the inherent improbability of speaking the same "tongue" as the work's composer, leaves the interpreter in a game space, with all the danger, excitement, and uncertainty possible for those playing nomad games.

2.3.2. The World of the Work

It is no accident that Johann Huizinga and Hans-Georg Gadamer equate narrative engagement with play and, specifically, with children's play. For, when we approach a narrative work we commit ourselves to the imaginative construction of an unreal space populated with unreal persons and objects, quite similar in effect to children's games of "make-believe." This imaginative construction is the world of the work, a label popularized by Paul Ricoeur in his hermeneutical writings. As Ricoeur notes, the world of the work is "the centre of gravity of the hermeneutical question" ("Function" 132). The world of the work is, as we shall see, the center of gravity of interpretation because it is the summation and ultimate goal of interpretation. This is consistent with Mailloux's assertion that the narrative work is always a rhetorical performance (60 *et passim*), and Kaufer's claim that rhetoric is "the application of language to bring about a world" (269). The interpreter enacts this rhetorical presentation of a narrative work through the processes of conformation, constructing her own mental version of the work.

Let us begin our exploration of the phenomenon of the world of the work with an

example from Marc Saporta's Composition No. 1. After the enactor has shuffled the deck of

pages (or not) according to Saporta's instructions, she may see this page:

For the summer vacation, Maman has decided to hire a girl to live in and take care of the two younger children. Preferably a German girl, so that the children can learn the language better. Besides, German students have the reputation of not minding work and being willing to accept their share of household tasks.

The country house is enormous and difficult to keep up. The governess can have one of the third-floor rooms that is usually kept locked.

Maman makes clear that no emotional involvement will be tolerated, which is quite natural. But the presence of the young girl in the house suggests, even so, that the summer will be an unusual one.

Maman is surprised by the lack of enthusiasm that greets her plan. In her opinion, the German girl could even be an agreeable playmate in her spare time.

Considering how subtle Maman is, it would be best not to oppose the plan too openly. She would guess at once that girls do not necessarily constitute an object of contempt, as boys of sixteen or seventeen prefer people – at least their parents – to think.

However good she may be at smelling out lies, Maman seems to have been taken in by this one.

This could be the first page the enactor reads or the last – the process of shuffling has forcibly separated the concepts of "sequence" and "chronology" – and yet the prose text of the work on this page offers quite enough clues to allow the enactor to assign a rough place in the chronology of the narrative. The interpretation of this page will be discussed in later sections of this chapter, but for our purposes let us assume that the page has already been interpreted by the conscientious enactor – a process that cannot exist prior to the conformation of the world of the work, nor prior to the enactment of the work, but only in reciprocal cooperation with these processes.

The enactor, in reading the passage above, visualizes the situation narrated -a surprising, but by no means rare, performance due to the lack of visual cues presented in the passage. The enactor conforms, from this page, a situation more so than a location, although the location is important. From this page, the enactor constructs an "enormous" country house that is "difficult to keep up," with an unused and shuttered third floor. The enactor peoples this house with a matriarch whose faculty for "smelling out lies" is highly developed but not infallible, her son, a boy "of sixteen or seventeen," whose interest in girls has developed, but is not yet widely known, and a pair of younger siblings who shall be placed under the care of a to-be-hired German governess. The emotional atmosphere of the manor, enforced by "Maman," is one of near-Victorian propriety, with all of the subterfuge and secret desires and passions that such repression invariably produces. Though Saporta does not describe the appearance of any of these people - at least, not on this page - the enactor has no problem constructing what she considers to be appropriate representations of Maman, the narrator (whom she may suppose to be the work's mysterious protagonist, "Mr. X," as a boy), the younger children, the German governess, and the country house. She hears, though Saporta does not include direct quotation on this page, Maman's commentary on the virtues of a German governess, as well as on her lodgings and on the potential for her son's socialization – though highly regulated and constrained – with the governess. The visual and auditory hallucination that arises from the enactor's conformation of this page is a piece of *Composition No. 1*'s world, as are the (nomad) thoughts of the enactor, the connections she senses between this page and any other pages she may have encountered, and between this work and her own life and experiences.

As the pages have been shuffled, the sequence of the narration is unpredictable, and the enactor may turn from the page quoted above to this one:

Marianne agrees to let a girl board with them, to take care of the children during the summer vacation. But only on certain conditions. Since Marianne's nerves cannot endure the presence of a stranger in her home, the girl cannot use the kitchen or the living room. In fact, she must stay in her own room, the guest room on the second floor of the villa, and one other room, the children's room, where she is to watch them while they play. And she will be entitled to go there only at certain hours. Thus all the other parts of the villa can be kept locked. This is what Marianne calls protecting her privacy. The idea that an outsider can walk into her home is a torment to her. This way, the girl's comings and goings will be reduced to a minimum. Besides, the girl will generally take the children out during her few hours of service. That way, Marianne will see her as little as possible.

It would be absurd to think that Marianne is ashamed to show anyone the neglected state that the house is in. In fact, she takes a certain pleasure in living in a chaotic and expensive bohemian atmosphere.

But she is convinced that her equilibrium would be imperiled if anyone tried to alter the established disorder, even with the innocent intention of putting something away.

The last housemaid was fired for trying to clean up the bathroom, Marianne's inviolable kingdom and the sanctuary of her "privacy."

This page, like the previous one, contains very little visual description. The "neglected state" of the house, for instance, is left entirely to the imagination of the enactor to supply. Marianne – Mr. X's wife, the enactor may suppose, in a daring act of interpretation – is ageless and featureless. She may be a great beauty, or she may be plain or even disfigured. Her obvious nervous condition may be immediately visible, or may be carefully hidden from view. The enactor, however, visualizes Marianne, adding her to the world of the work. Additionally, the narrator's tone colors the enactor's perception of Marianne, as the enactor may presume that this page, like the previous one, is narrated by Mr. X, now grown to adulthood. The narrator appears to view Marianne with a barely-contained sense of disdain, a derision that may influence the

enactor to imbue Marianne with the air of one used to suffering, or that may result in the enactor imagining Marianne to be a ridiculous figure, deserving of the plight described by the narrator.

The addition of this second page expands the world of the work in notable ways. First, until possibly proven incorrect by later pages, the enactor's conformation may now stretch across time from the narrator's childhood to his married life in adulthood. The chronological span of the world of the work is an important element in conformation, especially when engaging with a work composed in the distributed mode. In this case, the enactor may have, at this point, two temporal positions established, two poles between and around which the remaining content of the work can be configured. Second, the parallelism of these two passages cannot be, the enactor may conclude, coincidental. Rather, the world of Composition No. 1 begins to appear as one of seconds, doubles, and repetitions. In such a world, déjà vu is not the exception but the rule, and events from a given time period invariably resonate through their doppelgangers. Having encountered the page with Maman's decision to hire a governess first, the enactor's conformation of the second page is haunted by the question of a relationship between the narrator and the governess. Did a young Master X pursue his prurient interest in the German girl, and will this interest become a *pattern*, a predictor of his relationship with other women, including the governess to be hired by Marianne? As we see, the order in which the pages of the work are encountered affects the conformation of the work, as conformation is always affected by the subjective state of the enactor. Just imagine if these two pages had been encountered in the reverse order.

When considering a film – Koyaanisqatsi, for instance – the world of the work is a less obvious construction. Toward the motion picture's end, Reggio films business people entering a large elevator, more and more people pressing forward to squeeze into the car before the doors

close. As the doors begin to close, one last man tries to fit himself into the packed car, but fails – there is no more room. As the mirrored doors shut, the film's audience has no doubt that the people in the car will be traveling either up or down many, many floors - the size and sophistication of the car suggest a large building - although Reggio provides no clear establishing shot of the building. Furthermore, the scene easily could have been shot on a sound stage, fabricated from scratch. The filmic space of the scene, however, extends above and below the space shown on screen to include the rest of the office building, and even the city in which the building is located. The world of a filmic work encompasses more than is merely shown on screen – it includes all of the spaces implied, necessitated, or made possible by the film itself. As with Composition No. 1, the audience of Koyaanisqatsi is left to complete the world of the work. Some audience members will interpret the elevator scene as workers in a hurry to leave work at the end of the day. Those members may complete the world of the work by supplying dozens and dozens of floors beneath the floor shown, through which the elevator's occupants will descend on their way to the ground and, eventually, their homes. Other audience members will interpret the scene as the morning ritual of riding the elevator up to offices located high above the street. These audience members may supply the upper floors of what could be a sky scraper, stocked with offices, cubicles, and other office accoutrements. The world of a film, however, does not merely include physical space. As we saw with Composition No. 1, the world of the work also includes the conclusions that enactors reach or are persuaded to reach by the work.

In *Koyaanisqatsi*, the elevator scene is preceded by a series of shots depicting city grids, streets and buildings extending in all directions in a mesh of horizontal and vertical lines. Reggio then cuts to shots of circuit boards, chips, and connections also arranged in densely-

packed grids. The visual metaphor here is clear, made stronger by the extreme change in scale from the very large spaces of the city to the very small spaces of microcomputer chips. From the circuit boards, Reggio cuts to time-lapse photography of skyscrapers at night, lights in offices being turned on and off, seemingly at random. From the light show, we are shown an older man sitting in front of what appears to be a control board for the power grid. The man seems visibly disturbed as he smokes a cigarette and grabs his forehead, either out of boredom or desperation.

The montage continues with a series of shots of city life – masses of people walking along city sidewalks, the elevator scene, paramedics lifting a man who is either unconscious or dead onto a stretcher, people walking through the rubble left by a fire. The series ends with time-lapse images of stock brokers on the trading floor, their motion rendering them spectral waves rather than distinct figures. Scraps of paper cover the floor as the ghost brokers run back and forth across the screen.

The film's final sequence begins with a transition from the scraps of white paper littering the trading floor to images of white material raining to the earth. We quickly realize that we are being shown a rocket launch, perhaps the same rocket from the beginning of the film. The gantry tower blows its umbilical cables to the rocket, and it rises into the sky, propelled on a column of flame. Shortly into its flight, the rocket suddenly and spectacularly explodes. Out of the mass of fire comes a piece of the rocket's engine, burning and spinning as it falls through the air. For almost three minutes Reggio shows the engine falling, burning, spinning through a cloudless blue sky. The final image is a return to the cave paintings from the opening of the film. The world of *Koyaanisqatsi* includes not merely bizarre landscapes, cities, computer components, urbanites, rocket explosions, and cave paintings, but also the implication that, for all of our technological power and prowess, life remains violently uncontrollable and, as the title

informs us, "out of balance" with the natural order. Additionally, today the world of the work includes the two Space Shuttle disasters – the Challenger and the Columbia. While it is true that Challenger exploded shortly after liftoff in 1986, and Columbia exploded on reentry in 2003, three years and twenty years, respectively, after the completion of *Koyaanisqatsi*, the world of the film is conformed by audiences, and so it is impossible for most contemporary audiences to watch the explosion on film without thinking of the later tragedies.

Hermeneutics, since Schleiermacher and Dilthey, has investigated the relationship between the work – the product of a foreign mind – and the work's interpreter. In the nineteenth century, Dilthey wrote that "Exactly because a real transposition can take place [when man understands man], because affinity and universality of thought . . . can image forth and form a social-historical world, the inner events and processes in man can be distinguished from those of animals" (GS vol. 5, 250). As Richard Palmer glosses it, Dilthey's theory predicted that hermeneutics made possible the "reconstruction and reexperiencing of another person's world of experience," and that this reconstruction and re-experiencing "brings with it the possibility of finding in another person the profoundest depths of our own experience; from the encounter can come the discovery of a fuller inner world" (104). In other words, Schleiermacher and Dilthey's school of "divinatory" hermeneutics (so called because of their attempts to "divine" the inner thoughts and feelings of the composers of the works being interpreted) posited that enactment (though they would not have used such a term) of others' works leads directly to self-knowledge, as we come to know ourselves through the divination of the selves of others via the interpretation of works.

The preceding discussion of *Composition No. 1* and *Koyaanisqatsi*, however, reveals the limitations of such a theory. While the juxtaposition of images in the film may suggest to

audiences certain beliefs that Reggio may share (namely, that life is "out of balance" with nature), even this platitude is impossible to ascribe to Godfrey Reggio himself, who may well have completed the film as an attempt to construct a visual argument whose conclusion he does not actually espouse. Such a methodology may seem perverse, but there is no guarantee against perverse motivation in artistic composition. The inner thoughts and feelings of Marc Saporta in *Composition No. 1* are even more opaque, and attempting to divine his sympathies even for his protagonist is quite impossible. The inscrutability of the composer, however, does not preclude the hermeneutical possibility of self-knowledge.

The world of the work is a world – a self-contained totality – separate from, yet contained within the world of human experience. Before the world of the work can be constructed by an enactor, it first must be composed. Thus, the work of first composing the world of the work is an artistic project in which a composer attempts to fashion a totality, necessarily rejecting the totality of the actual world, and instead fashioning just enough material necessary to present the illusion of a self-contained world. As Umberto Eco writes, "Texts are the way to reduce the world to a manageable format, open to an intersubjective interpretive discourse" (*Limits* 21). Here Eco points out that the world of the work is always a reduction of the complexity and wholeness of the world of human experience. This reduction allows for artistry – the material composed is presented *just so*, and to achieve certain artistic effects. David Kaufer's characterization of rhetoric as a "design art," as mentioned earlier, here is made manifestly apparent, as each detail included in a work's content, as well as each detail omitted, has the potential to affect the enactor and thus contribute to the enactor's perception and construction of the work.

Gadamer is unambiguous on the world of the work, though he does not use exactly this terminology. As he writes, "A work of art is a whole, self-sufficient world" (*TM* 335). The importance of this point lies in the fact that there is always a divide between the actual world and the world of the work. This divide is easy to perceive in works like David Foster Wallace's *Infinite Jest*, which is set an unspecified number of years in the slightly dystopian future. Works set in what *may* be the present, such as Jonathan Franzen's *The Corrections*, pose a more difficult challenge, and yet must also be interpreted as fundamentally separate from the actual world. The most difficult test cases involve works set firmly and unambiguously in the realistic present, such as Raymond Carver's masterful short stories. His collection, *Where I'm Calling From*, presents nothing extraneous to the actual world, and yet the worlds created by Carver's stories are independent of the actual world. This is not to imply that the enactor must "forget" all that she knows of the actual world to interpret a work. On the contrary, as will be explored in later sections of this chapter, the enactor's knowledge of and experiences in the actual world are necessary for conformation.

In the last chapter, I cited Gunther Kress' assertion that "*The world told* is a different world to *the world shown*" (1, emphasis in original). Here it becomes apparent that the world *experienced* is different from the world *conformed*. The process of composing a world-*in-toto* necessarily differentiates the world of the work from the world of human experience, which – though it can be described – can never be reduced. Nor can it be affected as completely as the world of a work, whose very foundation is alterable by its composer. Indeed, Gadamer asserts that it is this alterability of the world of the work that is central to the work's artistry:

But art is present whenever a work succeeds in elevating what it is or represents to a new configuration, a new world of its own in miniature, a new order of unity in tension. This can occur whether the work presents us with specific cultural content and familiar features of the world around us, or whether we are confronted by the mute, yet profoundly familiar, Pythagorean harmonies of form and color. ("Art" 103)

In the next section, I will explore the issue of artistry and narrative works, but for now suffice it to say that the fashioning of the work, the pre-conformational composition of the world of the work, is one of the most appealing aspects of conformation.

2.3.3. The Enactor and the Work

If the world of the work is the central feature and "product" of engagement with works, what importance does the work itself have for conformation? This section will explore the ontological status of the work and the relationship revealed between composer, work, enactor, and enactment. Fundamentally, a work can be considered the physical manifestation of the effort of a composer (here, retaining the sensitivity to multimodality required by the distributed mode, referred to as *composition*). The issue becomes more complicated when we ask about the relationship between narrative works, the bound (and in the case of *Composition No. 1*, unbound) stacks of printed pages, and works of art. Are narrative works works of art?

The work is an artifact, irrespective of whether an enactor has ever encountered it. As an artifact, the work represents the artistry of the composer, which may be substantial and towering, minimal and derivative, or somewhere between. The work is, therefore, potentially a work of art. The *experience* of that art, however, is a thing substantially removed from the work's existence.³² An example may be instructive here. Sitting on my bookshelf at this moment, waiting patiently to be read, is Ann Patchett's 2001 novel, *Bel Canto*. The only things I know

³² Paul Ricoeur voices his approval of this dichotomy, following Roland Barthes' terminology in "From Work to Text." Ricoeur writes that "the text cannot, therefore, be purely and simply identified with writing" ("Function" 132). For Ricoeur, the transcendent entity of the "text" is the world of the work, which, as Barthes writes of the Text, "asks of the reader a practical collaboration." Without this collaboration, the writing on the page has no claim on art.

about the book are that it involves opera and a hostage situation, and that it won the Penn/Faulkner Award. If asked whether this book is work of art, I would answer in the affirmative, noting the award and remembering the glowing recommendation *Bel Canto* received from a friend for whose taste I have the highest regard. But the state of being a work of art and the prospect of having any sort of meaningful experience of that artistry are separated by the act of enacting the work, an act I have yet to perform. I would argue the same conclusion to the question of whether daVinci's *Mona Lisa* is a work of art. Irrefutably it is, and yet it is profoundly not a work of art *in my experience*, as I have never seen it. My encounters with reproductions of the painting lack *aura*, the "presence in time and space, [the painting's] unique existence at the place where it happens to be," in Benjamin's famous definition, which the original is presumed to possess (220). Just as the world experienced is different from the world conformed, so too is the work of art *experienced* different from the work of art *reputed*.

The subjective nature of the artistry of a work, divorced from its codification *qua* work, underlies most, if not all, theories of artistry, even as subjectivity is denied. As a formulation of artistic greatness, some perceive the superior work of art to be simultaneously beyond the reach and taste of the multitude, and the highest good for even the lowest and most common. Harold Bloom, for instance, in his polemic in favor of reading and the canon, *How to Read and Why*, argues: "Yet the strongest, most authentic motive for deep reading of the now much-abused traditional canon is the search for a difficult pleasure" (29). This claim is notable for its nested assumptions and arguments. First, Bloom argues for the importance of deep reading – an interpretive act with a high "degree of difficulty," as they say in the worlds of gymnastics and diving. The difficulty of deep reading puts it beyond the reach of many readers, and yet, Bloom argues, reading is necessary "if individuals are to retain any capacity to form their own

judgments and opinions," and certainly *deep* reading is the superior form of reading, the most capable of ensuring this capacity (21). Second, Bloom argues in favor of the traditional canon, insinuating that the canon is the ideal – possibly the only – source of the "difficult pleasure" that is the hallmark of deep reading and the salvation of Western culture. This insinuation can be seen in Bloom's claim that "A childhood largely spent watching television yields to an adolescence with a computer" (23).³³ Finally, the need for "difficult pleasure" as an indicator of both literary quality (the traditional canon provides it) and superior interpretation (the deep readers experience it) again indicates an essentially elitist pursuit, albeit one that *should be pursued by all*.

The world of the work, however, indicates that the artistic quality of a work is, in part, an inherently *subjective* measure. Speaking authoritatively about the artistry of any work requires the speaker to have previously conformed the work – all other assertions are the merest hearsay. This subjectivity suggests an inherent duality in artistic quality: the greatness of a work of art must lie in what is perceived, in the transcendently artistic conformation by *individual* interpreters, and in the reproducible and general, in the ability of the work to elicit transcendently artistic conformations *across populations and across time*. The former, without the latter, leads to idiosyncratic "personal favorites;" the latter without the former leads to "legendary" works which no one currently reads.

In the previous section, I noted that the enactor's real-world knowledge and experience are necessary for conformation; Umberto Eco's concept of the "Model Reader" explains why this is so. In *The Role of the Reader: Explorations in the Semiotics of Texts*, Eco states that "To organize a text, its author has to rely on a series of codes that assign given contents to the

³³ By now it should be apparent that, though I share Bloom's desire to spread the love of narrative – and yes, even of reading works not composed in the distributed mode – the views expressed here are solely those of Professor Bloom, and do not necessarily represent those of the present composer.

expression he uses. To make his text communicative, the author has to assume that the ensemble of codes he relies upon is the same as that shared by his possible reader." Eco labels the best possible reader a "Model Reader," defined as one who is "supposedly able to deal interpretively with the expressions in the same way as the author deals generatively with them" (7). In other words, the Model Reader for a given work by a given author is one who has the ability and knowledge necessary to correctly interpret *every* code and expression (in all of their ambiguities and multitude of meanings) used by the author to construct the work. Clearly this is an ideal, rather than a pragmatic description, and yet if the enactor had access only to what she has learned from other texts, she would be largely incapable of interpreting the composer's codes, most of which derive from the composer's experience in the actual world.

Though a wide and varied repertoire of actual world experiences proves to be an asset in conformation, this is not sufficient in and of itself for the task of interpretation. As Eco writes, "In *Opera Aperta* [trans. *The Open Work*], even though stressing the role of the interpreter [a "Model Reader"] ready to risk an ideal insomnia in order to pursue infinite interpretations, I was insisting that to interpret a text means to interpret *that* text, not one's own personal drives" (*Limits* 50). The distinction is an important one – the enactor's experiences mediate the transaction between herself and the work during conformation, but without close attention to the work itself, to the physical manifestation of the composer's efforts, the conformation cannot be authentic. As Joel Weinsheimer notes, "True interpretation is not just true to the play [*Macbeth*]; it is interpretation of the play's truth. It is not only the play that comes to exist in the interpretation but the thing that the play represents" (113). For Weinsheimer, even the most worldly of interpretations is invalid if it does not conform the work is crucial. Eco notes:

The Model Reader does not have to figure out each place and individual mentioned by the novel. It is sufficient he or she *pretends to believe to know them.* The Model Reader is not only required to display an enormous flexibility and superficiality, he or she is also required to display a consistent *good will.* (*Limits* 81-2, emphasis in original).

Here, Eco is alluding to what Bernard Suits calls the "ludic attitude," the willingness to submit to the play of the work, with all of its interpretive hurdles and stylistic difficulties. Conformation demands that the enactor submit, willingly, to the affective strategies of the work while simultaneously interpreting the work and its rhetorical play. The duality of immersion and interpretation will be discussed in the following chapter, but for now, the following examples will suffice to indicate the counterintuitive truth of this proposition.

In the two pages from *Composition No. 1* quoted previously, the narrative voice is highly nuanced and, in the second page, critical of Marianne, suggesting a subtle and potentially devious character. Louise Rosenblatt notes in *The Reader the Text the Poem* that "Even as we are generating the work of art, we are reacting to it" (48). The enactor who conforms these two pages from *Composition No. 1* without reacting to them *in toto*, and to the narrator's sexual subterfuge and condescension specifically, can neither hope to interpret them fully, nor to construct the world of the work in all of its affective and rhetorical fullness. Similarly, the final sequences of *Koyaanisqatsi* are interpretable from a purely intellectual perspective, and yet the world of the work that results bears little resemblance to the affecting work composed by Reggio. Interpretations of *Composition No. 1* or *Koyaanisqatsi* that ignore or consciously exclude these affective, immersive aspects are not, in Weinsheimer's terms, "true interpretations," as they do not represent interpretations of these works' truths. As I shall show in the following chapter, this holds true for all narrative works, not merely compositions in the distributed mode.

2.3.4. Enactment, Encounter, and Configuration

"Enactment" emerges as the central difference between past hermeneutics and the rhetorical hermeneutic demanded by the distributed mode, not because previous theorists have ignored the actions of the enactor (though they do not refer to her as such) – they have not. Gadamer writes that "Reading with understanding is always a kind of reproduction, performance, and interpretation" (TM 160). In those three terms, reproduction, performance, and interpretation, Gadamer neatly summarizes the essential nature of conformation as the construction of the world of the work, enactment as the active engagement with the work, and interpretation as the process by which "foreign" content is made intelligible, and thus understandable. Umberto Eco notes that "any act of interpretation is a dialectic between openness and form, initiative on the part of the interpreter and contextual pressure" (Limits 21). Eco's concern for interpretive verifiability is here balanced by the acknowledgement that interpretation requires an active engagement with the "open" facets of the work, as is prevalent in the distributed mode. And finally, hypermedia author and theorist Michael Joyce provides the following gloss on enactment and structure in the distributed mode. While discussing three hyperfictions, Stuart Moulthrop's Chaos, John McDade's Uncle Buddy's Phantom Funhouse, and Carolyn Guyer and Martha Petry's Izme Pass, Joyce writes:

Narrative is the series of individual questions that marginalize accepted order and thus enact history. Hypertext links are no less than the trace of such questions, a conversation with structure. All three are authentically concerned with consciousness rather than information, with creating and preserving knowledge rather than with the mere ordering of the known. (*Of Two Minds* 182)

The distributed mode facilitates relationships rather than orderings, dynamic operations rather than static structures – and perhaps is incapable of operating otherwise. Without the active engagement of an enactor, however, these operations and relationships remain unrealized and meaningless. It is through enactment that the potential for "creating and preserving knowledge" of works in the distributed mode – as well as traditional works – is actuated.

Though existing theories of hermeneutics and digital poetics have embraced the basic concepts of enactment, conformation is differentiated by its explicit examination of the many sub-processes of enactment. Enactment is a blanket term for the complex actions required to experience the content of the work, even in traditional, non-distributed works. Under the rubric of enactment are included elements I have termed *encounter*, *navigation*, and *configuration*. Encounter is the most universal in terms of application across the distributed mode and traditional forms of narrative, as it refers to the sensory process of engaging with the work to experience the content of the work. Encounter is obligatory regardless of medium, platform, or mode. Narrative cannot be interpreted without the enactor's reading, viewing, listening, or otherwise sensorially gathering the data of the work. In Stuart Moulthrop's Reagan Library, encounter requires the enactor to read the prose text and view the panoramic vistas. In Cortázar's Hopscotch, and in Saporta's Composition No. 1, encounter is a matter of reading prose text only. In Koyaanisqatsi, its two sequels, and in Baraka, encounter involves viewing the film and listening to its soundtrack. Encounter is such an automatic process, in most cases, that it often is left out of critical and hermeneutical discourse.

Navigation is another element of enactment, discussed previously in relation to *Reagan Library* and *Hopscotch*. Navigation – traversing the work – has become a constant across all modes of representation since the advent of the DVD. The "chapter selection" feature of most

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DVDs allows for the free navigation through the various "chapters" of the work – an intriguing strategy of fragmentation for even the most essentially unified filmic works. In *Composition No.* I, navigation may appear to be strictly linear following the initial shuffling of the pages, but the codex-like physical format of the work still allows the enactor to skip ahead or back through the stack of pages at will. Furthermore, Saporta's injunction to shuffle loosens the convention against skipping throughout a narrative work – if the last page could well have been the first page before shuffling, there cannot be any harm in looking at the pages out of order at *any* time. The decisions governing the enactor's progress through the stack of pages are every bit as dependent on volition and conscious choice as those in a digital hyperfiction.

The navigational choices made by the enactor must be carefully considered in the context of the particular enactment, as well. An enactor who reads the two pages in *Composition No. 1* about Maman and Marianne's decisions to hire governesses may be sufficiently intrigued by the parallelism and the potentially unreliable narrator that she may scan through the stack of pages, setting the remaining pages aside until she encounters another page depicting a similar scene or its consequences. In other words, the enactor may navigate through the work to only those pages that interest her *at that moment*, leaving the others for a later examination. The work, as conformed in this scenario, will be very different from the world of the work conformed by a more random arrangement of pages. The juxtaposition of scenes that may arise naturally from the shuffling of pages may be defeated, and instead the fragmented work may be configured at the level of navigation into a more logical, unified, traditional whole.

The final element of enactment is configuration, the enactor's efforts to assemble the content of the work into the world of the work. This action usually takes place in the consciousness (and sometimes the subconscious) of the enactor, except in cases like *Composition*

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No. 1, in which configuration occurs both as a cognitive activity and as a physical act of shuffling the pages of the work. Usually, however, configuration refers to the enactor's efforts to identify the chronological, character, and geographical referent encountered in the work. As I mentioned earlier, for example, the chronological referents of the Maman and Marianne pages are the past (during the narrator's sixteenth or seventeenth year) and presumably the present (during his married adult life). Interpreting the material of the work – which will be discussed in the following section – allows the enactor to configure the pages into a structure that will allow her more easily to proceed with the acts of encounter, navigation, configuration, and interpretation. Configuration indicates one of the ways in which reading and writing, encounter and composition, are inseparable. The enactor's efforts to configure the material of the work into a coherent world of the work are cognitively analogous to a composer's efforts to configure her ideas into a coherent and communicable message.

Enactment, as the complex of encounter, navigation, and configuration, also is relatable to the enactor's actual world interactions. The actual world must be perceived to allow for meaningful interaction, thus necessitating encounter. Encounter's multitude of perceptions must be configured into a coherent representation, which will allow for further encounters to be seamlessly integrated into the configuration and will facilitate decision-making, as in navigation. Gadamer comments on the similarities between interpreting works and operating in the world:

The work of art provides a clear example of that universal characteristic of human existence – the never-ending process of building a world. In the midst of a world in which everything familiar is dissolving, the work of art stands as a pledge of order. Perhaps our capacity to preserve and maintain, the capacity that supports human culture, rests in turn upon the fact that we must always order anew what threatens to dissolve before us. This is what the productive activity of the artist and our own experience of art reveals in exemplary fashion. ("Art" 103-4)

Though his comments here seem to recall the complaints of Michiko Kakutani ("Never-Ending Saga") and Laura Miller ("www.claptrap.com") that the distributed mode lacks a coherent vision of life and is thus artistically corrupt, Gadamer's point is not so much the importance of coherence in art as it is the universal and innate narrative instinct. In A Thousand Plateaus, Deleuze and Guattari write that "All history does is to translate a coexistence of becomings into a succession" (430). This is the essence of the narrative instinct, the need to translate a random series of events into a causal and coherent narrative. The narrative instinct is at play in our existence in the world, and it is the cognitive foundation of enactment, especially the processes of configuration and navigation. Because of the narrative instinct, composers in the distributed mode are free to experiment with fragmentation and extreme disruptions of traditional narrative progression - there is presumably no series of events, whether narrated or experienced, that an enactor cannot configure into at least a minimally satisfying narrative. This makes the affective and immersive experience of the world of the work vital. The immersive, emotional, and rhetorical power of the work – unlike the purely analytical experience of the work, which can mask an artistically weak work through the operation of the narrative instinct - emerges as a reliable indicator of the artistic value of the work.

2.3.5. Interpretation, Analysis, and Resonance

Enactment, however, is incomplete without interpretation. Interpretation is the process by which "foreign" content is made intelligible, and thus understandable. Interpretation, like enactment, is always mediated by the enactor's experience and knowledge of the actual world. All forms of action in the world are mediated by the enactor's experience and knowledge of the actual world, and interpretation and enactment are no different. The work itself is fundamentally outside the

world of the enactor – it is foreign to her knowledge and experience, and remains so irrespective of the number of times she has conformed the work. The work, as the physical manifestation of the effort of the composer, begins its existence as the product of a foreign consciousness, is encoded in unknown terms, and relates a narrative whose origin, development, and resolution are foreign to the enactor. What is internalizable is the world of the work, the construction of the enactor based on the content and constraints of the work. The work itself thus remains forever apart from the enactor, but the world of the work is incorporable into the world experiences of When I think of a particular work, what I remember most vividly is my the enactor. conformation of that work. The physical being of the work, the book, film, or hypermedia, is of markedly less importance. In the instances where the work itself is commonly fetishized – the case of a first or rare edition, or the sentimental value of a gift, for instance – what is valued is not the work per se, but rather the aura of the work, in the first case, and the nostalgic value of memories of the giver or the reception of the gift in the second. In the first case, the aura of the work results in the sensation of being displaced in time, of being transported to an earlier time. The work's aura makes the act of conformation appear to be either rare, and therefore privileged, or closer to the conformations performed by the original interpreters of the work. In the second case, the work serves as a surrogate for the object of nostalgia; conformation does not, initially, figure in the value of the work.

As enactment denoted a set of related and interdependent activities, so too does interpretation, encompassing acts of analysis at the gestalt and atomistic level, and also the operation of resonance between the narrative world and the interpreter's world. Analysis refers to the dual processes of *micro-analyzation*, determining what the content of the work being analyzed means in itself, and of *macro-analyzation*, determining what the content of the piece of

the work being analyzed means in the context of the work as a whole,. Analysis can also refer to the process of determining what a particular idea *about* the work means, both in the context of the gestalt work and when applied only to a specific fragment of the work. The analytical processes, of course, are neither mutually exclusive nor determinately sequenced. In the example from *Koyaanisqatsi* of the rocket launch followed by the "alien" landscape, it may be impossible to identify which operated first, micro-analyzation or macro-analyzation. At the micro level, the landscape first must be identified before it can be metaphorized as the destination of the rocket, and that identification must result in a sufficiently foreign descriptor to allow the Kuleshov effect to operate after the scene with the launched rocket. At the macro level, the Kuleshov effect prepares audiences for the macro-scale interpretation of the landscape as the destination of the rocket. The question of which occurs first is almost certainly pointless, in any case, as the interpretation of the scenes requires both, oscillating between micro and macro analysis, each scale providing more information for the other to further refine the enactor's analysis.

I have termed the other interpretive sub-process *resonance* because it is the fluctuating interaction between the enactor's world and the world of the work that constantly accompanies interpretation and enactment during conformation. Resonance asks the question: What do the content of the work and my thoughts about the interpretation and enactment of the work mean to *me*? Resonance is the process by which the enactor's knowledge and experience of the world inform the interpretation and enactment of the world of the work, and also by which the world of the work informs the enactor's world knowledge and experience. The two worlds resonate – sometimes at a high frequency – with each other, affecting each other and being affected, in turn.

Resonance, as I have described it, has a strong connection to what Gadamer sees as the relationship between interpretation and understanding. In *Truth and Method*, Gadamer explains that: "Interpretation is not an occasional, post fact supplement to understanding; rather, understanding is always interpretation, and hence interpretation is the explicit form of understanding" (307). Thus, the act of interpretation is the outward manifestation of understanding. In his later essay, "On the Problem of Self-Understanding," Gadamer returns to the theories of understanding proposed by his mentor, Martin Heidegger, which prompts him to differentiate what he sees as the *process* of interpretation from the *event* of understanding. Gadamer writes:

In the last analysis, *all* understanding is self-understanding, but not in the sense of a preliminary self-possession or of one finally and definitively achieved. For the self-understanding only realizes itself in the understanding of a subject matter and does not have the character of a free self-realization. The self that we are does not possess itself; one could say that it "happens." (55, emphasis in original)

Following Heidegger, Gadamer here asserts that, as understanding is an event, a "happening," and not a conscious effort, self-knowledge must also be an event, and therefore cannot be effected by the application of willpower or thought. This position forces Gadamer to explain how interpretation – the goal and action of hermeneutical inquiry – can lead to understanding, since understanding is outside of ordinary human control. To solve this dilemma Gadamer again looks to Heidegger, and concludes that "It is not really we ourselves who understand: it is always a past that allows us to say, 'I have understood'" ("Problem" 58). In other words, understanding can only occur when the interpreter *already understands*, but does not know that she understands. Then, understanding occurs as the "coming into being" of self-knowledge, which is

really the conscious awareness of prior knowledge now made manifest through the mediation of the work of art.

Rather than follow Gadamer and Heidegger down the metaphysical garden path, I suggest that understanding is one possible result of conformation – whether of the creation of the world of the work of art or of the enactment and interpretation of the actual world. Resonance allows for prior knowledge to effectuate the analyzation of new knowledge, which then can resonate with the enactor's world experience and knowledge. Or, to put it another way, the content of the work may trigger specific thoughts and memories from the enactor's world, which resonate with the content of the work even though the work and the enactor's experiences may be strikingly dissimilar. An enactor may read about Marianne's neuroses and resonate with The enactor, never prone to territorialism or Marianne's need to control her space. possessiveness, may have no experiences in common with Marianne's need to restrict the governess' movements and to maintain her bathroom sanctuary as inviolate, yet the enactor may depend on her morning routine in the actual world to ensure her balance throughout the day. The enactor may reflect on her own reactions to disruptions to her routine, reactions which may mirror Marianne's, and the resonance between the two scenarios may result in the enactor gaining a new awareness of her weaknesses and their possible consequences. The difference between this model of understanding and Gadamer's can be summarized thusly: whereas Gadamer writes that understanding arrives with the realization, "I have understood," resonance allows for the acquisition of understanding through conscious effort, and with the recognition, "I never realized."

2.4. RHETORICAL HERMENEUTICS AND CONFORMATION

Joel Weinsheimer writes: "Art understands non-art by representing it *as*, and this understanding is therefore metaphorical regardless of whether the artwork contains metaphors. In other words, it is the relation (between art and non-art), not one of its terms, that is metaphorical" (78). Weinsheimer's point is well-taken – since the world of the work is not the actual world, but is instead a fabricated, artistic *reduction* of a possible world, the work of art is itself metaphorized. The world of the work presents itself as a real, actual world, even though it is not. The tension between the world of the work and the actual world energizes the enactor's interactions with the world she is conforming from the work, and strengthens the need for resonance between the two worlds. The work of art, thus, is fundamentally rhetorical, persuading enactors to engage in the work of conformation even in the face of the hermeneutical difficulties inherent in engaging with a work.

Though I disagree with his understanding of understanding, Gadamer's ideas also support the fundamental rhetorical nature of the work of art. In Gadamer's theories, as discussed previously, the work of art persuades (or shocks) the interpreter into eventuating her latent selfknowledge into being.

Paul Ricoeur also holds that the work of art, and specifically the literary work, "is the medium through which we understand ourselves." For Ricoeur, the work of art

extends the fundamental characteristic of all discourse whereby the latter is addressed to someone. But in contrast to dialogue, this *vis-à-vis* is not given in the situation of discourse; it is, if I may say so, created or instituted by the work itself. A work opens up its readers and thus creates its own subjective *vis-à-vis*. ("Function" 143)

Ricoeur argues that the task of hermeneutics is not, as many have asserted, the discovery of a hidden meaning buried in code within the work. Instead, in Ricoeur's terms, the world of the work unfolds in front of the work, in plain sight of the enactor. Thus, "to understand is *to understand oneself in front of the text*. It is not a question of imposing upon the text our finite capacity of understanding, but of exposing ourselves to the text and receiving from it an enlarged self, which would be the proposed existence corresponding in the most suitable way to the world proposed" ("Function" 143, emphasis in original).

Much earlier in this chapter, I mentioned Plato's denigration of the rhetoricians and sophists in the *Phaedrus*, as Plato felt that only philosophy could discover the truth and improve mankind. Ricoeur's imagery of enlargement following exposure to the work of art is highly reminiscent of this ancient turf battle over the claim to truth and knowledge, except for two important divergences. First, for Ricoeur, Gadamer, and Heidegger, the transcendent force is not oratory, as practiced by the rhetoricians and sophists, nor philosophy, as evidenced by the Socratic dialogues, but rather the work of art. In this, I suspect the hermeneuticists and the work of art are closer in spirit to the rhetoricians and sophists, as both groups appreciated the artful construction and deployment of communication that may characterize the work of art. As for Plato, though he explicitly decries the practice of writing in the *Phaedrus*, in that dialogue and all of the others his use of rhetorical and affective strategies is masterful and utterly without qualm. Second, and more importantly, unlike Plato's belief in the active pursuit of truth, hermeneutical theories descended from Heidegger espouse an essentially passive role for the reader. The reader "exposes" herself to the work of art and "receives" from it a transcendent experience. Though Ricoeur discusses the structuralist analysis performed by the reader, and Gadamer discusses the ludic work of interpretation, the metaphysical nature of their transaction between the work of art and its interpreter is, in my view, a fundamental flaw. Not only does it ignore the real effort expended by the reader during conformation, but it also renders literary interpretation finally unteachable. In the following chapters, I demonstrate the application of a conformation-based pedagogy to the teaching of reading and writing at the college level, and the insights that such a pedagogy sheds on both.

3. MASTER OF THE MAZE: READING AS GODGAME, INTERPRETATION AS EXPERIENCE

"The godgame is over." "The what?" "The godgame." For a moment there was something both faintly mischievous and sardonic in her eyes. "Because there is no God, and it is not a game." (Fowles, The Magus 637)

The eternal allure of the maze is the seemingly unattainable center. (Wright 3)

Stripped of all secondary motives, all addictions are one: to make a world of our own. (Kelly 233)

3.1. INTO THE LABYRINTH: A PEDAGOGY OF DIGITAL DIFFICULTY

The Wachowski brothers' film, *The Matrix*, posits a world created by computer simulation, which is indistinguishable from reality, and which allows the intelligent machines to harvest energy from humans plugged into this virtual reality matrix. In this world, the humans' great hope in the fight against the machines is the hero known only as "the one." Morpheus, one of the leaders of the human resistance, takes Neo deep within the matrix to the Oracle to determine whether Neo is the one. As they approach, Neo asks Morpheus about the Oracle:

Neo:	And she knows what everything?
Morpheus:	She would say she knows enough.
Neo:	And she's never wrong?
Morpheus:	Try not to think of it in terms of right and wrong. She is a guide, Neo.
	She can help you to find the path.

As he waits for his audience with the Oracle, Neo sees children engaged in different activities, sitting in the Oracle's waiting room. Two young girls calmly levitate blocks, moving them back and forth between themselves in a hands-off, gravity-free display of juggling. A young boy with a shaved head sits in front of a collection of metal spoons, each of which has been twisted into a fantastic knot. The boy picks up a large spoon and looks at it. Neo's reflection is captured by the back of the bowl of the spoon. As the boy looks placidly at the spoon, its stem bends and twists, moving its bowl in a figure-eight pattern around the stem in the boy's unmoving hand, before snapping back to its original shape and rigidity. The boy hands the spoon to Neo, who looks at it, worriedly.

- Boy: Do not try and bend the spoon. That's impossible. Instead, only try to realize the truth.
- Neo: What truth?
- Boy: There is no spoon.
- Neo: There is no spoon?
- Boy: Then you will realize that it is not the spoon that bends, it is only yourself.

Neo focuses on the spoon and it slowly starts to bend toward the floor. When one of the Oracle's attendants informs Neo that the Oracle is ready to see him, the interruption causes the spoon to instantly regain its previous spoonish form. Neo, shaken, hands the spoon back to the boy.

This scene, like something out of the Uri Geller playbook, illustrates the distinction between awareness and appearance that is central to this chapter. To Neo, it appears that the boy has the miraculous power to bend the spoons with only the power of his mind. When the boy hands the spoon to Neo, the challenge for Neo to bend the spoon is initially an impossible task. The boy's response, "there is no spoon," recontextualizes the contest of wills from human vs. spoon to human vs. self, as Neo must harness his own awareness of the matrix. In the computer-generated world of the matrix, there literally is no spoon, merely bits and bytes of data appearing to be a spoon. The difficulty for the more enlightened Neo is to reject his previous experiences and assumptions about life in the matrix, and thus to enable himself to see the seeming impossibility of mental spoon-bending as a challenging but possible exercise in his own ability to master his own expectations. By focusing on the "impossibility" of bending the spoon, Neo is able to experience a deeper connection with the realities and subtleties of the matrix.

This chapter takes up the difficult questions of reading – what happens, what do we *want* to happen, and how can we teach those practices. I focus my discussion on two notoriously challenging and heavily fragmented works, Italo Calvino's novel *If on a winter's night a traveler* and Michael Joyce's hyperfiction narrative *Afternoon, A Story*. Both works present a range of interpretive challenges and a host of difficult narrative pleasures. I first discuss an approach to interpretation based on the counter-intuitive strategy of embracing interpretive difficulties. Working through the difficulties of these works leads to the realization that these challenges are not incidental, but rather are integral features of the narratives and their presentations, making these works something akin to *tests* for the interpreter. Examining the literary trope of the godgame and its use in such works as John Fowles' *The Magus*, Thomas Pynchon's *The Crying of Lot 49*, and the Medieval romance, *Sir Gawain and the Green Knight*, sheds light on the antagonistic dynamic established by *Traveler* and *Afternoon* between the works' authors and their enactors.

The history and experience of mazes and labyrinths provides another crucial piece to the puzzle presented by these works, and by difficult works in general: the role of affect and subjective experience in the learning process. It is affect that finally allows us to reach an understanding of the interpretive demands these works make on their enactors, for the conformation of their worlds demands not merely a keen intellect, but also an affective, *immersive* engagement with the work. As I shall argue, nested immersive experience (as the reader is immersed in her own enactment of the work, she also maintains a state of immersion in the work's narrative) is crucial to interpretation and to the process of world-creation from works in general, and it is largely absent from our literary pedagogies. Preferring to avoid the risk of solipsism, we frequently avoid discussing the affective dimensions of works in our research and in our classes, and yet we ourselves would be hard pressed to read without becoming immersed in both the narrative and our own interpretation of that narrative. The conclusion to this chapter argues for the teaching of immersive reading in our literature classes, and indicates ways to keep those discussions from degenerating into chaos and the abdication of interpretation. As I have argued before, and will argue in the next chapter, works in the distributed mode are not necessary to teach these concepts or to experience these effects – the distributed mode simply makes them more easily visible, and thus more easily apprehended by students and teachers alike.

3.1.1. Putting Difficulty to Work

In the world of English studies, the difficult work often holds a special pride of place. Eliot's "The Waste Land," Faulkner's *The Sound and the Fury*, Shakespeare's *King Lear*, Borges' "Tlön, Uqbar, Orbis Tertius," all hold a fascination and an esteem that is in no small part connected to their notorious ambiguity and complexity. We love (and teach) these works and

others like them because they challenge us, and because they constantly reward our efforts with new insights and connections, and a new appreciation for their authors, their stories, and for our own interpretive abilities. But what of our students?

Mariolina Salvatori argues that our treatment of difficult works should make explicit not merely our *knowledge* of the works, but also, and more importantly, our interpretive *heuristics*. She writes:

If we are really concerned lest pedagogy become a strategy of exclusion, our pedagogical imperative should be consciously and consistently to make *manifest* the rules and practices of interpretation we have acquired from institutional training, and to teach all students – remedial as well as mainstream, undergraduate as well as graduate – the very methods we practice in the classroom and use to produce the texts that grant us professional status. ("Toward" 81, emphasis in original)

For Salvatori, this is not merely a matter of pedagogical efficacy, but also of pedagogical ethics – unless we find ways to make our own strategies and acts of interpretation visible in the classroom, we run the risk of teaching students to memorize facts and conclusions about works, but not how to interrogate the work and the facts gleaned from them to reach their own conclusions. Salvatori notes, however, that "When inexperienced readers read complex texts, their 'difficulties' consistently identify actual and venerable interpretive cruxes. This, I believe, is a fact worth reflecting on" ("Toward" 82-83). Salvatori's observation suggests that students already possess interpretive instincts, and are able to identify productive interpretive cruxes in the difficulty the 'beginning' of a critical reading of a text, inexperienced readers see in it a form of entrapment" ("Toward" 83). Rather than try to ameliorate her students' feelings of "entrapment" when reaching a difficulty in a text, Salvatori has devised a pedagogy for engaging

with that difficulty, validating it as the beginning of a serious, interpretive engagement with the work.

Salvatori uses what she calls "difficulty papers" in her courses to help students recontextualize their own moments of difficulty. In her essay "Understanding Difficulties: A Heuristic," Salvatori includes the text of the difficulty paper she assigned while teaching a course on writing about poetry:

You can expect to write regularly in this course. In preparation for class discussion and writing assignments, you will write short (1/2 to 1 page) 'difficulty papers': these are papers in which you identify and begin to hypothesize the reasons for any possible difficulty you might be experiencing as you read a poem. Each week, you will write a difficulty paper on one or more of the assigned poems. Each week, I will select one or two of them as unusual or representative examples of the readings you produce. I will photocopy, distribute, and use them to ground our discussions. My goal, in doing so, is to move all of us from judging a difficulty as a reader's inability to understand a text to discerning in it a reader's incipient awareness of the particular 'demands' imposed by the language/structure/style/content of a text. (368)

Rather than labeling a difficult moment something that makes interpretation impossible, the difficulty paper asks students to begin to think of these moments as textual features which make interpretation necessary and possible at a deeper level than that which the reader/writer previously had been capable. The difficulty paper is also noteworthy in that it foregrounds a notion which may be foreign to students: that works place interpretive requirements upon their readers, and that different works require different interpretive skills. In other words, "reading" is revealed to be not an enactment of a unitary skill, but rather the contextualized deployment of a number of approaches and hypotheses.

In their book, *The Elements (and Pleasures) of Difficulty*, Mariolina Salvatori and Patricia Donahue point out that "As students put their difficulties in writing, as they write them out, they

give themselves a chance to acknowledge the complexity of reading, which, if not *captured* through writing, would easily slide away" (5, emphasis in original). Reading happens in time, it is sequential, and the thoughts, worries, and connections we construct while conforming a work are all capable of being replaced by what comes later in the process. By requiring their students to pause during the reading process, or at least to return as best they can to a prior moment in their cognition, and by making that pause a mandatory part of the coursework, Salvatori and Donahue normalize for their students the interpretive investigation performed by more experienced readers. What may appear to the students as an admission of failure or stupidity – the acknowledgement of an interpretive challenge so difficult as to impede the student's understanding of the work - becomes an enabling moment and the surest guide toward a meaningful engagement with the work. As Salvatori and Donahue write, "That is what we want to promote, an engagement with difficulties that prevents them from bringing to a halt – from making impossible – the challenging work of reading, writing, and thinking" (2). A pedagogy of difficulty fosters in students the self-awareness that trying to "get" everything in a difficult text on the first reading – like using mental power to bend a spoon – is impossible. Rather, students can use their own difficulties to begin to understand the interpretive requirements the work places upon its readers. In such a dynamic, it is not the spoon - or the difficult work - that bends, it is only the reader and her strategies for making sense of the work.

3.1.2. If on a semester's night a reader ...

Italo Calvino's *If on a winter's night a traveler* is one of the codex novels frequently cited and discussed by hypertext theorists. It is, in other words, a codex work that shares many features with works in the distributed mode, and these features combine to make *Traveler* a difficult and

frustrating read. The work itself is comprised of twelve numbered chapters, between each of which is a named chapter. The numbered chapters recount the book-buying and book-reading (mis)adventures of "you," the Lettore. As the Lettore - the (male gendered) reader, in Italian you read that "you" have recently purchased "Italo Calvino's new novel, If on a winter's night a traveler" (Traveler 3). The second chapter, named "If on a winter's night a traveler," presents that narrative - or, rather, the first thirty-two pages of that narrative, which is interrupted by a printing error, causing you to return to the bookstore in chapter two and demanding a complete copy of Calvino's book. At the bookstore, you meet the beautiful Ludmilla, the "Other Reader" (in Italian, the *Lettrice*), who becomes your love interest through the course of the book. You also learn that what you thought was Calvino's If on a winter's night is actually Outside the town of Malbork, by Polish author Tazio Bazakbal. Wanting to finish what you had begun, you pick up a copy of *Malbork*, flirt with the Other Reader, and head home to finish your book. Or so you think. Malbork is "really" Leaning from the steep slope, by Cimmerian author Ukko Ahti and so the book progresses. Each numbered chapter narrates your attempts to acquire a novel and a lover, and each named chapter recounts the incipit of a different book entirely. The book is, if this has not already become clear, a challenging, frustrating work to get through, at least the first time one reads it.

The beauty of using something like Salvatori's (and Donahue's) difficulty papers lies in the attention that gets paid both to the phenomenology of reading and to the hermeneutics of reading. The approach validates and foregrounds the reader's experience of reading, asking for the "unpleasant" interpretive moments to be privileged via their immortalization in writing, instead of allowing these moments to remain unspoken signifiers of shame and inadequacy. At the same time, the pedagogy of difficulty also provides not a method (*pace* Gadamer) but an approach to interpretation that is inseparable from the student herself and her own particularities of experience, interest, and insight. In a class of twenty students, there will be a wide range of difficulties identified; even if the different difficulties are related, each student's approach to the difficulty – what it means, why it is important, what it might be indicating – will be different.

Were I to write a difficulty paper about *If on a winter's night a traveler*, I would identify Calvino's narration throughout the numbered chapters as a major stumbling block. When I begin reading the book, I am accosted by Calvino's use of the second person familiar (the *tu* form in the original Italian, "you" in Weaver's English translation), and immediately recognize this as a postmodern trope of simultaneous distancing and intimacy. In other words, the first sentence, "You are about to begin reading Italo Calvino's new novel, *If on a winter's night a traveler*," does not bother me (3). Much. It is, of course, impossible that Calvino wrote the novel with me, individually, in mind, and yet I recognize that by this Calvino is signaling his intention to attempt to involve me in the action of the narration. This is all well and good, but the rest of the chapter continues in the same exhortative mood, as Calvino spends pages instructing me on the best ways to prepare myself physically and mentally to receive his new novel. He writes, for instance:

> Find the most comfortable position: seated, stretched out, curled up, or lying flat. Flat on your back, on your side, on your stomach. In an easy chair, on the sofa, in the rocker, the deck chair, on the hassock. In the hammock, if you have a hammock. On top of your bed, of course, or in the bed. You can even stand on your hands, head down, in the yoga position. With the book upside down, naturally. Of course, the ideal position for reading is something you can never find. (3)

His concern would be touching if I believed for a moment that my comfort were important to Calvino. Instead, this paragraph, and the rest of the chapter, resembles a pointless list.³⁴ If I am reading Calvino's suggestions about the best posture in which to read Calvino's book, then I am already reading Calvino's book, and his instructions, no matter how well intentioned, are likely unnecessary. Because I actively desire to begin reading Calvino's new book, his lengthy discourse on my approach to his book strikes me as irritating.

I am reminded, in fact, of a similarly irritating literary figure who used lists to dominate another: Sam-I-Am, from Dr. Seuss' classic children's book, *Green Eggs and Ham*. Sam-I-Am hounds Seuss' unnamed protagonist, demanding that the protagonist eat the eponymous dish. Forced to rebut each solicitous offer, the protagonist famously responds:

> I could not, would not, on a boat. I will not, will not, with a goat. I will not eat them in the rain. I will not eat them on a train. Not in the dark! Not in a tree! Not in a car! You let me be! I do not like them in a box. I do not like them with a fox. I will not eat them in a house. I do not like them with a mouse. I do not like them here or there. I do not like them ANYWHERE! (46)

Seuss' un-hungry hero capitulates in the end, conceding, "Sam! If you will let me be, I will try them. You will see," and to no one's surprise, he does like them (54). Without the extreme persistence of Sam-I-Am, however, this conversion would not have occurred. I am left to wonder, to dread, whether Calvino's intention throughout the novel is the same – to hound his reader until "I" surrender to his superior insight and experience.

Calvino's list-making seems to operate as a delaying tactic, as if he were attempting to stall the telling of the novel by constantly reminding the reader of some new position to assume

³⁴ A masterful use of the pointless list occurs in Christopher Guest's mockumentary (mock documentary) film, *Best in Show*. Guest's character, a breeder and shower of hound dogs, informs the "documentary" film crew that as a child, he would recite the name "to every nut that there was." Then, in a slow, Southern drawl, he proceeds to name nuts, "Peanut. Hazelnut. Cashew nut. Macadamia nut," occasionally editorializing on the type of nut he had just named. The scene is comically brilliant, providing insight into the character of the dog breeder, and also making the audience increasingly uncomfortable as he continues talking about *nuts*.

(in chapter one), or by describing in detail the increasingly far-fetched missions the Reader undertakes to secure a complete novel and to seduce Ludmilla, the Other Reader (chapters two through eleven). The traditional "narrative" chapters, those with names, further the sense of being delayed as each occupies the reader without presenting any further progress toward narrative closure or resolution. Chapter twelve, however, is only a few lines long, and recounts a bedtime conversation between the Reader and the Other Reader, who are now married. Ludmilla turns out her light and tells you to do the same, but you demur, "Just a moment, I've almost finished *If on a winter's night a traveler* by Italo Calvino" (254). And having so read, so have *you* finished the book. The book's ending presents its own difficulties, though, as the reader is left to interpret the meaning of this statement. As far as the reader knows, the Reader was never able to find a complete copy of Calvino's *Traveler*, and so the reader is left to ponder: what is it that the Reader is reading?

The pedagogy of difficulty takes as its starting point the student's own interpretive actions and challenges, but also brings in the work of literary theorists to supplement the students' work with these texts ("Toward" 84-85). Looking at the critical reception and engagement with *Traveler*, for instance, might result in noticing that Madeleine Sorapure argues that the role of the Reader is that of "detective," but that role is "doomed to fail in Calvino's work and in much of contemporary fiction, to be bombarded by the clues, leads, and details it tries desperately to organize." This desire to organize and to structure chaos is, Sorapure asserts, "essentially a manifestation of man's desire to do the impossible: to get out of time, out of a necessary pluralistic, disordered situation in the world and in the world of the text" (707). In fact, she writes, the Reader "finds neither the end – the resolution to his confusion – nor the origin – the source of his confusion – to the tales that have so intrigued him" (706). Sorapure

seems to indicate an interpretation of the ending of the work as being not entirely reliable – the Reader's assertion that he is finishing *Traveler*, in other words, cannot be taken literally, because he has not found that imaginary work by the real work's end.

Yet Salvatori encourages her students to assert "their authority and autonomy," and Sorapure's conflation of the universal desire for resolution with the Reader's particular resolution strikes a false chord ("Toward" 84). The Reader, we will have noted, has unambiguously resolved his romantic quest for Ludmilla, succeeding in his pursuit of the quixotic and ephemeral Other Reader; is it outside the realm of possibility that he also finally has succeeded in "assembling" the text of *If on a winter's night a traveler*? If so, we are left with yet another difficulty – what is that work, and how should it be interpreted? If we take the "easy" solution to this difficulty and assume that the "work" is the conglomeration of the multiple numbered and named chapters, then we are still left with a problem, for the numbered chapters present a coherent (if implausible) narrative, while the named chapters recount ten different incipits to other, more or less framed, narratives. Should we, then, treat *Traveler* as an anthology, or as a novel? In short, how are we to resolve the essentially fragmented and seemingly irresolvable nature of the work?

3.1.3. Hyper(textual) Difficulty

In my own teaching, I have taken a slightly different approach to difficulty than Salvatori and Donahue. As I understand their project, the hermeneutical goal of working with difficulty is to allow readers to engage with their own interpretive processes in a visible, scriptable manner. Reading remains a difficult subject to teach or discuss because so much of it simply *happens*. What happens when you sit down and read a book, or this chapter, dear reader? How would you

explain all of it to others? At what point do you become aware of these things/activities/awarenesses? The previous chapter was an attempt to freeze interpretation in time and present a synchronic portrait of the multiple activities readers perform diachronically as they enact works. The pedagogy of difficulty attempts much the same, though localized at particular "hot spot" moments, when such activities may become most visible through the challenge of the difficult work. Fragmented works in the distributed mode, and especially hypertextual works, foreground those moments of aporia in which the pedagogy of difficulty is most interested – the moments when the enactor's ability to continue interpreting is forced to stop at a gap or fissure in the work.

I adapted (very loosely, as will become apparent) the pedagogical impetus behind the difficulty paper to meet the interpretive needs of hypertextual narratives, and in so doing realized that the hermeneutical activities performed by my students as they enacted a hypernarrative are largely identical to those performed every time they read – even when they read a completely traditional codex work. In a course examining issues of literary engagement with contemporary issues and concerns, I discussed hypertext – with which all were familiar due to their experiences with the World Wide Web – and how it may be applied to telling stories. I then asked my students to enact Stuart Moulthrop's *Reagan Library*, discussed in the first chapter of this work. In addition to enacting the work, though, they were asked to record their enactment and reflect upon it. Below, I have reproduced the hyperfiction reading response I assigned my students.

Reading Response: *Reagan Library*

"The number of pages in this book is literally infinite. No page is the first page, no page is the last. I don't know why they're numbered in this arbitrary way, but perhaps it's to give one to understand that the terms of an infinite series can be numbered in any way whatever."

(Borges, "The Book of Sand" 482)

Overview:

The computer has become ubiquitous in Western society, and html is its *lingua franca*. The code that allows for the creation of killer web pages, however, can also be used for more literary pursuits. Imagine the network of web pages linked to each other that comprises the World Wide Web. Each page contains information, and each page links to other pages that have *something* (usually) to do with what you "clicked on," to activate that hyperlink. Now imagine a novel or short story written this way. What you're imagining is called "hyperfiction."

For this Reading Response, you are to visit English Literature Professor Stuart Moulthrop's web site, and read a hyperfiction story included in the hypertext fiction of the site, entitled *Reagan Library*. The URL for the story is:

http://iat.ubalt.edu/moulthrop/hypertexts/rl/

Hypertext is a way of creating *linkages* instead of *linearity*. Instead of reading from word to word, sentence to sentence, and page to page, you must *choose* which hyperlink to activate, which "path" to take through the constellation of textual fragments that comprise the story. For this reason, reading hyperfiction can be quite confusing and frustrating. This is normal, and an important part of the aesthetic experience of reading hyperfiction.

Reagan Library is a narrative comprised of text and images. Each page has a piece of text, and a panoramic graphic depicting the "world" around you. You may click on the hyperlinked words or phrases in the text, or you may explore the panoramic image and click on the objects you see. Both navigational methods will move you through the text/world of *Reagan Library*.

This Reading Response has two parts: notes, and a written summary. In the first part, you are to take notes on at least the first 50 lexias you read. (A lexia is a "chunk" of the work, usually displayed by itself on the screen in hyperfiction.) Your notes should consist of four types of information: 1) lexia name; 2) link selected; 3) what you expected – or hoped – to find by choosing that link; and 4) how your expectations were either met or frustrated by choosing that link. You may record this information in any format you like, although something legible would be nice.

Part 1: The Four Types of Data

Lexia Name

Write down the name of the lexia you are currently reading. In *Reagan Library*, the lexia names are given in a colored strip to the left of the page. You may note, however, that some of the names are the same except for either the color of the

strip, or the color of the sky in the graphic, or both. Because of this, I suggest that you record the color of the strip (and, in the black strips, the color of the sky) along with the lexia name. Make a list of the first 50 (at least) lexias you read as you progress through and around *Reagan Library*.

Link Selected

Which link did you click on? In *Reagan Library* there are two different types of clickable links. You may click on: 1) underlined words or phrases in the lexias; or 2) the objects visible in the panoramic graphic. (You may zoom in toward the objects by pressing the SHIFT key, and zoom out by pressing the CTRL key.) Because your choices are important to the development of the story, I encourage you to think through your choices before you implement them.

Expectations

As you think through your reading experience, try asking yourself questions about your reading. What do you already know? What characters do you know? What do you know about them? What do you want to find out? What sounds interesting to you? The answers to these questions will tell you what your expectations are for each link/lexia.

Outcome

So? How did your link satisfy your expectations? Was the new lexia what you expected, or something completely different? What connections do you see between the lexia you just left, and the one you just arrived at? What is the author trying to say by connecting these two lexias? Is it what you expected?

Part 2: Reflection

This Reading Response is an attempt to get you thinking about *the ways we think when we read.* Because of this, expect it to be both hard and frustrating. But after your excellent work with Borges, I have confidence that you are up to the challenge.

For the reflection part of this response, I want you to write a prose narrative of your experience. Consider the following questions: *how* do you read; what are you *thinking* as you read; what things do you *do* as you read; which of these thoughts and actions help you to understand what you are reading, and which ones prevent you from getting it; what was the story/stories; how do these different stories/characters connect? Most importantly, *how did you figure out these connections?*

This part of the Reading Response should be the usual 1-page, single spaced.

Because of the difficulty of this Reading Response, I will assign bonus points to exceptional Responses. Specifically, in the first part, I will reward detailed descriptions of *why* you selected links and what the outcome was. In the second part, I will reward students who really attempt to engage with the material, its unconventional format, and the process of reading, in a thoughtful, reflective way. Why is the story being told in this form? What does that accomplish?

At the head of the assignment I included a brief passage from Jorge Luis Borges' short story, "The Book of Sand," which tells of an impossible book comprised of every book ever written and that ever would be read. The pages were, therefore, as infinite as the number of grains of sand. We had read the story immediately preceding our engagement with *Reagan Library*, so the notion of a fragmented, intertextual narrative was not entirely foreign to them. The epigraph was thus a suggestion of connections to be made between and among the various course works, but also a subtle reminder that though the assignment focused on one particular work, the students' experiences with other works and in other interpretive situations might be useful. Though I have no proof that epigrams, thus used, can help to reduce the compartmentalization of knowledge and experiences that modern education seems so adept at instilling in our students, I remain committed to the attempt.

The hyperfiction reading response was designed to accomplish a number of important interpretive goals. First, the assignment literally requires students to *navigate* at least fifty different lexias. The course is designed for lower division undergraduate students, and is a favorite with non-majors. These students, I worried, might simply shut down when faced with the interpretive requirements of Moulthrop's hypermedia work. The reading response provided a structure for navigating the work, which could, I hoped, be used as the basis for an insightful interpretation later. Second, the assignment asks students to become aware of their *actions* as they enact the work. The first part of the response is simply a table of data, recording the students' navigational progress through the work, their choices from the many linking options,

their expectations for those links, and the outcomes from those choices. By writing down this data, the students gain a tangible artifact of their enactment, an artifact that can be searched later for patterns as part of the second half of the assignment, the reflection. The third goal of the assignment is to make students aware not only that reading and enacting are active processes, but that they make *choices* throughout their enactment. Every time an enactor is presented with more than one linking option, she is required to evaluate her options and to select the option which seems most likely to lead to the satisfaction of her needs. This is an extremely complex set of interpretive acts, and yet our students do it every time they surf the Internet. This aspect of the assignment attempts to make this connection of skills and habits explicit and visible to the students, so that they may feel confident in their abilities, even though the abilities are being called upon in an unfamiliar setting. The fourth goal of the assignment is to make the worldconstruction inherent in conformation visible to my students. By asking them to formulate a rationale for their choices and then to record those rationales, I am asking my students to verbalize their own processes of world-creation. Each link choice represents a hypothesis about the world of the work. By then asking the students to evaluate the outcomes of those link choices, I am asking them to consciously measure the accuracy of those hypotheses.

The explanation of my hyperfiction reading assignment, however, sounds far more painful and complicated than its actual performance. The fragmented nature of hyperfiction requires enactors to make decisions about navigation the work, just as fragmented paper-bound works do. The substantial difference lies in the nature of the digital work, which may actively prevent the enactor from pursuing navigational paths unless they have been constructed explicitly by the composer. In Julio Cortázar's *Hopscotch*, Milorad Pavić's *Dictionary of the Khazars*, or Marc Saporta's *Composition No. 1*, for instance, the enactor has the power to move

to whatever page she wishes at any time. This does not obviate the need for, or the desirability of, understanding her navigational choices, but it means that the nature of the enactor's choices may differ substantially. While the enactor of *Hopscotch* might decide to hop to another chapter because she is tiring of the plot lines of the present chapter, the enactor of *Reagan Library* has only the choices made possible by Moulthrop's composing and coding of the work. Thus, in the hyperfiction reading assignment, the students must engage interpretively with the choices presented by the composer, and so must interpret from within the constraints set by the composer.

After completing the fifty-lexia requirement for the enactment log, the students are then asked to reflect on the process and on their own actions and patterns of navigation and interpretation. This reflection is often the start of a very productive interpretation of both the hyperfiction work and the enactor's own interpretive style and skills. The hyperfiction reading response asks students to think of interpretation as something that happens constantly during enactment, rather than as a "conclusion" one reaches after finishing reading the work. In hyperfiction works, this is a crucial perspective to adopt, as the web-like structure of lexias and links means that, for most works, there literally *is* no end of the work – an enterprising (and tireless) enactor could continue to select links indefinitely without reaching a terminus. The reflection, then, becomes a provisional conclusion, a contingent stopping place from which to evaluate the meta-interpretive progress and process of the enactor, regardless of whether the enactor has achieved a sense of narrative closure. Many hyperfictions, *Reagan Library* included, seem to actively prevent just that sense of narrative closure, but perhaps none more famously – or more successfully – than Michael Joyce's *Afternoon, A Story*.

3.1.4. An Agonizing Afternoon

In his book, *Of Two Minds: Hypertext Pedagogy and Poetics*, Michael Joyce explains the impetus behind *Afternoon*, writing that:

What I really wanted to do, I discovered, was not merely to move a paragraph from page 265 to page 7 but to do so almost endlessly. I wanted, quite simply, to write a novel that would change in successive readings and to make those changing versions according to the connections that I had for some time naturally discovered in the process of writing and that I wanted my readers to share. (31)

This desire led Joyce to collaborate with Jay David Bolter to create the Storyspace hypertext authoring system, and to compose *Afternoon*, *A Story*, the first Storyspace hyperfiction. In *Afternoon*, Peter, our protagonist, tells us: "I want to say I may have seen my son die this morning" ("I want to say").³⁵ The first lexia in the work, though, gives little sign of this impending morbid turn of events. Figure 2 shows the first lexia in *Afternoon*, titled simply "begin."

³⁵ In *Afternoon*, as in *Reagan Library*, citation is challenging. I will provide the name of the lexia from which all passages from *Afternoon* have been excerpted. This passage, for instance, is the entire text contained in the lexia "I want to say."

📓 Afternoon, a story - [begin]	_ 🗆 🗙
📓 Elle Edit Storyspace Navigate Bookmark Windows Help	_ 8 ×
I try to recall winter. < As if it were yesterday? > she says, but I do not signify one way or another. By five the sun sets and the afternoon melt freezes again across the blacktop into crystal octopi and palms of ice rivers and continents beset by fear, and we walk out to the car, the snow moaning beneath our boots and the oaks exploding in series along the fenceline on the horizon, the shrapnel settling like relics, the echoing thundering off far ice. This was the essence of wood, these fragments say. And this darkness is air.	
< Poetry > she says, without emotion, one way or another.	
Do you want to hear about it?	
YN Links History	
	ļ

Figure 2: Afternoon, A Story's first lexia.

Unlike *Reagan Library*, *Afternoon* was composed in the Storyspace program, and requires the Storyspace viewer to be displayed. In Figure 2, the gray frames around the prose text are the Storyspace viewer program. "Begin" presents its own difficulties – who is the "T" and who is the "she?" What is the relationship between these two people? What is the gender of the "1?" What are they talking about? What relationship does this have to anything else in the work? When does this dialog occur within the chronology of the narrative? In a traditional narrative, simply plugging along through the pages of the work might be expected to lead to enlightenment. In a hyperfiction, however, because the enactor is required to make a choice, to select a word or phrase to link from, these questions gain greater significance *in and of themselves*. Interpreting the first lexia, in other words, is an exercise in *micro-analyzation*, one that has no recourse to macro-analyzation, or to any of the other elements of conformation. Even so, the enactor cannot

help but begin to form hypotheses about the world of the work composed by Joyce, and her choices will – she hopes – prove those guesses and inferences to be correct.

"Begin" also includes second-person address, as does Calvino's work. At the end of the lexia, the narrator asks, "Do you want to hear about it?" It is unclear to whom the narrator is speaking, whether to the "she" or to the reader, but the reader has a way of responding that is impossible in *If on a winter's night a traveler*: at the bottom of the screen, on the left side, are two buttons marked "Y" and "N." Should the enactor click on the "Y" button, she would be taken to a lexia named "yes," and should she click "N," she would be taken to "no." The buttons at the bottom, then, seem to form a feedback loop with the (not so) rhetorical question in the first lexia, allowing the enactor another set of navigational options for progressing through the work.

Afternoon also includes a button at the bottom center of the window marked "Links," which, if clicked, shows a table of all of the possible links from the present lexia, listed by the link "path," the destination of the link path, and the "guard field" restricting the enactor's navigation along that path. There are twenty paths from "begin," but not all of them are accessible the first time through this lexia, because Joyce has installed "guard fields" that will redirect or make inoperable certain links until the enactor has visited certain other lexias. Every word displayed in the text is a possible link. Most words in "begin" link to "I want to say," which reveals the dramatic tension in the narrative – the possible death of the narrator's son. In another example of the *post hoc propter hoc* logical fallacy first discussed in relation to the Kuleshov effect, "I want to say I may have seen my son die this morning" appears to answer the narrator's efforts to "recall winter" make that interpretation unlikely upon close examination. In any case, the sparseness of the "I want to say" lexia gives the enactor a narrative purpose, a goal

toward which she will attempt to move – namely, determining whether the narrator's son really did die.

Unfortunately, the narrator, Peter, is deeply, profoundly ambivalent: he is desperate to find out what happened, if anything; and he is terrified of learning that his suspicions are correct. These conflicting motivations are structurally represented in the work by the linking structure and the guard fields, which prevent the enactor from reaching a lexia that may prove conclusive one way or another until she has first visited a great number of the lexias. Jane Yellowlees Douglas, perhaps the greatest critical authority on Afternoon, writes that there are 539 lexias in Afternoon, and that those are connected by 905 links (End of Books 96). Douglas identifies the lexia "white afternoon" as the key to unlocking the riddle of the potentially deceased progeny, but as she notes, "it is reached only after a lengthy visitation of fifty-seven narrative places [...] 'white afternoon' represents the furthest reaches of the physical spaces within *Afternoon*, the textual equivalent of a basement - or the end of a novel" (End of Books 106). Reaching "white afternoon" is the enactor's quest, much as assembling a completed narrative is the quest of the Reader in If on a winter's night a traveler. But knowing which 57 lexias in Afternoon collectively lower the guard field surrounding "white afternoon," and being able to navigate through the 539-lexia work to reach those lexias *in order*, is a task far beyond the scope of my students' hypertext reading assignment, which only requires navigation through 50 lexias. It may be a task beyond the patience and interpretive powers of many enactors who come to the work, which means that many interpretations of the work will, of necessity, be forced to struggle without this missing answer to the central narrative concern. In *Traveler*, Calvino continually distracts the reader (and the Reader) with new narratives, and in Afternoon, Joyce erects barriers between the enactor and her target. Both works prevent, or at least postpone, any sort of traditional narrative closure and the reader's satisfaction that such resolution brings. These forms of delayed narrative gratification lead to the stress and frustration of feeling trapped in a game you cannot win because the rules are known only to the one who composed the ludic work.

3.2. POWER PLAYS AND POWER PLAYERS AT THE GODGAME

In 1940, David W. Maurer published *The Big Con: The Story of the Confidence Man*, now considered the classic work on the language and scams of the con game. In the book, Maurer explains the tricks of the confidence game, and produces a fascinating journalistic work of a thriving criminal culture. After describing several important genres of confidence game, Maurer pauses to consider the fallacious, but widespread, "feeling among legitimate folk that anyone who is the victim of a confidence game is a numskull." Quite the opposite, we are told, is the case. Maurer explains that "the higher a mark's intelligence, the quicker he sees through the deal directly to his own advantage" (103). The mark – the victim of a confidence game – is presented with a scenario that promises to reward the mark handsomely for his participation and cooperation in some scheme. Frequently, the mark is led to believe that the scheme will produce greater profit for the mark than for the con artist who proposes it, though that is never made explicit. Instead, the perspicacious mark will analyze the situation, realize the asymmetrical rewards to be gained, and agree to play the game.³⁶

³⁶ Currently, a number of e-mails are circulating online, all of which purport to have been sent by exiled civil servants, or the adult children of government officials, from various countries in Africa. The e-mails inform their recipients that the government official has collected a large sum of money (usually in the tens or hundreds of millions of US dollars), and would like to transfer this money to a safe bank account – such as yours – for safe keeping until some trouble/civil war/natural disaster has abated. This rather sloppy confidence game attempts to prey upon the recipient's desire to take the money and run, but of course once the recipient provides a bank account, the transfer of funds likely would proceed in the opposite direction. It goes without saying that the classic confidence games, while following the same general

When a skilled confidence artist plies his or her "trade," the lies of the game form a coherent, self-sufficient, and altogether plausible alternate reality in which the mark becomes trapped. As Maurer describes the phenomenon, "The mark is thrown into an unreal world which very closely resembles real life; like the spectator regarding the life groups in a museum of natural history, he cannot tell where the real scene merges into the background" (103-104). The confidence artist depends on the eagerness and greed of the mark to obscure the seams and holes in the game narrative. In his or her zeal to take advantage of the "naïve" confidence artist, the mark neglects to question the game's fictions – such questioning may prevent the mark from participating in the game before the opportunity passes, or else it may offend the con artist, who will take the opportunity elsewhere. As Maurer concludes, "it is not intelligence but integrity which determines whether or not a man is a good mark" (104). A mark with high integrity will not be willing to take advantage of the situation or of the confidence artist, and thus cannot be victimized by the artist.

The confidence game depends upon a foundational narrative, a rhetorical world-situation which is able to be mistaken for the real world. This world is composed by, and controlled by, the confidence artist – the mark is simply a tourist in the con game's environment. Everything the mark sees, hears, and does – while in the world of the game – is determined by the artist. The mark's thoughts, of course, are independent of this, but the game manipulates the mark into reaching certain conclusions and forming certain plans, as the con depends on the self-interest and the carefully directed "initiative" of the mark.

This section explores the trope of the literary godgame, another situation in which a controlling entity subjects a victim to a specially-composed world-narrative to achieve an ulterior

principles, were more complex and more plausible. Digital artist Ze Frank has recorded a humorous video of himself performing (reading aloud while being videotaped) one such con game e-mail, complete with the typographical errors endemic to these e-mails. Frank's video may be accessed online at http://www.zefrank.com/request/>.

purpose. The term "godgame" was coined by English novelist John Fowles in his novel, *The Magus*. Lest the comparison to the confidence game leave the wrong impression, the godgame is not always malicious. It does not always culminate in the victim's loss of something precious. And finally, as Maurer insists, the comparison need not be considered slanderous to writers; "Of all the *grifters*," Maurer writes, "the confidence man is the aristocrat" (1, emphasis in original). The skill, finesse, and rhetorical prowess of the confidence artist are formidable and, at their best, provide a not inconceivable role model for authors interested in honing their craft. For, what is narrative, but a collection of lies told so persuasively that the reader is able *and willing* to accept it as real while she reads?

3.2.1. The Literary Godgame

In his novel *The Magus*, John Fowles tells the story of aimless young Englishman Nicholas Urfe, who accepts a job teaching English at a school in the Greek islands. While in Greece, Urfe meets the wealthy and reclusive Maurice Conchis, who systematically subjects Urfe to a series of increasingly bizarre, disturbing, and sexual situations with a cast of actors playing different roles in Conchis' tableaux. Urfe is fascinated by the scenario and sexually infatuated with one of the female players, and so continues to return to Bourani, Conchis' villa, at every opportunity. Eventually, as the lies, performances, and stakes grow increasingly more serious, Urfe is forced to preside in a sort of courtroom trial as judge of Conchis and the others. The trial, of course, is actually a test of Urfe, to see whether the events at Bourani have had an effect on the feckless Englishman.

At the beginning of this chapter, I included a short interchange between Urfe and Mrs. Lily de Seitas, one of Conchis' associates in the dramatic affairs at Bourani. In the passage quoted, de Seitas explains the term employed by herself and Conchis to describe the experiences provided for Urfe – a *godgame*, because, as de Seitas archly notes, "there is no God, and it is not a game" (637). Fowles' use of the term is new, though the concept, and its use as a literary trope, is not. Postmodernist theorist Robert Rawdon Wilson defines the godgame as:

a specific class of illusions that, while strongly characteristic of modernity, does not spring from the experience of this bewildering century. [...] a precise mode of illusion in which one person (or several) is made a victim by another person's superior knowledge and power. Caught in a cunningly constructed web of appearances, the victim, who finds the illusion impenetrable, is observed and his behavior is judged. ("Spooking Oedipa" 187)

The trope of the godgame is essentially providential, and hence, as the name implies, a borrowing from the theological origins of hermeneutics. In attempting to understand the patterns and plans of Creation, the notion of Providence is employed to justify the existence of evil and the experience of suffering.³⁷ Pain and injustice are part of God's plan, it is asserted, and thus, eventually, they result in goodness – as the Plan is good, and as Creation itself is, essentially, good. In the absence of an active and visible God, as in any such vacuum of power and authority, a lower-case god will act.

The godgame, like the theological concept of Providence, has four main components: a god, a subject, a testing game, and the observation and evaluation of the subject, who is expected, throughout the godgame, to struggle. This suffering is due, in part, to the subject's

³⁷ In the Judeo-Christian tradition, the notion of Providence recurs throughout scripture. In the Hebrew Testament, for instance, Deuteronomy 29:29 states: "The secret things belong to the LORD our God: but the things revealed belong to us and to our children forever, that we may observe all the words of the law." The Christian Testament, in Romans 8:28, expands upon that theme, asserting that "We know that God causes all things to work together for good to those who love God, to those who are called according to His purpose." Both verses express the ineffability of the theistic Plan, and attempt to rationalize human adherence to that Plan through the notion that, in theological terms, *it is all for the best*. All Biblical verses in this chapter are taken from the Revised Standard Version.

"attempts to think his way out or through (that is, discover the rules)" of the game ("Spooking Oedipa 187). By the end of the game, as in life, the trials and tribulations of the game are generally expected to result in the purification – or, at least, the edification – of the subject. As Ernst von Glaserfeld notes, the godgame in *The Magus* constitutes "a novel kind of therapy," whose "purpose is to awaken, to change attitudes and ideas, and, ultimately, to install what I would call wisdom" ("Reflections" 445). As a literary device, the godgame leads to the growth of the protagonist – through the protagonist's suffering, development occurs and the narrative concludes with the protagonist facing the world as a stronger, more self-aware individual. In *The Magus*, however, this is not the case.

Fowles' book easily could be considered a tragedy in the classic sense, as the inveterate callowness of Nicholas Urfe prevents him from accomplishing anything more than realizing his own weaknesses and flaws. Before the trial, Urfe is placed in a cell with an enormous mural of a gigantic figure painted all in black, sprawled across either a field of grass or a bed of fire. The giant points to a small mirror that has been hung on the wall of the cell. Fowles writes Urfe's reaction to the image: "A gaunt hand pointed down to a little mirror hanging on the wall; exhorting me, I supposed, to look at myself, to consider that I must die" (499). For Urfe, a specialist in literature and the humanities, the only interpretation for the dark figure is the cliché of the skeleton, and the mirror is only a reminder of his own mortality. The simple and profound interpretation – that the figure represents the pain and suffering of *life*, and that the mirror is an exhortation to *self-reflection* – is lost on Urfe, who seems incapable of all but the most superficial self-awareness. Earlier, Conchis dismisses Urfe with the following words, doomed never to be heeded: "You had your chance. I suggest you reflect on what it is in you that caused you to miss it" (454). For Urfe is incapable of seeing beyond the moment, and especially of

seeing beyond his own, narrowly-construed self-interest. During the trial, one of the players reads a blisteringly harsh and mortifyingly accurate psychological portrait of Urfe and his shortcomings. Urfe's response: "There was some truth in what she was saying. But I knew nothing could justify such a public analysis, even if it were true" (519). The mirror in his cell, the heightened drama of the situation, which he acknowledges – all of this is insufficient to cause Urfe to rise above his usual myopia to see the need for true self-reflection and change. In the tragic sense, it is his own lack of depth that causes Urfe to miss every opportunity to learn about himself and to reform his own deep insignificance.

At the novel's end, Urfe's *hamartia* leads him to strike his former girlfriend, Alison, rather than begging her forgiveness and acceptance. Though he had betrayed Alison numerous times at Bourani, Urfe expects her to beg him for forgiveness now that he has returned from Greece. When she does not, Fowles writes, "My arm flicked out and slapped her left cheek as hard as it could. The blow caught her completely by surprise, nearly knocked her off balance, and her eyes blinked with the shock, then very slowly she put her left hand to the cheek" (666). The pedagogical, and sometimes sadistic dramas at Bourani should have encouraged Urfe to reexamine his life. Instead, he is only able to realize his own inadequacy, but without the necessary action of rectifying that lack (667).³⁸ Earlier in the novel, Urfe challenges Conchis' right to play god, asking "What makes you so sure you know my real self?" Conchis responds, "I do not claim that. My decision is based on the certain knowledge that you are incapable of knowing it yourself" (447). The closest Urfe comes to knowing himself is through analogy to an apocryphal tale of Marie Antoinette and the French Revolution. As the peasants storm

³⁸ I stand by my interpretation of *The Magus* as classical tragedy, as I think it the most plausible explanation for the failure of the godgame. However, a more provocative reading of the work suggests itself. If we agree with Ralph Berets, that the godgame was successful in enabling "an 'elect' individual to impose a meaningful pattern on his existence" (90), a reading supported by a passage in Fowles' text (540), then we are left with a terrifying, and harshly misogynistic, portrait of the Godless world, and those in it chosen to be elect. For in this version of the tale, Nicholas Urfe is not a failure, but is cleansed and sanctified, to carry on his aimless wanderings, absolved of all injuries caused along the way.

Versailles, a butcher, meat cleaver in hand, bursts into the royal apartments and finds the queen standing by a window. Rather than hacking her to bits, he falls to his knees in tears. Urfe tells this story to Lily de Seitas, whose response is "Poor butcher" (642). Urfe affirms that he believes that was Antoinette's response, as well. Urfe knows that he is engaged in an asymmetrical power struggle, and yet he is unable to get up off his knees and ennoble himself, to take his destiny in hand and overthrow the old regime of his life. The godgame ends in tragedy, and the chosen/created/elect is left abject and fallen.

Most literary godgames, however, are resolved more affirmatively. The classic medieval romance, *Sir Gawain and the Green Knight*, for instance, is structured around a clear godgame – the chivalric testing of the knights of King Arthur's court. It is Christmas at Camelot, and the festivities are interrupted by the intrusion of an enormous green apparition – a knight on horseback – who challenges anyone of the court to a beheading. The responding knight will attempt to decapitate the Green Knight and, should the Green Knight survive, in a year's time, the Green Knight will have the opportunity to return the blow. The knights quail before the size and ferocity of the Green Knight, and only Sir Gawain is brave enough to defend the King's honor by responding. He cleanly severs the Green Knight's head from his neck, whereupon the Knight picks up his head, reminds Gawain that he is now obligated to find the Green Chapel in one year's time to receive a similar blow, and rides from Arthur's hall.

Gawain sets forth on his own quest to locate the mysterious Green Chapel, and comes upon a wondrous castle in the middle of a forest green. The lord of the castle bids him to stay and hunt with them, and the lady of the castle – a beautiful and seductive woman – bids Gawain to lie with her. Gawain enjoys his host's hospitality, and refrains from succumbing to the lady's charms, though he does kiss her twice, and receives from her a beautiful green silk scarf to wear as her charm. At New Years, the lord of the castle provides a servant to show Gawain the way to the Green Chapel. Gawain prepares himself for his certain demise, but it does not come. The giant Green Knight merely feints at Gawain twice, and when Gawain flinches, he scratches Gawain's neck with his enormous axe on his third attempt. The challenge is thus concluded with nothing more than a flesh wound suffered by Sir Gawain.

All is not as it appears, however. The Green Knight informs Gawain that the three attempts he made with his axe were repayment for liberties taken by Gawain, for "True men pay what they owe" (2354, 49).³⁹ As he later explains, the blows were in response to Gawain's actions at the castle:

For that is my belt around you, that same braided girdle, My wife it was that wore it; I know well the tale, And the count of your kisses and your conduct too, And the wooing of my wife – it was all my scheme! She made trial of a man most faultless by far Of all that ever walked over the wide earth; As pearls to white peas, more precious and prized, So is Gawain, in good faith, to other gay knights. (2358-2365, 49)

The Green Knight, in truth Sir Bercilak de Hautdesert, used the magic of Morgan le Fay, halfsister to King Arthur and a noted sorceress, to effect his headless performance at Arthur's court. He later tested Gawain through feats of hunting and of chivalric restraint (through the truly clever advances of Lady de Hautdesert) – a godgame which Gawain passed, as evidenced by his survival. Gawain, shamed by the discovery of his (admittedly mild) dalliances with the (extremely forward) Lady de Hautdesert, offers to return the green silk to its rightful owner, but Bercilak refuses, noting that it will serve to remind Gawain of his frailty and encourage his humility, and thus should remain with the imperfect, but honorable, knight. Gawain responds:

But your girdle, God love you! I gladly shall take

³⁹ I will cite to passages from *Gawain* by line number as well as page number from the Boroff translation. Hence, the passage on repayment cited as (2354, 49) – is from line 2354, on page 49 of Boroff's translation.

And be pleased to possess, not for the pure gold, Nor the bright belt itself, nor the beauteous pendants, Nor for wealth, nor worldly state, nor workmanship fine, But a sign of excess it shall seem oftentimes When I ride in renown, and remember with shame The faults and the frailty of the flesh perverse, How its tenderness entices the foul taste of sin; And so when praise and high prowess have pleased my heart, A look at this love-lace will lower my pride. (2429-2438, 51)

With this speech, Gawain proves his success in the godgame – he has not only acquitted himself admirably (by refusing Lady de Hautdesert's forceful advances), but has learned a valuable and chivalric lesson from the experience, a lesson he is not too proud to recount to his tutor in the game, the Green Knight (who is, of course, Bercilak de Hautdesert magically disguised).

In *Sir Gawain and the Green Knight*, as in *The Magus*, the godgame's "god" is a central figure in the narrative. Bercilak de Hautdesert and Maurice Conchis are main characters in their respective narratives, and are able to interact with their subjects throughout their stories. In *The Crying of Lot 49*, however, Thomas Pynchon introduces a *deus absconditus* to the godgame – a god who has absconded from the scene of the game – the deceased Pierce Inverarity. Inverarity, a California technology and manufacturing magnate, dies and makes Oedipa Maas, with whom he had a brief affair years before, the executrix of his estate. In her attempts to settle Inverarity's estate, Maas stumbles upon a massive conspiracy involving the Trystero, an ancient organization devoted to destroying postal operations. Maas discovers an independent European postal system, Thurn and Taxis, which held "a postal monopoly throughout most of the Holy Roman Empire," but which was destroyed utterly by the anti-governmental force of the Trystero (*Crying* 66). This heretofore unknown bit of world history is not merely historical, as Maas begins to suspect that the Trystero is still in operation, maintaining an underground postal system marked by the acronym W.A.S.T.E. – "We Await Silent Trystero's Empire," usually scrawled on trash cans

doubling as drop boxes – and that Pierce Inverarity had discovered the Trystero's secret before his death (169). By the end of the novel, Maas has embraced her descent down the rabbit hole, and lies in wait at an auction of Inverarity's effects; the bidders for a set of Trystero stamps, she believes, will be members of the present-day Trystero, and her suspicions will be confirmed.

One of the novel's characters asks Maas, near the end of the novel, whether she should not view the entire W.A.S.T.E. conspiracy as a giant game, asking: "Has it ever occurred to you, Oedipa, that somebody's putting you on? That this is all a hoax, maybe something Inverarity set up before he died?" (167). But Maas refuses to discount what she herself has seen – appearance and perception trump the commonly agreed-upon reality. As she notes, "With her own eyes, she had verified a WASTE system: seen two WASTE postmen, a WASTE mailbox, WASTE stamps, WASTE cancellations. And the image of the muted post horn [the Trystero's icon] all but saturating the Bay Area" (132).40 Though the Trystero's shadowy past and secretive present suggest only a minor digression from common reality, it is enough to upset Maas' balance in life. Her pursuit of the secret W.A.S.T.E. system, as well as her resolution to find the Trystero, mark her successful completion of the godgame set for her by her former lover, Pierce Inverarity. Pynchon signals her passage through the testing of the godgame by noting that, by the last pages of the novel, Maas now possesses, in the immortal words of Janis Joplin, "the courage you find you have when there is nothing more to lose," which allows her to stake out the forged W.A.S.T.E. stamps to be auctioned as lot 49 (182). The novel ends with Maas' initiation into a world of shadowy groups, secret agents, and much activity sub rasa. The auctioneer, Passerine, "spread his arms in a gesture that seemed to belong to the priesthood of some remote culture;

⁴⁰ At this point in the novel, Maas has only seen the initials, and does not realize they are an acronym. Hence, the lack of periods between the letters.

perhaps to a descending angel. The auctioneer cleared his throat. Oedipa settled back, to await the crying of lot 49" (183).

3.2.2. Playing the Mark: The Ludic Work and the Meta-Literary Godgame

In confidence games, and in illusionism, the trick is focusing the mark's (or the audience's) attention away from where the action is really occurring. In the confidence game, the mark's interest is piqued by the risk to the con artist, not to himself. In prestidigitation and other feats of "magical" illusion, the magician keeps the audience focused on the front of a box, while his assistant has disappeared from its false back. The literary godgame is much the same. While the reader's attention is focused on the skill and psychological insight of the narrative's god figure, the real work is being performed by the narrative's composer. For it is much easier to *write* a godgame than to *stage* one, and yet every masterful godgame in literature owes its existence to a masterful composer able to analyze the psychology of his subject and construct a game difficult enough to test and transform the subject without destroying the subject in the process.

Whether the god is an active character in the narrative (as in *The Magus* and *Sir Gawain and the Green Knight*) or an absconded deity (as in *The Crying of Lot 49*), the composer is the real genius – devising and constructing game worlds within the world of the work that retain their intelligibility and conformability by readers.⁴¹

But once we begin to consider the author behind a godgame narrative, we begin to wonder where the boundaries of the godgame lie. Robert Rawdon Wilson argues that the godgame is universal because it expresses an archetypal human fear: "Beneath every literary

⁴¹ Of course, godgames occur throughout narrative. Though I discuss only literary godgames in this chapter, there are many notable filmic godgames, such as *The Wizard of Oz, The Game, Willy Wonka and the Chocolate Factory*, and *The Silence of the Lambs*, to name but a few.

godgame there lies a situation that recalls (while evoking the appropriate feelings) the common human intuition of being made a victim, a scapegoat, or a sacrifice, and of being deluded by someone, by a *they* set over and against oneself" ("Spooking Oedipa" 203). When Nicholas Urfe is snared by the lures of Maurice Conchis, and Sir Gawain by the bounties of Bercilak de Hautdesert, and Oedipa Maas by the weird systems of power revealed by Pierce Inverarity's empire, we empathize with these characters, because we know the feeling of being taken advantage of by superior force, resources, or intellect. And we note the seductive quality of the godgame – who would refuse the special attention and lures of a psycho-sexual adventure designed specifically for themselves?

If we reduce the literary godgame to its constituent elements, we are left with a god (the composer of an alternate "game" world), a subject (who will be asked to interpret that world and to interact with it in substantive ways), a series of tests (difficult or ambiguous elements and activities in the composed world requiring interpretation and intervention by the subject), and an opportunity for growth or development by the godgame's subject (the resonance between the conformed world and the interpreter's world, and the adaptation and evolution of the interpreter's world caused by that resonance). The comparison to reading and interpreting in general is clear – the literary godgame is a instantiation in narrative of the phenomenon of reading in general.⁴² And if all readers are engaging in a godgame with an absconded deity – as in Pynchon's *The Crying of Lot 49* – then the frustrations and obstacles to our enactments of Calvino's *If on a winter's night a traveler* and Joyce's *Afternoon, A Story* fit into a larger pattern,

⁴² Wilson, whose work on godgames is central to my thesis here, rejects this claim in a 1981 article. Wilson writes, "It may be that the author can be said to play a game [. . .] in writing. That would not be to grant the fundamental assertion that *all* literary works are games (or have 'gamelike' structures) but it would admit that the creative playfulness of literary creation may take the shape of a game" ("Three Prolusions" 87). To this I reply that some games are deadly serious, and that all *interpretation*, as Hans-Georg Gadamer reminds us, occurs as play between the work and the interpreter (*TM* 101-134). Thus, it is not necessary to assert that the literary work *qua* literature is a game to note the game-like dynamic of literary interpretation.

a more productive model than merely the sadistic whims of two particular postmodern authors. But if this is the case, then what are we to make of the rules of the (god)games we are being asked to play in *Traveler* and *Afternoon*? As Wilson notes, "The victim of a godgame finds himself in the bewildering necessity of having to think himself out of a context that he cannot understand" ("Godgames" 7). With the greater time and resources available to readers (as compared with the constrained time and resources available to *characters* caught in godgames), what can we determine about the nature of the labyrinth we find ourselves in when we attempt to enact each work? How do we make sense of the rules of the game, and how can we teach these skills to our students?

3.3. IN THE LABYRINTH

Maze or labyrinth – we may suspect that one involves multiple paths, and the other a highly circuitous single path, but which is which? The common perception of difference between the two terms is the first misdirection we will encounter in our exploration of the labyrinth. Penelope Reed Doob and Craig Wright, in their landmark studies of mazes in history and culture, agree that "the words have different etymologies but mean the same thing" (Doob 1). Indeed, "there is no difference between the two," either in contemporary usage or in their earliest references (Wright 4 *et passim*). *Labyrinth* is the older term, and Wright notes the similarity between the word and the Greek *labrys* – the double-headed axe, which structurally resembles the ancient labyrinths recorded in murals and illustrations (4). Doob, on the other hand, argues that the word derives from the Latin *labor* and *intus*, labor and in-ness. She writes: "The key word in almost all medieval etymologies [of 'labyrinth'] is *labor*, with all its connotations of

difficulty." She explains that, "etymologically speaking, then, the labyrinth is a process involving internal difficulty (or error, or artistry, or fatiguing effort); and what happens inside is more important than whether it is hard to get in or out" (97). Perhaps fittingly, the uncertainty over the origins of labyrinth are mirrored in the etymology of *maze*. Doob explains that "The English *mase*, of uncertain origin, also stresses difficult process, annoyance, confusion," but "whatever its roots, the word enters Middle English with Old English *amasod*, 'astonished, bewildered'" (98). In English usage the two words, maze and labyrinth, come to mean the same thing "by a kind of metonymy, the effect giving its name to the cause." This linguistic operation is possible because of "the confusion and bewilderment common to both: if a mazed man is confused or deluded and a labyrinth confuses and deceives, then a labyrinth is a maze" (Doob 98-99).

Jorge Luis Borges, in his story "The Two Kings and the Two Labyrinths," tells the tale of two kings – "the king of the Arabs" and "the King of the isles of Babylonia." The Babylonian king constructed "a labyrinth so confused and so subtle that the most prudent men would not venture to enter it" (263). While on a visit, the king of the Arabs was invited into the maze, whereupon he wandered, lost and humiliated. The king of the Arabs prayed to Allah, who showed him the door out of the monstrous maze. The vengeful king of the Arabs then conquered Babylonia and captured its king. The king of Babylonia was taken three days' journey into the desert, where he was released. The Arabian king announced:

In Babylonia didst thou attempt to make me lose my way in a labyrinth of brass with many stairways, doors, and walls; now the Powerful One has seen fit to allow me to show thee mine, which has no stairways to climb, nor doors to force, nor wearying galleries to wander through, nor walls to impede thy passage. (263) Of course, released in the middle of the desert, the Babylonian king "died of hunger and thirst," a victim of a far more cunning maze (264).

This section will examine *multicursal* mazes – those with multiple paths – and *unicursal* mazes – those with only a single path. In the first chapter, I briefly discussed the problems enactors have when they attempt to orient themselves among the multitude of lexias in a hypertextual narrative. The experience is often described as being lost in a maze, unable to reach either the center or exit. In this chapter, we shall look at the *experience* of the maze, and the ways in which being *amazod* by a narrative can (and cannot) truthfully and productively cause the narrative itself to be metaphorized as a type of maze.

3.3.1. Turning in the Gyre: Experiencing Unicursal Mazes

The unicursal maze is the oldest type of maze invented by humans. Figure 3 shows a diagram of the unicursal maze inlaid into the stones of the floor of the cathedral at Chartres, France.

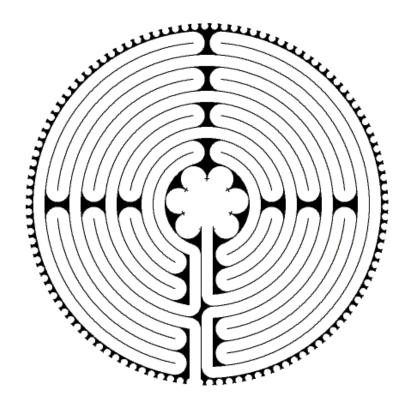


Figure 3: The unicursal maze at Chartres, France.

Penelope Reed Doob succinctly describes unicursal mazes as creating "the most circuitous route conceivable within any given space, the longest possible way to get to the center" (48). The unicursal maze at Chartres, for instance, requires its visitors to travel over nearly the entire area of the maze to reach the center. During that long walk, the visitor is sent through thirty-four turns, spiraling sometimes nearer and sometimes farther away from the center before reaching the final path into the middle of the maze. What is most surprising about the unicursal maze, however, is it was the ancient world's only model. Doob notes that:

What is most important for present purposes is that, except for one fresco at Knossos, unknown from 1400 B.C. until Sir Arthur Evans's excavations, and a wall labyrinth (only vaguely multicursal) at Poitiers dating from the twelfth century, all classical and medieval mazes share a remarkable characteristic: *they are unicursal, with no forked paths or internal choices to be seen.* (40, emphasis in original)

Thus, the labyrinth in the myth of Theseus and the Minotaur, for instance, was created with a unicursal maze in mind. Umberto Eco, in his book, *Semiotics and the Philosophy of Language*, points out that "Theseus entering the labyrinth of Crete had no choices to make: he could not but reach the center, and from the center the way out" (80). The single path of a unicursal maze leads inexorably to the center of the maze, but once at the center, the maze-walker must turn around and follow the path back out again, traversing the length of the maze twice. The adventure may be tiring, but it is hardly life threatening. The narrative implications and contradictions from this fact are startling and disturbing, but Eco attempts to rectify our understanding of the myth by noting that "That is the reason by which at the center there was the Minotaur, to make the whole thing a little more exciting. [...] In this kind of labyrinth the Ariadne thread is useless, since one *cannot* get lost: the labyrinth itself is an Ariadne thread" (80, emphasis in original).⁴³ In a unicursal maze, the maze itself may be devastatingly complex and "amazing," but it cannot prevent the determined traveler from ultimately reaching its center, and then its entrance/exit again simply by following the only path available.

Craig Wright, examining the uses and meanings of mazes in myth and culture, notes that "Mazes which have a path to the center also have something more: someone on that path [...] The name of this warrior may change, but he is inseparable from the maze. Every myth needs a hero" (4). The Cretan labyrinth's power of amazement is legendary, but more famous yet are Theseus and Daedalus, the hero and inventor of the maze. Outside of myth and legend, the unicursal maze requires only perseverance to solve, though the solution may well leave the maze's hero disoriented and thoroughly amazed.

⁴³ In *The Metamorphoses*, Ovid is far less concerned with Theseus' act of bravery than he is with Ariadne's betrayal by Theseus and her transformation into stars by Bacchus. In Ovid's telling of the tale, Daedalus and his son Icarus were not imprisoned in the labyrinth, either. Rather, their flight from Crete was to escape their exile on the island. As Eco writes, the Cretan maze is fearsome only because of the monster at its center, and though "as one entered it, only a wary mind/ Could find an exit to the world again," it does *not* possess the power to amaze and befuddle its creator, as is sometimes recounted. (*Metamorphoses* Book VIII, 220.)

3.3.2. Testing the Reader's Faith: Calvino's Unicursal Labyrinth

The maze in the cathedral at Chartres is, as all of the cathedral mazes are, a peculiarly trying form of labyrinth. We expect a maze to present us with high walls, our vision limited to only the path immediately before and behind us, but the floor labyrinths, inlaid in the stone, provide only a path for the maze-walker's feet. The center remains always visible, and yet kept out of reach. Each turn inward promises access to the goal, and yet all of the first thirty-three turns eventually lead away from the sought-after center. Calvino's *If on a winter's night a traveler* is structured in a similar way. The reader beginning Calvino's novel is lead through a series of delays and switchbacks in chapter one, but expects the first named chapter, *If on a winter's night a traveler*, to lead to the center of the narrative. No sooner does the reader become enmeshed in the scene, however, but Calvino interrupts the narrative and sends the reader back toward the perimeter of the maze with another numbered chapter. And so the pattern repeats itself through numbered and named chapters – promises of narrative coherence, and eventually closure, broken as the plots weave and circle around a center whose very existence becomes increasingly problematic as the novel continues.

And yet, of course, the novel is a traditionally-manufactured novel, printed on numbered and bound pages, with no special arrangements or tables of instruction to subvert the codex reading conventions. Craig Wright argues that the necessary quality for an adventurer in a unicursal maze is faith (3). Faith is central, because without faith in the center, without a guiding belief in the larger structure of the maze, the maze-walker is not engaged in a noble activity, but rather, either a random wandering or a nihilistic exercise in masochism and busy-work. So, we shall profess our faith in Italo Calvino and his work, setting our feet on the path of the work and following it through to the end, which we avow – in the absence of proof, which we will not be able to collect until we finish the novel – will reveal the center of the narrative.

Enactment, in the processes of conformation, includes encounter, navigation, and configuration. In a unicursally-designed work, such as a traditional codex work, navigation is subsumed by the standard conventions of reading, barring acts of *willfulness* on the part of the enactor who violates the sequential presentation of the work. Configuration is still a part of the interpretive process, but in a much weaker form than while enacting a more heavily fragmented work. Interpreting hypertext narratives, for instance, requires a double process of configuration: the enactor configures the fragments of narration, a process accomplished by navigating through the work; and the enactor also configures into a more-or-less coherent world the analyses she produces while enacting the work. Thus, the work itself is configured through the enactor's navigation, and the world of the work is configured by the enactor's entire process of interpretation. In If on a winter's night a traveler, however, configuration only occurs at the level of assembling the world of the work – the work itself is fixed in its order. But most interesting is enactment itself when considering a work like *Traveler*. As all works are static and mute without the cooperation of an interpreter, it stands to reason that enactment also has a necessary role to play in the *reading* of a novel like *Traveler*.

Enactment is more than the evocation of the world of the work from a recording of the work; enactment is the performance of the work with, ideally, all of the cognitive *and* affective features of the work intact. What this means is that, while the enactor is busy conforming the world of the work, she also should be feeling the frustration and confusion Calvino has composed into the text of the novel. Indeed, ignoring these feelings is a failure of enactment and a failure of interpretation, though indulging in them may also lead to impairment of the enactor's

interpretive faculties. As Wright says of the unicursal maze, we must have faith and endure the frustrations devised by Calvino.

If we recognize that Calvino, not unlike Maurice Conchis in *The Magus*, has devised a series of bizarre scenarios and entanglements for his readers, then we may begin to untangle the threads of the experience of enacting Traveler. Calvino is our magister ludi, our master of games, and he has devised an experiential drama for our performance. As we enact the work, we are faced with frustrated expectations and desires at every turn. We know, however, that the work is unicursal, and so we continue through the work until we reach the end. At the novel's end, we are shown the Reader's resolution to both his quests, though we have not been provided the same degree of closure ourselves. Having reached the last page of the book, we have not reached the center of Calvino's maze, nor of his game, for our interpretation of the work remains woefully thin. This was Nicholas Urfe's failure in *The Magus*: he mistook reaching the end of the game with *winning* the game. He confused understanding the game with experiencing the game, and without the affective dimension of the godgame, Urfe's understanding was never complete or profound enough to alter his personality or world view. In his cell before the trial, for instance, Urfe never takes the broad suggestion of the mural to engage in self-examination and reflection.

The Magus is an allegory of reading, just as *Traveler* is (a point to which I will return in more detail later in this chapter). Urfe believes that making it through to the end should be sufficient, that his brute powers of deciphering what Julius Rowan Raper calls "the mythic masque, or psychodrama, that Maurice Conchis (the magus) stages to lead him out of his confusion" (61), can insulate him from having to become emotionally entangled in Conchis' mess. By rejecting the affective dimension of the masque and drama, Urfe remains as mired as ever in his

confusion. Urfe produces a highly intellectual and almost completely bloodless gloss on the affair, and so misses the most important feature of the game – that it is meant to be *lived* as much as it is to be *understood*.

In Samuel R. Delaney's novel Triton: An Ambiguous Heterotopia, Bron (another emotionally and experientially stunted protagonist) unwittingly becomes an audience for a radical street theater performance designed by a character known as the Spike. The guerilla theater incorporates music, pyrotechnics, acrobatics, and mixed scenes of violence and sexuality. Delaney describes Bron's reactions: "His back and belly chilled. He breathed out, breathed in, trying to catch the words"; "Chills encased him. His eyelids guivered"; "His ears and tongue felt carbonated"; "His scalp crawled with joy"; "Awed, he looked up" (18); "He raised his hands, clapped, too - weakly: but it shook his whole body; he clapped again, wildly off-rhythm"; "Bron clapped again, alone, and realized tears were rolling one cheek"; "Bron swallowed, took a step, tried to bring himself back into himself: it seemed that fragments were scattered all around the square"; and "His body still tingled. Anyway, it was exciting! Exciting and ... beautiful! even to the point of nausea!" (19, emphasis in original). Bron's outward reaction to the troupe's performance is one of immense gratitude: "Smiling back, he shook his head, a little bewildered, a little shaken. 'Thank-' He coughed, shook his head again. 'Thank you ...' which was all there was to say. 'Please . . . thank you-" (19). Bron's nonconsensual immersion into the Spike's micro-godgame (she calls it "micro-theater," as it lasts for seconds rather than minutes or hours) drives the narrative throughout the book, provoking a dissatisfaction with his life. Bron's famous thought on the novel's first page - "I am a reasonably happy man" - changes its connotation from an expression of sufficiency to an admission of insufficiency. Interestingly, it is *reason*, and the reasonableness of Bron's experience of happiness, that is at fault, triggered by the aesthetic, affective, and emotional overload of the Spike's micro-drama.

As soon as we begin seriously considering the interpretative necessity of subjective, emotional states, our analysis runs the risk of degenerating into the "everyone's opinion is valid" solipsism that is the antithesis of hermeneutic inquiry. In his studies of "open" works - art with explicitly ambiguous structures and meanings, which thus requires the audience to configure and interpret the work without definitive guidance as to the correctness of these configurations and interpretations - Umberto Eco reaches the only conclusion left available to him: if determining the "correct" interpretation is impossible, then the only way to validate interpretation is to determine what is *not* a correct interpretation. As Eco writes, for open works "there is, perhaps, no way to decide which interpretation is the 'good' one, but it is still possible to decide, on the basis of the context, which one is due, not to an effort of understanding 'that' text, but rather to a hallucinatory response on the part of the addressee" (Limits 21). Eco's use of the trope of hallucination is reminiscent of Marshall McLuhan's analysis of the information density of various media. As McLuhan phrases it, media with high information density, such as films, are "hot," and those with low information density, such as telephony and print media, are "cool."⁴⁴ Hot media provide audiences with, typically, more information than they can handle at any given time, and in multiple modalities. Cool media, on the other hand, require "completion by the audience" to be interpretable (Understanding Media 23). The implications for this are, as McLuhan writes, that "in experiments in which all outer sensation is withdrawn, the subject

⁴⁴ McLuhan notes that "the alphabet, when pushed to a high degree of abstract visual intensity, becomes typography," a point to be discussed in the following chapter (23). When McLuhan wrote the essays in *Understanding Media* – in the early 1960s – media were substantially different than they are today. McLuhan considered television, for instance, to be a cool medium. No one watching a cable news broadcast on television today, however, would consider the newscaster, insert picture of a field reporter, graphics and theme music for particularly flashy stories, and news "crawl" across the bottom of the screen, to be low-density. Similarly, the newspaper has been considerably "hotted-up" in McLuhan's terms by the evolution of layout design heralded and championed by *USA Today* and the newsmagazines like *Time* and *Newsweek*.

begins a furious fill-in or completion of senses that is sheer hallucination. So the hotting-up of one sense tends to effect hypnosis, and the cooling of all senses tends to result in hallucination" (32). The novel, though dense with meaning, is a medium with low density of information. This is hardly controversial – hermeneutics is based on the impossibility of perfect communication through writing, and though we do not usually speak of it as such, the mental construction of the world of the work (re)composed while reading is a conscious exercise in hallucination.

So then, is our assumption – that the reader's frustration is an interpretable element of the work – a verifiable interpretation about the work, or is it merely a hallucination? Mariolina Salvatori's difficulty paper assignment asks students to make connections between the difficulties they encounter (such as narrative frustration) and possible interpretations of those difficulties (the sense of frustration is a necessary component of the world of Traveler). In practicing such a pedagogy, a student may ideally develop, over the course of several papers, the following increasingly sophisticated chain of inferences stemming from her difficulty with the work: 1) Traveler is frustrating; 2) It is frustrating because Calvino refuses to get on with the story (through the first numbered chapter); 3) It is even more frustrating that the first named chapter is terminated before it reaches any sort of resolution; 4) Even worse, all of the named chapters begin, but fail to resolve, any sort of coherent narrative; 5) The only story with a beginning, middle, and end is the Reader's story in the numbered chapters, but that story only exists to frame the named chapters; 6) The numbered chapters are especially frustrating because of Calvino's constant attempts to tell the reader what s/he is feeling and/or doing as the Reader; 7) The Reader is also frustrated, and for many of the same reasons as I (the reader) am - this doubling seems to be too structured to be purely coincidental; 8) The reader/Reader's frustration also seems to be related to the description of the type of reading/book that either Ludmilla (the

Other Reader/Lettrice) or her sister Lotaria want next to read – their descriptions determine the narrative style of the following named chapter; 9) This suggests that the book is – as many critics have noted – really a book about reading, and the "real" narrative follows the Reader, not the named chapter incipits; 10) If I am reading this novel about reading, and if I am having the same meta-narrative frustrations that the protagonist is having, then clearly Calvino is playing both the Reader and the reader, and such games usually have a pedagogical purpose; and 11) My interpretation of *If on a winter's night a traveler*, then, should focus on the relationship between the readings and reading materials offered in the book, and should attempt to discern what it is I am supposed to learn from my very frustrating experience reading the book.

The hypertext reading assignment I discussed earlier in this chapter takes a different, but related approach to the difficulties of reading and interpretation, but one that is highly concordant with Salvatori's. In my hypertext reading assignment, I ask students to foreground the processes of micro-analyzation and macro-analyzation, asking them to think through the twin problems of "what do you know now" and "how does it relate to what you have already read." I do not ask my students to record their answers to these questions because, by recording the rationales behind their navigational choices and the outcomes of those choices, they are already performing the work of both analyzations *and* connecting those answers to their own expectations for the work. In a work like *Traveler*, Calvino's playfulness with his readers' *Afternoon*, the enactor's sense of disparity between what she knows and what she wants to know guides her navigational choices. By foregrounding the dynamic of expectations and surprise as a normal feature of narrative in the distributed mode, the "difficulty" of "reading" such moments is recontextualized from an impossibility into a (mandatory) opportunity for interpretation. In a

unicursal work like Calvino's, the enactor's expectations do not enable her to move through the work in a self-directed manner; she is at Calvino's mercy, unless she chooses to violate reading conventions. The hyperfiction reading assignment, however, foregrounds the interpretive richness possible at moments when the enactor's expectations are rejected. The experience of enacting heavily fragmented works in the distributed mode makes such rejection not an indictment of the reader's interpretive skill, but rather a flag that *something* is going on in the work which may require (and reward) further investigation.

3.3.3. Twisty Little Passages, All Alike: Experiencing Multicursal Mazes

While unicursal mazes demand faith and perseverance from those who enter them, the multicursal maze "requires logic to solve a puzzle" (Wright 3). Figure 4 shows a sample multicursal maze. The defining characteristic of a multicursal maze is its inclusion of multiple paths, the majority of which lead neither to the maze's center, nor to its exit. Instead, the multicursal maze requires the maze-walker to decide among navigational options without advance knowledge of the correctness of the paths she chooses.

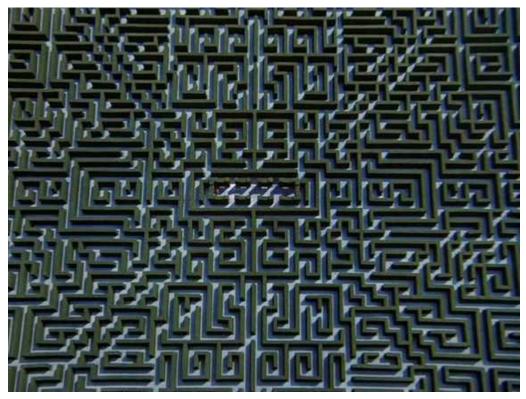


Figure 4: The multicursal hedge maze from Stanley Kubrick's film, *The Shining*.

Craig Wright summarizes the historical transition from unicursal to multicursal mazes that occurred at the end of the sixteenth century, writing:

Indeed, until the end of the sixteenth century, garden mazes, as well as representations of such mazes in the visual arts, were predominantly 'one-way.' Here the unicursal quadratic maze of the Roman villa was simply transplanted outdoors. By the end of the sixteenth century, however, the numerical balance begins to shift decidedly in favor of the multicursal maze. So synonymous did garden maze and multicursal maze become that when the Germans needed to coin a new word to denote a multi-path maze, they began to call it an 'error garden' (*Irrgarten*), whether the maze was in a garden or not. By the seventeenth century most new mazes were multicursal. (225)

Today, the word "maze" invariably refers to the multicursal variety. Umberto Eco notes that it is only in a multicursal maze that "one does need an Ariadne thread; otherwise, one might spend one's life in turning around by repeating the same moves. [....] A [multicursal] maze does not

need a Minotaur: it is its own Minotaur: in other words, *the Minotaur is the visitor's trial-anderror process''* (*Semiotics* 81, emphasis in original). The hedge maze in figure 4 illustrates the literally monstrous potential of the multicursal maze. At the film's climax, Jack Nicholson's character, Jack Torrance, has been driven insane and pursues his son Danny into the hedge maze during a blizzard. Torrance bellows in blind, bestial rage as he chases Danny through the towering hedges, assuming the role of the murderous minotaur, and yet the maze itself proves to be the most deadly foe. Torrance is defeated by the maze – unable to find Danny and unable to escape the twisting passages, he freezes to death. Danny, meanwhile, retraces his steps, following his own footprints in the snow like Ariadne's thread, and escapes to safety.

Eco describes a third type of maze, neither unicursal nor multicursal, strictly speaking – the net, or web. "The main feature of a net," he writes, "is that every point can be connected with every other point, and, where the connections are not yet designed, they are, however, conceivable and designable" (*Semiotics* 81). Though there are significant structural differences between multicursal mazes, such as in figure 4, and web-like mazes, the experience of the traveler wandering inside the walls of both mazes can be quite similar. As Borges establishes in his story, "The Two Kings and the Two Labyrinths," the contrast between multicursal mazes and web mazes, with the goal of demonstrating that web mazes may be even more amazing than multicursal ones. If the maze-walker has a purpose in mind – either the center, exit, or some other point in the maze – then the lack of blind alleys may be insignificant to the visitor's chances of finding the desired spot. Unlike unicursal mazes, multicursal and web mazes alike present the visitor with a plethora of navigational choices, which necessarily means the visitor repeatedly may choose *incorrectly* and thus become lost.

Hypertext narratives are frequently structured as web-like labyrinths, with the multiple link paths between lexias establishing a net of narrative elements through which the enactor moves. In *Afternoon, A Story*, however, Michael Joyce employs a number of guard fields, like blind alleys preventing enactors from reaching certain lexias unless others already have been reached. This feature bridges the differences between the two types of multicursal labyrinths, making *Afternoon* a hybrid form, combining the sense of structured pathways and restricted navigation of multicursal mazes with the sense of tacit connections and unimpeded associations organizing the seemingly open web mazes. In both, as Borges makes clear, the visitor can become lost and confused – which is, arguably, the very purpose and pleasure of a maze.

3.3.4. "Not All Who Wander Are Lost": Hyperfiction and the Enactor's Choices⁴⁵

Penelope Reed Doob analyzes the symbolic differences between unicursal and multicursal mazes, noting that "The multicursal maze exemplifies the constant choice demanded of an individual, but the unicursal pattern describes the inevitability to which everyone in that particular maze must be subject. In effect, a unicursal maze-walker is Everyman, not an individual" (50). In *If on a winter's night a traveler*, Calvino writes the story of Reader, whose frustrations are shared by his readers, *whoever they may be*. Because Calvino cannot differentiate among his readers, his work operates as an allegory. In *Afternoon, A Traveler*, on the other hand, the enactor must configure the work through her navigation – her decisions materially affect not the work but her own experience of the work. As a result, though readers of *Traveler* may comfort themselves with the belief that the majority of other readers are suffering

⁴⁵ The heading for this section comes from J. R. R. Tolkien's *The Fellowship of the Ring*. The wizard Gandalf writes to Frodo, a Hobbit, telling him to hurry to the elf town Rivendell. His message reads, in part: "All that is gold does not glitter,/ Not all those who wander are lost;/ The old that is strong does not wither,/ Deep roots are not reached by the frost" (182).

similar frustrations, the reader of *Afternoon* cannot escape the feeling that *she* is responsible for her narrative frustrations through her "poor" choices. A walker in a unicursal maze cannot help but reach the goal, provided she simply perseveres. A walker in a multicursal or web maze, no matter how long she walks, is not guaranteed success. Failure is a tribute to the designer of the maze, but is, ultimately, a judgment on the skills of the walker. In the narrative context, this has profound implications for the interpretation of heavily fragmented works.

The first lexia in Joyce's *Afternoon* poses a question to the enactor – "Do you want to hear about it?" ("begin"). If the enactor chooses to ignore the question, to treat it as a rhetorical question, and instead either presses the Enter key to follow the "default" link or clicks on one of the words in the lexia, chances are good that she will be shown "I want to say."⁴⁶ This provides the enactor with a narrative goal, a center of the labyrinth, which the enactor will attempt to reach. Earlier in this chapter, I mentioned Jane Yellowlees Douglas' interpretation of the "white afternoon" lexia as the work's central fragment (*End of Books* 106). In "white afternoon," Joyce writes:

The investigator finds him to be at fault.

He is shocked to see the body so beautifully there upon the wide green lawn.

The boy is nearby. ("white afternoon")

In three other lexias, "1/", "2/", and "Lolly's monologue", Joyce provides an internal monologue, probably from Lolly, a psychotherapist, which explains, elliptically, that Peter caused a fatal accident by losing control of his car and swerving in front of his ex-wife and son as they were in the oncoming lane. Peter's literal loss of control, Lolly suggests, was due to the mental

⁴⁶ Of course, in the narrative scenario of *Afternoon*, the question, "Do you want to hear about it?" is also a *hypothetical* question: there is no person asking the question, only a figment of Joyce's imagination, and the object of the direct address – the enactor – is also hypothetical, from Joyce's perspective.

instability caused by learning that his boss, Werther, was sleeping with Peter's ex-wife. But when the enactor begins *Afternoon*, none of this is apparent, and Joyce's guard fields ensure that it remains hidden from the enactor for quite some time.

"I want to say" provides the enactor with an enormous hint about the central conflict in the narrative, as well as its (hoped-for) resolution. The reader who encounters it early in her enactment of the work knows, at that moment, what it is she wants to know from the work – she wants to know what, if anything, happened to Lisa and Andrew, Peter's ex-wife and son. When she attempts to learn what happened, by navigating through the lexias of the work, she quickly learns that Peter does not know, and is incapable of learning what happened. Thus, the enactor discovers a second question to answer: why is Peter so passive in the face of the possible death of his ex-wife and son. The hypertext reading response assignment discussed earlier in this chapter asks students to record their navigation through a hyperfiction work. The table they must complete for the assignment requires them to ask themselves four questions every time they encounter a lexia: "what do I know"; "what do I want to know"; "how will I find what I want to know"; and "did I learn what I wanted to know." Salvatori's difficulty pedagogy, and much contemporary hermeneutical theory, is predicated upon the belief that interpretation is an ongoing process, not something that occurs only when we finish reading a story. The hypertext reading response asks students to make that ongoing process of interpretation visible, explicit, and conscious. The enactors engaged in my reading response are required to develop and practice a hyper-rational and hyper-aware reading and enacting style. As Salvatori and Donahue argue, writing helps the student to retain more of the details reached in each of the interpretive processes, and at every step of her enactment of the work (Elements 5). In the labyrinth of lexias that comprise Afternoon, it is easy to become overwhelmed by the volume of data presented

seemingly without thought to structure or organization. Just as in a physical maze, the welter of options for making sense out of the entire edifice can easily become unmanageable. The reading response allows students to take their time and reflect on each lexia and their own reactions and interpretations to it. By being hyper-rational and hyper-aware, however, the enactor is faced with the obvious conclusion that Peter is *not* as driven as she is to find the answer. As the enactor works her way through the narrative, Peter's constant digression into reminiscences, daydreams, and philosophical reflections, among the few attempts he makes to ascertain the truth, indicate an individual who either is not aware of his own actions and thoughts, or is not fully in control of them.

As the student enacts the work, trying to discover the truth about Lisa and Andrew, she finds that her way to the truth is blocked at every turn. We expect mazes to block our way to the center and to make our journey difficult. We do not, however, expect narrative to do the same. This expectation of intelligibility is especially poignant for students, who are asked to engage with these works, and who know that their ability to make sense of the work is being evaluated. In this situation, it would be easy for a student to conclude that her enactment was a complete failure, as she could not discover the center of Joyce's maze. The hypertext reading response is an attempt to forestall that surrender to "impossibility" and instead to treat that challenge *as* a challenge that may be overcome. By retaining a heightened awareness and sense of purpose, the enactor may become aware that Peter's evasion of the truth about the accident, his inability to control his impulses and fears, becomes increasingly bizarre and hard to accept as the enactor continues to experience the work. The enactor, in other words, is behaving correctly; it is Peter who is not, and his odd reactions and thoughts eventually become a source of anxiety and antagonism for the enactor. Peter reveals himself to be, long before the "white afternoon" lexia,

an unreliable narrator. His unreliability also helps to explain the antipathy engendered in the enactor by Peter's narration and digressions.

But none of these conclusions is foregone, especially not to a student enactor coming to Afternoon for the first time. The multicursal maze is a structure that is designed to seem impossible to interpret, especially to someone within the maze's passages. The multicursal maze is an architectural taunt: "I dare you to try to understand me." It is only from the godlike perspective of a great height, or by studying the maze's plan before entering it, that a visitor can readily make sense of the maze's complexity. In other words, only those who are shown the maze in its entirety, or those who have already experienced its amazement, can efficiently interpret the multicursal maze. In his own hermeneutical practice, Hans-Georg Gadamer presupposes that interpretation takes place retrospectively. In his essay, "Who Am I and Who Are You?", about Paul Celan's book of poetry *Breath-Turn*, Gadamer asserts that "each of the poems has its place in a sequence, and read within this context, each poem achieves a certain measure of precision - but the entire sequence of these poems is hermeneutically encoded" (67). The poems are not numbered and, though we may assume some organization in Celan's ordering of them, Gadamer's labeling of them as a "sequence" is itself an interpretation, and one that could be made only after reading all of the poems.

All of which is to say that a macro-analytic pronouncement, such as Peter's unreliability as a narrator, is easier to make after having spent a great deal of time with the work rather than while enmeshed in the links and guard fields of *Afternoon*'s lexias. However, if we agree with Douglas that "white afternoon" holds the crux of the story, then we may also agree with her that the lexia "I call" holds the key to narrative closure. In that lexia, Peter attempts to contact his lover, Nausicaa, and his ex-wife Lisa both at work and at her home, and failing all three times to reach either woman, Peter announces, "I do not call the hospital. I take a pill and call Lolly" ("I call"). In this lexia, we see that Peter takes a sedative to regain control of his panic and anxiety, and calls Werther's wife, the psychotherapist. The entire work, then, can be interpreted as either the prologue and necessary preparation for Peter's therapy, or as the therapy session itself, narrated by Peter to Lolly. In either case, the story – Peter's profound ambivalence, torn between the terror of knowing and the terror of wondering – becomes secondary to its affective power for the enactor. If the enactor believes Peter wants to know what happened, the digressions and evasions preventing this knowledge must be as frustrating and infuriating for Peter as they are for the enactor. And so, as in Calvino's *If on a winter's night a traveler*, the enactor's frustration is doubled in the narration, suggesting that the work's true artistry might lie not in what is told, but in what is *done* to the enactor in an attempt to replicate Peter's moods and states, and thus to provide a fully affective experience for the enactor.

3.4. FINDING THE SWEET SPOT: ANALYSIS AND IMMERSION AT THE MAZE'S CENTER

All reading is enactment. It is easier to see this in digital environments – as with hypermedia narratives that require the reader to do certain things to be granted access to the rest of the story – but even in the most traditional works, the process of (re)constructing the world of the work, of *comforming* it according to the structures and material of the work, is always an enactment. In the next chapter, I will discuss at length the ways in which writing is inseparable from and involves *multiple* processes of reading. By the same token, and as may have become clear, reading requires "writing." Enactment, and the entire enterprise of conformation, is, fundamentally, a framework for mentally composing a narrative totality from that which has

been recorded by another person. In the first chapter, I cited Richard Palmer's definition of hermeneutics as the process by which "something foreign, strange, separated in time, space, or experience is made familiar, present, comprehensible" (Hermeneutics 14). The "making" of familiarity is itself a process of composition, of multimodal composition, for it usually includes far more than merely words. Recalling a favorite novel, for instance, rarely brings to mind merely words, but rather the sights and sounds, the emotions of the characters *and* the reader, which arose from the enactment of that work. These experiences – in part subjective because they come from the enactor's personal world-view and experiences, and in part objective because they are evoked by, and grounded in, the material of the work - resonate with the enactor and provide an emotional impetus to incorporate the world of the work into the enactor's own worldview. The affective power of narrative is so strong and so central to the experience of interpreting literature that it provoked Louise Rosenblatt's famous dictum, "Someone else can read the newspaper or a scientific work for us and summarize it acceptably. No one, however, can read a poem for us" (Exploration 33). To fully engage with the resonant affective dimension of narrative, however, the reader must experience narrative immersion – a state usually considered antithetical to critical inquiry. In her seminal book, Hamlet on the Holodeck, Janet Murray offers the following description of textual immersion:

Immersion is a metaphorical term derived from the physical experience of being submerged in water. We seek the same feeling from a psychologically immersive experience that we do from a plunge in the ocean or swimming pool: the sensation of being surrounded by a completely other reality, as different as water is from air, that takes over all our attention, our whole perceptual apparatus. (98)

This sensation should be familiar to all readers – the auto-hypnotic state in which the events in the story occupy all of our senses, in which we hear, see, smell, taste, and feel whatever the

characters are experiencing. As Calvino puts it, "Relax. Concentrate. Let the world around you fade" (*Traveler* 3). When the outside world "fades" to insignificance and the reader becomes wholly enrapt by the narration, the distance and reflection necessary for *critical* engagement seems impossible. And yet, as Murray points out, one of the important and often-overlooked aspects of immersion in distributed narratives is that, in this kind of structure, "immersion implies learning to swim, to do the things that the new environment makes possible" (99). Both *Traveler* and *Afternoon* work very hard to *prevent* the reader's immersion in the narrative: Calvino's taunting incipits and Joyce's recalcitrant protagonist/narrator and obstructing guard fields disrupt the seamless world of the narration as it is being, however painfully, conformed by the enactor. What the reader learns from these works is a different form or level of immersion, as the enactor is submerged in her own enactment of the world of the work, sometimes in addition to, and sometimes rather than, the work's world directly.

3.4.1. Double Plays: Reading Writings/Writing Readings

Marie-Laure Ryan pegs the disruption of narrative immersion on Calvino's multiple writing styles in the named chapters of *If on a winter's night a traveler*. In the first named chapter, "If on a winter's night a traveler," for instance, Calvino begins: "The novel begins in a railway station, a locomotive huffs, steam from a piston covers the opening of the chapter, a cloud of smoke hides part of the first paragraph" (10). Ryan argues that "by tracing step by step the emergence of the fictional world in the mind of the reader, the text prevents this emergence. The fictional world remains partially hidden behind the activity that constructs it" (*Narrative* 169). In other words, because it is Calvino effecting the immersive effect, rather than the reader herself, distance is created between the sensory world of the work and the enactor conforming

that world. I agree with Ryan that the named chapters in Calvino's book are deliberate attempts to disrupt immersion, but Ryan's conclusion overlooks the far more disruptive effect of Calvino's termination of each of his named chapters just as they become most interesting. That Calvino is choosing to take the old creative writing commandment, "show, don't tell," to ridiculous, and possibly contradictory lengths does not automatically prevent the reader from becoming immersed in the incipits, even at their most bizarre.⁴⁷ The critical reaction to *Traveler* seems curiously unanimous: as James Seitz writes, "Calvino creates a narrative structure that places the act of reading at the center of attention" (Motives for Metaphor 129).⁴⁸ Many also situate Calvino's interest in reading as a Barthesian exploration of the battle for supremacy between reading and writing. As Melissa Watts notes, however, "according to Barthes, all this power invested in the reader must be at the cost of the author" ("Reinscribing a Dead Author" 710). Watts is here referring to Barthes' essay, "The Death of the Author," in which he announces that "The reader is the space on which all the quotations that make up a writing are inscribed without any of them being lost; a text's unity lies not in its origin but in its destination," and "the birth of the reader must be at the cost of the author" (148). I read Barthes' pronouncement of the death of the author as a call for serious investigation into the reader's activities, and though Barthes is being characteristically hyperbolic, Traveler offers an alternative to the battle between what Salvatori calls the "writer's authority" and the "reader's autonomy."

⁴⁷ Calvino is, of course, showing the *effects* of the prose in each incipit rather than telling the prose and letting it produce its own effects in the reader. Which, of course, means that he is also *telling* the effects, rather than showing them and allowing them to arise in the mind of the reader.

⁴⁸ See, for instance, Geoffrey Green's "Ghosts and Shadows" 101; Carl D. Malmgren's "Romancing the Reader" 108; Ian Rankin's "The Role of the Reader" 129; Mariolina Salvatori's "Italo Calvino's If on a winter's night" 185; Madeleine Sorapure's "Being in the Midst" 705; Jerry A. Varsava's "Calvino's Combinative Aesthetics" 16; and Melissa Watts' "Reinscribing a Dead Author" 711.

As I mentioned previously, each of the named chapters in *Traveler* is presented in a different style. That style is determined by an announcement in the previous numbered chapter concerning the preferred reading style of the Other Reader, Ludmilla.⁴⁹ Three examples of this dynamic will provide ample material to analyze *Traveler*'s stance on the supposed battle between reader and author. In Chapter Two, Ludmilla announces: "I prefer novels, [. . .] that bring me immediately into a world where everything is precise, concrete, specific. I feel a special satisfaction in knowing that things are made in that certain fashion and not otherwise, even the most commonplace things that in real life seem indifferent to me" (29). The next named chapter, "Outside the town of Malbork," begins:

An odor of frying wafts at the opening of the page, of onion in fact, onion being fried, a bit scorched, because in the onion there are veins that turn violet and then brown, and especially the edge, the margin of each little sliver of onion becomes black before golden, it is the juice of the onion that is carbonized, passing through a series of olfactory and chromatic nuances, all enveloped in the smell of simmering oil. Rape oil, the text specifies; everything here is very precise, things with their nomenclature and the sensations that things transmit $[\ldots]$ (33)

In Chapter Four, Ludmilla changes her mind and tells the Reader that "The book I would like to read now is a novel in which you sense the story arriving like still-vague thunder, the historical story along with the individual's story, a novel that gives the sense of living through an upheaval that still has no name, has not yet taken shape" (70). The following chapter, "Without fear of wind or vertigo," begins: "At five in the morning, military vehicles crossed the city; outside the food stores lines began to form, housewives with tallow lanterns; on the walls the propaganda slogans, painted during the night by the teams of the various factions of the Provisional Council,

⁴⁹ There are two exceptions to this pattern: in Chapter 3, Ludmilla's sister, the Other Other Reader, explains what it is that *she* likes best to read; in Chapter 6, Silas Flannery, the bestselling author and participant in a massive scheme of literary forgery, admits that he is obsessed with Ludmilla, and so writes each of his books in a manner calculated to satisfy whatever it is Ludmilla wants most to read at that moment. Even Chapter 1, in which we do not know of Ludmilla's existence, is styled after Ludmilla's preferences, which she describes to the Reader in Chapter 2 (28-29).

were not yet dry" (75). The chapter continues in a highly traditional realist narrative style, until

it breaks, several pages later, into Calvino's usual metanarrative style:

Several paragraphs ensue, bristling with names of generals and deputies, concerned with the shelling and retreats from the front, about schisms and unifications in the parties represented in the Council, punctuated by climatic annotations: downpours, frosts, racing clouds, windstorms. All this, in any case, solely as a frame for my moods: a festive abandonment to the wave of events, or of withdrawal into myself as if concentrating myself into an obsessive pattern, as if everything around me served only to disguise me, to hide me, like the sandbag defenses that are being raised more or less on all sides $[\ldots]$ (82)

And in Chapter Seven, Ludmilla decides that "I like books [...] where all the mysteries and the

anguish pass through a precise and cold mind, without shadows, like the mind of a chessplayer"

(153). The next incipit, "In a network of lines that intersect," begins:

Speculate, reflect: every thinking activity implies mirrors for me. According to Plotinus, the soul is a mirror that creates material things reflecting the ideas of the higher reason. Maybe this is why I need mirrors to think: I cannot concentrate except in the presence of reflected images, as if my soul needed a model to imitate every time it wanted to employ its speculative capacity. (The adjective here assumes all its meanings: I am at once a man who thinks and a businessman, and a collector of optical instruments as well.) (157)

The collector of optical instruments notes that:

These pages I am writing should also transmit a cold luminosity, as if in a mirrored tube, where a finite number of figures are broken up and turned upside down and multiplied. If my figure sets out in all directions and is doubled at every corner, it is to discourage those who want to pursue me. I am a man with many enemies, whom I must constantly elude. (158-159)

The pattern is consistent across the ten named chapters and their origins in the ten numbered chapters preceding them.

What Calvino provides in these incipits is a phenomenology of reading and of writing. In the brief passage from "If on a winter's night a traveler" quoted above, for instance, the fog and steam which "hides part of the first paragraph" is a recording of the subjective immersive experience of reading the "real" (meaning here, fully written-out in the traditional mode of realist narrative) prose. The "reader's" sensory engagement with the work becomes more important to the reader (the actual reader in the real world, not any of Calvino's constructed readers or Readers) than the words themselves. However, the same passage also records the experience and intention of the composer of the work. As the first reader of the work is its composer (a truism that will be explored in the next chapter), the first person to experience the sensation of enshrouding fog and smoke is the work's composer. It also must be the case, though, that a composer bent on capturing, as Ludmilla prefers, "that sense of bewilderment a novel gives you when you start reading it," and who uses swirling mist to concretize and convey that sensation to his readers, surely must intend for the effect to be as described (*Traveler* 28).⁵⁰ Thus, what we have in this passage is the recording of the motivation of the writing itself, a trace of the *ideal text* (which concept I shall discuss in the next chapter) envisioned by Calvino.

In the examples above, Calvino provides *exactly* what it is Ludmilla professes to like in novels. He also includes glosses on the narrative which summarize and condense narrative material to its most relevant aspects. In this, Calvino provides his actual readers with what novelist and screenplay writer William Goldman calls a "good parts version," an abridgement in which all of the tedious parts have been excised, leaving only the most exciting and important bits for the reader (*Princess Bride* 25). In *Traveler*, this abridgement accomplishes two

⁵⁰ Of course, this analysis is only possible because of Ludmilla's helpful announcements in the numbered chapters. Absent such unambiguous indicators – which are here useful only because they and the named chapters are, together, part of the totality of Calvino's novel – authorial intention remains unknowable and unreliable when suggested. An alternative, less generous interpretation of Calvino's intention is that he fears he will never achieve the effect and affect of his ideal text, and thus removes the possibility that his prose might fall flat. Personally, I prefer the former.

purposes: it represents either the narrative intent or the reader's composition of the world of the work. Calvino uses words like "should," and states definitively what effect the effaced narration is having on the Reader/reader, showing the ideal state of writing he "hopes" is being accomplished. That hope is rather fatuous, as Calvino does not allow his prose to fail to reach its highest potential, replacing the "working" bits of prose with their "successes." The summary and abridgement passages reflect the dilation and contraction performed by the reader as she enacts the work, reductively classifying lengthy – and putatively unnecessary – passages rather than attempting to remember them in their entirety. The extensive genealogies in the Hebrew Testament of the Bible are often handled in the same way by readers more interested in other aspects of the text.⁵¹

The phenomenological descriptions of the immersed reading experience and the narrative glossing in *Traveler* are explorations and recordings of the cognitive processes of the reader, as well as of the author. A similar dynamic is at work in Joyce's *Afternoon*. As Joyce's enactors navigate the work, they are faced with the need to make interpretive decisions based partly on the narrative material Joyce presents, and partly on their own experiences enacting the work. As I mentioned previously, Joyce considers the hypertextually linked structure of works like *Afternoon* to be organized according to "connections that I had for some time naturally discovered in the process of writing and that I wanted my readers to share" (*Of Two Minds* 31). The linked structure and guard fields in place in *Afternoon*, according to Joyce, represent Joyce's own connections about the work. Though, as I noted previously, authorial intention is, indeed,

⁵¹ The story of Jacob is an example of this. Chapters 25-35 tell of the deeds of Jacob and 37-50 tell "the history of the family of Jacob," focusing on the adventures of Joseph, he of the coat of many colors (Gen. 37:2). In between is chapter 36, a listing of "the descendents of Esau," Jacob's brother. For 43 verses, we are told of the "descendent of Esau," the descendents in "the hill country of Seir," "the chiefs of the sons of Esau," and so on. Though the genealogies are important to many theological and historical aspects of the Testament and the relationships between Jehova and the Isrealites, from a narrative standpoint they are easily replaced with a mere mental notation of their presence. The names and places involved in such extensive lists are, perhaps blasphemously, easily forgotten.

suspect, it seems a safe assumption that the links do – at least in some instances – represent meaningful ideational connections on the part of the work's composer. This is not to say that *all* of the links are thus meaningful, or that the meaning behind even the most "meaningful" links can be definitively known or accurately attributed to Joyce. However, the link structure does represent a patent cognitive process of composition and world-creation.

3.4.2. Immersion and/as Critical Perspective

The purpose of a maze is to induce amazement in those who enter it, to produce an affective state of awe and confusion. Walking through a multicursal maze with a map of the passages reveals the truth of this – the experience is simply not a-mazing. Even unicursal mazes can create this feeling of awe and confusion through their economy of space – practically every bit of space within the maze's boundary is used and traversed in a unicursal maze, producing a marvelous pilgrimage within a relatively small area. Godgames often use mazes (both real and metaphorical) to induce a sufficiently powerful affective state to motivate the subject to come to a new realization about the world and about herself, and most likely to adopt a new course of action or way of being as a result. Perhaps most importantly, though, the affective states induced by reading are also crucial to the enterprise of English Studies.

As teachers of English, we are expected to love reading. If we do, it is hardly believable that this is solely because we enjoy acquiring new information. People who love to read do so for the mixture of information and affect, of data and immersion that comes from reading. And yet, our students frequently report *not* loving reading. Many struggle with the texts we assign, attempting to glean as much information as they can from the text so that they can complete the next essay or exam, and then forget the work completely. For these students, reading is not an

affective experience of wonder and engagement, and their interpretations often suffer because of it.

Salvatori's difficulty pedagogy and my own hypertext reading response assignment attempt to grapple with this problem, "to make manifest the rules and practices of interpretation we have acquired from institutional training," as Salvatori writes ("Toward" 81). Difficult texts elicit a doubled immersion from experienced readers - immersion in the narrative itself and immersion in the interpreter's efforts to enact and interpret the work. When she reads Afternoon or Traveler, the experienced reader does not merely sink gracefully into the world of these works. Instead, the interpreter moves between these two immersive states, enacting and conforming the world of the work, and reflecting and analyzing her own efforts to do just that. Calvino, for instance, keeps our critical attention on the godgame by refusing to allow us to remain narratively immersed. As we become comfortable with and engrossed in the scenes in the named chapters, Calvino ends the chapters and yanks us back out into the parallel narrative of the Reader and Other Reader, making us face, once again, the effort being expended by us, the readers, the Reader, and the Other Reader, to assemble a completed narrative. In this way, he toys with Brechtian "Verfremdungseffekt" - allowing us narrative immersion only to take it away, and thus to heighten both the affect of narrative immersion and the affect of its absence. In a sense, it is a chastening of the reader, a punishment for "forgetting" herself and her place in the world/work. Joyce does much the same thing in Afternoon, providing enough narrative material in many of the lexias, and linking them together to produce strings of related narrative, only to end the sequence and disappoint the enactor with lexias on unrelated topics, thus forcibly postponing the enactor's search for the answers to her existing questions about the work and its scenario.

Even in works that would not be considered especially difficult, the experienced reader bounces between levels of immersion, pausing the enactment of the work to reflect on a particularly exciting or troubling development in the text. The codex format makes it easy to do this; pages can be turned forward or back or skipped in large numbers as the reader wishes. If the reader puts the book down, the action pauses, indefinitely, until the reader chooses to return to the work and its world. In his essay, "Aesthetic Subjectivity and the Teaching of Literature," Gary Farber notes:

Many literature teachers, when they're preparing a text, and some literature teachers, when they're teaching it in class, become accustomed to moving back and forth easily from one mode [of immersion] to another. Many of us, I think, know what it's like to be continually bouncing in and out of the illusion as we read and make our notes in preparation for teaching. (19)

For Louise Rosenblatt, one of the earliest and most forceful advocates for encouraging immersive reading practices in students, being able to control the cognitive transition from narrative immersion to critical (or metacognitive) immersion can result in "the fusion of thought and feeling, of cognitive and affective, that constitutes the integrated sensibility" (*Reader* 46). We want our students to be able to develop complex interpretations of the works we assign in our classes, and to be able to do the same with the complex works they encounter elsewhere. Interpreting a work like *Afternoon* requires the enactor to *feel* "Oh my goodness, that's horrible!" while *thinking* "Given what I've seen so far, how will I find out how this happened?" This is, to use Rosenblatt's term, an "integrated sensibility" to the work of interpretation and to the pleasures of reading, as well, of course, to the work of reading and the pleasures the reader to maintain the state of narrative immersion even while suspending that state to engage in critical connection-making and analysis. By foregrounding the centrality of immersion, and the different

types of immersion possible during reading, we can begin to teach our students the strategies and skills we ourselves practice when we read.

Too often I have had students in my classes who are unprepared to approach a difficult work like Traveler or Afternoon. Many of these students have been taught a mechanical approach to literature – something along the lines of looking for the "symbolism" contained in the story - that is not useful when enacting a work that demands its readers engage with it on cognitive, affective, and metacritical levels. For these students, making sense of the multiple personalities of Calvino's Traveler or the willful obfuscation and obstructions of Joyce's Afternoon is a challenge akin to bending spoons with psychic power. It is not that these students fail to try – they do try, and often quite admirably. For them the task is simply impossible. We must introduce new approaches to literary interpretation and engagement in our classes, and these approaches need to be adopted at every level of literary instruction. Pedagogies like Salvatori's and my own are attempts to provide students not with a set of templates, but with a guiding philosophy to help them find their own way into and through difficult works. Once they become comfortable treating works like these as challenging climbs rather than impassable cliffs, they will begin to see that it is not the spoon that bends, but rather themselves and their own interpretive acts. At that moment, they will gain a new awareness of literature and of their own power to make it productive and pleasurable, at which point we all – students and teachers alike - win.

4. DIGITAL DISCOURSE: COMPOSING IN AND WITH TECHNOLOGY

Technologies become significant when social and cultural conditions allow them to become significant. (Gunther Kress, Literacy in the New Media Age 18)

Think of the computer, not as a tool, but as a medium. (Brenda Laurel, *Computers as Theater* 126)

4.1. SELF-REFLEXXIVE PEDAGOGIES: A DIFFERENT KIND OF ENVIRONMENTAL APPROACH

Environmentalism, when applied to literary criticism or composition, usually entails the exploration of literary representations of the natural world. Writers such as Henry Thoreau, Ernest Hemingway, Rachel Carson, Wendell Berry, John Muir, and Leslie Marmon Silko figure prominently, their arguments and descriptions of the complex – and frequently disastrous – relationships between humans and the earth's ecosystem forming a critical and poetical framework for examining human civilization. Throughout this work, I have used the metaphor of *environment* in different settings, but rarely with the meaning it assumes in literarily ecological discourse. It is in the realm of composition, and specifically the composition

classroom, however, that my environmental approach to literacy pedagogy and practice becomes most explicit.

In the first chapter of the present work, my exploration of the specific qualities and features of the distributed mode foregrounds a notion of narrative as being spatialized; narrative content and ways of conveying meaning are *distributed* across numerous lexias and modes of representation, which establishes a narrative environment through which the enactor is called upon to navigate. The second chapter introduces the concept of the world of the work, the cognitive construction of the imaginative totality of the narrative work, and the concept of approaching rhetoric as world construction. The third chapter continues these discussions, focusing on the enactor's processes of constructing the world of the work as a guide for the development of pedagogies of literary interpretation designed to enable enactors to become more explicitly and effectively self-aware readers and interpreters.

In this chapter I turn from the consumption and interpretation of works to their production, focusing on the composition classroom. In so doing, I engage with the notion of environmentalism in a doubled sense: the composer constructs, piece by piece, the world of her work; and, while doing so, the composer operates within the environment of her technologies of composition. Whether she practices her rhetorical skills with paper and pencil or with cutting-edge computers and software packages, the composer is constrained and enhanced by the technologies she uses. In this chapter, I will examine the ways computers and computer software affect and are affected by their composing users, focusing on ways to demystify the "transparency" that so often is assumed about computers. By making the familiar and comfortable technologies of the Internet, the word processor, and other so-called "productivity"

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programs *strange*, I propose a composition pedagogy that sees the computer as both a tool and a topic for writing.

The National Council of Teachers of English (NCTE) has issued guidelines explicitly calling for the integration of technology and, specifically, multimodal discourse into composition curricula. The NCTE Executive Committee writes:

As basic tools for communicating expand to include modes beyond print alone, "writing" comes to mean more than scratching words with pen and paper. Writers need to be able to think about the physical design of text, about the appropriateness and thematic content of visual images, about the integration of sound with a reading experience, and about the medium that is most appropriate for a particular message, purpose, and audience. (n.p.)

That is, the old understandings of "literacy" are no longer as useful as we may wish, because the activities we call "writing" and "reading" as they are most commonly practiced today diverge in important ways from those traditional understandings. The Conference on College Composition and Communication (CCCC) has gone so far as to recognize that the impact of this shift in literate practices will materially affect the writing produced by researchers. In a position statement on "Scholarship in Composition Guidelines for Faculty, Deans, and Department Chairs," the CCCC proclaims that textbooks, computer software and programs, and curricular development are all "ways of presenting important new work in composition," and "When they meet appropriate standards of scholarship, therefore, they should carry appropriate credit in tenure and promotion" (n.p.). Which is to say that when we ask our students to engage seriously with multimodal composition, we should do so from a theoretically sound and well-researched basis (thus necessitating the creation of new textbooks and curriculum), such pedagogies may well need new software tools to maximize their effectiveness (as was the case when Michael Joyce collaborated with Jay David Bolter to create the hypertext authoring system Storyspace),

and the research produced from such serious engagement with multimodal composition and pedagogies may well result in scholarship that bears little or no resemblance to the standard academic essay format (thus requiring the academy to adopt new strategies for evaluating scholarly digital works).

That NCTE and CCCC feel the need to call for such changes, of course, indicates that conditions throughout education are not yet fully conducive to such practices. NCTE, for instance, notes that "Many teachers and students do not, however, have adequate access to computing, recording, and video equipment to take advantage of the most up-to-date technologies" (n.p.). But even in classrooms with state of the art technologies and faculty proficient in their use, serious questions and issues about the use of multimodality in the composition curriculum remain. In this section, I will look at some of the most pressing theoretical concerns about multimodality – the relationship between visual and linguistic rhetoric and design, the role of aesthetics in multimodal composition, the need to balance the desire for invention with attention to analysis, and the desperate lack of instruction in the pragmatics and artistry of code-switching among the various composed discourses. As our technology evolves and makes more radical multimodality available and accessible to students and teachers alike, these issues move more and more forcefully to the forefront of digital composition theory. The solutions we devise for them will chart the course for composition in the digital age.

In this chapter, I discuss a series of assignments I have used in my composition classes. Appendix B reproduces my course syllabus for the first-year writing seminar in which I taught these assignments. They are designed to require students to engage in traditional words-on-thepage composition and in non-traditional multimodal composition. By combining verbal and visual rhetorics in assignments, my students, hopefully, gain a deeper understanding of the ways in which modes affect and are affected by each other, of the ways in which our interpretation of works is affected by the modal choices (which are always, of course, *rhetorical* choices) of the composer, and of the ways in which the environment of the computer affects and is affected by the composer's decisions. A commitment to teaching multimodal, digital forms of discourse brings with it, however, a host of challenges and theoretical issues to consider. I will first explore the broad, theoretical issues at play in digital discourse, and then turn my attention to the institutional implications for enacting a pedagogy of technological use and awareness, such as I propose here. Pedagogical decisions are always complex – or, at least, they should be. The complexity of the issues surrounding, and arising from, digital media and composition, as well as the benefits to be gained from incorporating digitality into the writing classroom are, I firmly believe, sure indicators that the enterprise is worth undertaking.

4.1.1. Writing Requires Reading Times Three

In the previous chapter, I demonstrated the ways in which conformation requires readers to simultaneously "write" the world of the work as they "read" the work itself. In this chapter, my focus is on writing, but the connection between reading and writing still obtains. If anything, reading and writing are even less divisible during the many acts that make up writing, and are more visible, than they are during reading. As I defined it earlier, *conformation* is the complex of activities and strategies employed by an interpreter as she engages with a composed work to (re)construct the world of that work. It would be pointless to argue that reading is not an interpretive act, but if we want to extend to writing the same prestige, we are faced with an interesting problem. To claim that writers do not merely put their interpretations down on paper or on screen, but that writing itself is inherently interpretive, suggests that the conformation

model should also apply to composition. Teleologically, composition, too, is concerned with the crafting of a world, and that world must be (re)constructed from some form of created concept. Certainly, processes of enactment and analyzation are also performed by writers, as they practice their craft. The most noticeable difference between reading and writing as processes of conformation lies in the seeming absence of a work to be conformed. In writing, however, the composer engages with an *ideal work*, a Platonic phantasm embodying the perfect, never-to-be-achieved final form of the written product. That is, the composer sits down to write *something*, and that goal takes the place of the work to be interpreted during reading. Of course, since the perfectly ideal work almost certainly has yet to be composed, the process is rather like reading while wearing sunglasses in a dark room – the best the average composer can do is try to feel her way along without getting a nasty paper cut from the deceptively sharp edges of the pages.

Because the ideal work cannot be read directly, the composer engages in three simultaneous and continuous acts of reading while writing: she reads the topic of the composition – this is *analytical reading*; she reads the material that she is generating as she writes – this is *writerly reading*; and she reads the material she is writing as if she were a stranger – this is *imaginative reading*. These three readings comprise the ideal constellation of reading strategies – a feedback loop – for the writer, but it is possible, I suppose, to write without engaging in *any* of them. Such an endeavor would require one to write without a shred of analysis or even of narrative organization (for this requires a great deal of analytical thought and insight), without the slightest awareness of correctness, revision, or the practice of craft, and without a bit of concern for whether one's readers will understand what has been written. Such a composition might be interesting from an academic perspective, but as a piece of writing it would be almost certainly unintelligible.

Setting aside the thought-experiment of reading-less writing, the first mode of reading, analytical reading, is the necessary precondition for writing. Whether the composer is writing about a work of literature, a work of art, a current event, a memory, or what-have-you, that subject must be interpreted. As I have mentioned previously, this act of interpretation is only truly "reading" when the subject is itself a text, by which I mean a composition in prose words. And yet, the ubiquity of the metaphor of reading for all other acts of interpretation is powerful. My use of it here is purely in the interest of intelligibility – this project advances enough neologisms and convoluted turns of phrase to achieve clarity that perhaps this misuse of reading may be excused.

Analytical reading is deceptively uncontroversial, even though its basis has been a serious bone of contention for compositionists and literary theorists for decades. In 1978 William Coles presented the idea of the "nominal subject" for the composition course in his seminal book, *The Plural I: The Teaching of Writing*, arguing that the subject of composition courses should be the compositions of the students, not "everything from *The Reader's Digest* to *Paradise Lost* to William Golding" (11). In 1993, *College English* published Gary Tate's article, "A Place for Literature in Freshman Composition." immediately following and rebutting Erika Lindemann's article "Freshman Composition: No Place for Literature." This point/counterpoint in print generated such heat that two years later *College English* published a "Symposium" on "Literature in the Composition Classroom," including follow-up essays by Tate ("Notes on the Dying of a Conversation") and Lindemann ("Three Views of English 101"), accompanied by pieces by Michael Gamer ("Fictionalizing the Disciplines: Literature and the Boundaries of Knowledge") and Erwin Steinberg ("Imaginative Literature in the Composition Classrooms?"), and a response by Jane Peterson ("Through the Looking-Glass: A Response"). In my own

composition courses, I teach literature. I also teach essays, poetry, images, film, and sometimes music. This presents certain advantages, as I will discuss later in this chapter, and it highlights certain disadvantages. As I explored at length previously, our students need targeted instruction in reading and in literary interpretation. Teaching literature in the composition classroom means that students will have a range of complex material in common (the course texts) about which to write. It also means, however, that valuable class time will have to be spent teaching and discussing with students how to read instead of write.

Removing literature and narrative works from the composition curriculum, however, does not solve the problem of needing to teach reading skills in addition to writing skills. Rather, all good writers spend a great deal of time and energy reading their own work. Writerly reading, the second mode of reading, is a form of reading that is familiar to teachers of composition, and that is alien to many of our students. Writerly reading is the activity that, ideally, allows writers to perceive the fine-grain issues of correctness, editing, and tone, and the big-picture issues of coherence, transitions, and organization. Of course, moving between these two registers is an act of interpretation, indistinguishable from the interpreter's movement between micro- and macroanalyzation. In my courses, I ask my students to submit their work electronically, using either email or the Web software package favored by my university. Because of this, I am able to view my students' work exactly as they see it on their computer monitors, with all of the red-squiggles and green-squiggles of an irate spell-checker and grammar-checker in place. Only the students themselves know whether those tell-tale indicators show a lack of writerly reading, or merely a lack of time to engage in such reading, or even a grammar-checker designed by a computer programmer who may or may not have the desired proficiency with spelling and grammar. In any case, however, these are only the most immediately visible signs of a lack of writerly

reading, and whether this is due to inability, inattention, or shoddy software, we must make writerly reading an explicit, taught component of our composition pedagogies.

The third mode of reading, imaginative reading, is easily the strangest and the hardest to understand or practice. Imaginative reading is the closest I have been able to come to explaining the phenomenon I like to call the "head paper" – that is, the paper whose brilliant gloriousness is complete and apparent *only in the head of the composer*. On paper, many important details, explanations, transitions, and connections have been inadvertently omitted, thus leaving something more closely resembling a train wreck on the page. Imaginative reading should be the act of pretending to be someone else, someone without access to the composer's trove of memories, thoughts, and experiences. The composer's projection of herself into the imagined role of other allows her to determine what might and might not make sense to her readers. It is an odd mode of reading, and difficult to explain, but the instant and distributed structure of audience feedback made possible by blogs, as I shall soon describe, provides one way of addressing the skills of imaginative reading.

4.1.2. Blogging: Publication, Audience and Dialog

When other teachers look at my composition syllabi, the first question many ask concerns my use of student-written blogs. Web logs, the long-form origin of the unpleasant sounding contraction *blogs*, began as lists posted to personal web pages identifying interesting sites and content found online. Such early blogs were frequently un-annotated, and provided a provocatively gnomic record of one's activities on the Web.⁵² Today, blogs are used for much

⁵² Today, though blogs have become quite different, browsing other people's links of interest remains a popular activity. Del.icio.us, for instance, is an extremely popular site (accessible at <u>http://del.icio.us/</u>) which allows users to add their personal bookmarks to interesting Web sites. These bookmarks are categorized by topic and by the user who

more than merely recording Web "surfing." Contemporary blog programs allow their composers to post to the blog lengthy prose messages, images, video clips, sound files, and virtually any other form of information that can be digitized. In my composition classes, I require that my students create a blog and post (publish their writing) to it at least twice a week.



Figure 5: A student blog.

Figure 5 shows a student blog created for one of my courses, using the popular and free blogging service Blogger.⁵³ Using a simple Web interface, my students select from a number of templates to determine the appearance of their blog, and are then free to post their thoughts,

posted them, and are viewable by anyone interested in the topic or user. From a practical standpoint, del.icio.us offers a collection of links whose quality and usefulness is already attested to by their inclusion on the site. From a personal standpoint, viewing the bookmarks of one's friends can offer a revealing and highly entertaining portrait of the friend.

comments, and reflections to the blog. The standard blog contains a title (in this case, the amusing "Whatever Floats Your Boat"), and then a list of "posts" arranged down the page in reverse chronological order. Along the right side of the page, in the blog *sidebar*, is a list of the contributors to the blog (each of which is a clickable link to the self-generated profile of the blogger), the titles of recent posts to the blog (each of which is a clickable link to that post), and a clickable listing of all previous posts which have been archived monthly.

Blogging allows for instant Internet publishing, and Blogger's blogs are able to be viewed by anyone with a computer and an Internet connection. Using Blogger, as my students have, a blog writer simply navigates to the Blogger home page, enters her login identification and password, and can then begin typing whatever she would like to have appear on her blog. What the blogger types will appear as a *post* on her blog. In Figure 5, for instance, there are three posts, "Free Photo Ipod... no... really," "The End," and "Thanksgiving Break." Each was composed and published by one of the blog authors, and each is prominently featured on the main page of the blog. Beneath each post, however, another way to write using blogs is indicated – through comments. Blogger indicates that the post "The End," for instance, was written by "Sarah" at "11:13 PM" and features 4 comments. Readers visiting a blog may click on the "comments" link at the bottom of each post and type their own reactions and thoughts about the post, as well as reading comments already offered by others.

Pew Internet and American Life Project Director Lee Rainey, in a report entitled "The State of Blogging," estimates that more than 8 million Americans "have created a blog or webbased diary" (1). It is much easier to post comments on other people's blogs than to create and update your own blog, however, and the Pew report asserts that 14.4 million U.S. users "have posted comments or other material on blogs" (*ibid*.). Even easier yet is simply reading blogs without posting or commenting at all. "By the end of 2004," Rainey indicates, "32 million Americans were blog readers" (*ibid.*). The numbers are impressive and become even more so when factoring in blogs composed throughout the world. Duncan Riley, at the Internet news site *The Blog Herald*, pegs the number of blogs worldwide as "greater than 34.5 million" (n.p.).⁵⁴ The number of blogs, bloggers, and blog readers is a persuasive indicator of the growing importance of blogs in contemporary literacy practice.

Two features of blogs in particular make them especially useful for my composition classes – blogs are *public* and they are *dialogic*.⁵⁵ In contrast to traditional journal-writing, blogs are a public forum in which the composer presents her thoughts to the world. As I discuss in the previous chapter, I believe it is important to give students safe spaces in which to begin to grapple with their interpretations and ideas. This space usually takes the form of informal response papers in my classes. The disadvantage of the response paper is that the student's writing reiterates the closed – and, importantly, non-circulatory – nature of the writing traditionally produced for college courses. This inaccessibility, however, is usually necessary for the response paper to be considered "safe." Most student work is generated by the student, seen and graded by the professor, and then returned to the student, who may or may not ever look at that work again. Even if the student is a frequent contributor to class discussion, her most complex thoughts and their most professional presentation remain a private affair. Blogs make student work public, which, as we shall see, has important implications for composition pedagogy. The possibility of commenting also makes blog-writing a dialogic endeavor. As I mentioned above, the blog post "The End" received four comments - all were from fellow

⁵⁴ Riley admits that his figures are not scientific, but his investigation represents the best estimate to date of blogging numbers including the non-English-speaking world. As Riley correctly notes, "the United States is not the entirety of the Internet" (n.p.).

⁵⁵ Of course, the public nature of blogs presents some serious issues to be considered carefully. I discuss these in detail in section 4.5.

classmates of the writer, but many other posts written by my students received comments from friends, family, and even complete strangers. Writing in a public forum highlights the challenges of writing for an uncertain audience. Instead of the traditional assumption that the student writer will be producing works for at most her class and at least her professor – all of whom share a common set of readings, discussions, and assignments for the course – the blog writer writes for an unknown group of readers, who may be intimately familiar with the topic under discussion or have no knowledge of it. The blog writer finds herself frequently confronted with a reading public that responds to her writing with affirmation or disapproval, with questions about clarification or suggestions for further inquiry. The model of writing posed by blogs is one in which writing is a social act, and in which the writer is able to interact with her readers. Perhaps most importantly, writing in blogs helps my students to see their writing as a constantly evolving dialog, rather than as a finite exercise in assembling sets of words for grades.

The linking possible in blogs (from one blog post to other posts, other blogs, news articles, events, or anything else that may be found online), makes possible a sense of community among bloggers. The blogs that I read most frequently, for instance, are also the ones to which I link most frequently in my own blog posts, and I look for those other bloggers to mention my blog posts occasionally on their own sites. Linking may be a way of showing respect for a particularly insightful or quirky post, and a healthy exchange of links and cross-blog discussions of topics also helps the blogger to see her ideas as being important, and her writerly voice as having an audience of other writers. The comments feature on blogs works in much the same way, allowing blog writers and readers alike an opportunity to contribute to the online discourse. These dialogic forms of blogging are a provocative answer to the problem of teaching imaginative reading. By providing writers with instant feedback on their writing, blogs can help

writers to develop the awareness of their audience's cognitive and interpretive needs necessary for successful writing.

4.1.3. The Weekly Blogging Requirement: The Habit of Writing

In a recent course, I required my students to post to their blogs at least twice a week. Each week I would assign a broad topic to address, such as "e-mail 'novels' vs. traditional novels," "PowerPoint success or horror stories," or "First thoughts on Mark Haddon's novel, *The Curious Incident of the Dog in the Night-Time*." The students could address these topics in any way they saw fit, and we would use their writings in our class discussions. The second post each week could concern anything about which the student wanted to write. Some posts were about music, others about sports, and one blog regularly analyzed and summarized several popular daytime television soap operas.

Kathleen Blake Yancey, in her Chair's Address to the Conference on College Composition and Communication (CCCC) in 2004, pointed to the fact that our students are engaging in a bewildering amount of textual communication every day – from personal Web pages, to blog, to text-messaging on cellular phones, to instant messaging (IM) on computers, to e-mail – and all of this textual production is done because they want to write these messages, not because they are part of a writing assignment. As she writes:

Don't you wish that the energy and motivation that students bring to some of these other genres they would bring to our assignments? How is it that what we teach and we test can be so different from what our students know as writing? What *is* writing, really? ("Made Not Only in Words" 298)

Over the past several years, I have asked my students if they have a personal web page and/or blog. Not a semester has gone by that I have not had at least one student with each of these in each class. Recently, I have noticed that the number of students who will admit to having a web

page or blog is increasing. Yancey is correct to note that digital technology is allowing a multitude of new ways to compose, disseminate, and consume textual, visual, and auditory messages, and yet our composition classes, by and large, do not even acknowledge these discourses, let alone address them as fertile topics for inquiry and opportunities for skill-building.

I use a two-post-per-week schedule for my student blogs because I want my students to gain the benefits of responding to class topics in writing, and I also want them to get in the habit Writing, in other words, can be something done every day, not merely for of writing. assignments. This may seem obvious, yet Yancey's critique is important – breaking down the barriers between writing for personal reasons and writing for course-related reasons is necessary if we hope to make our composition classes useful not only in the composition classroom, but in other classes as well as in all of the writing activities in which our students participate. From the students' perspective, this is crucial as well. Scott DeWitt forcefully limns what is at stake when he writes: "To only value written culture (as academics typically do) implies that our students have failed themselves and that they come to our classes as empty vessels, lacking the abilities and experiences necessary for academic success" (22). Our students are already proficient in many forms of discourse, but perhaps not in the one that is considered necessary to university success – standard formal written English. Finding ways to build bridges between the various modes of written discourse our students already practice and those we want them to be able to practice will demand close attention to the different types of digital discourse.

One of my students, whom I will call "Beth Roberts,"⁵⁶ composed a post for her blog

entitled "Physics Will Make You Tired," describing her experience at a mandatory lecture given

by a noted physicist. Roberts⁵⁷ writes:

In the weeks before leaving Campus, I attended the Freshman Lecture on "Why the Universe Is Shaped the Way It Is." A friend of mine, Austin, accompanied me. (And I just now remembered the ticket sitting in the pocket of my hoodie.)

Austin's original hope was to grab the ticket and leave, but the presenters had expected this, and told us they wouldn't be available until the end, and that we weren't permitted to leave early for any reason. I was getting the feeling that we were not in store for something at all entertaining. Austin had a mask of terror and panic from the moment he stepped inside.

Our speaker, who's name I can not find but will surely put back in here as soon as I do, was someone our introduction woman told us we should be "honored to have," and began singing his praises. Finally, it was our actual speakers turn to impress us.

He fired up a Power Point Presentation.

God, no.

He began to speak, and before he had a chance to impress me, I was counting everything he was doing wrong that was going to drown us all swiftly in a sea of lethargy, including how many times he could end a sentence with "Ok?." It was like a check list right out of the "Cognitive Style of Power Point."

I had high hopes coming in, but when only one of his (completely recited!) slides had anything to do with how the universe is shaped, let alone WHY, I lost all faith in the presentation. There was evidence that his speaking style was supposed to NOT make us feel like stupid freshmen, but he bored us all. We all left sort of confused and with throbbing brains.

⁵⁶ Throughout this work I have changed student names. Many of my students have given me their permission to reprint their work using their real names, but one student raised an interesting point. He granted me permission to use his name only in print media – not in online works – because he wanted to control his profile in online search engines such as Google and Yahoo. As this work is being prepared for electronic submission, and as I cannot guarantee that it will never be available online, I have taken the (from my perspective unfortunate) step of providing pseudonyms for all of the students whose work I discuss.

⁵⁷ When referring to student writing, I have chosen to follow the traditional mode of academic citation, referring to the author by her last name. This may appear to be cold or distancing, or even disrespectful. Nothing could be farther from my intention. If we seriously intend to treat student writing as important, and student writers as capable of producing work worthy of analysis, we owe it to our students to treat them with academic respect and formality.

I thought, certainly, if they were offering it to Freshmen, that they would attempt to make even Physics interesting. My bad.

Many sections of first-year composition require students to attend university lectures; after each lecture, students provide their professors with tickets handed out at the lecture to prove their compliance with the policy. In this post, Roberts uses the routine of the ticket to create foreshadowing and mood. She also conveys a wonderful sense of authorial voice, and though her post is far too informal to be considered an academic paper, she analyzes the lecture using visual rhetoric expert Edward Tufte's screed against PowerPoint, *The Cognitive Style of PowerPoint*, and manages to make the analysis fit naturally and easily into her narrative of the event. "Physics Will Make You Tired" offers a surprising amount of material to analyze and appreciate, and an encouraging wealth of ideas and perspectives which may be developed into longer, more formal papers.

Besides the two-post requirement each week, my students also were required to comment on at least two other blog posts. Roberts' post provoked several other students to share their thoughts on the lecture. One student continued Roberts' Tuftian analysis, noting that "the PowerPoint [slideshow] he had broke just about every single rule that Tufte presents. It was just slide after slide with bullet after bullet. Not exciting at all." Another commented on the comfortableness of the chairs in the lecture hall, noting how conducive they were to lecture-long naps.

From my perspective as her professor, I wish Roberts had written her critique of the lecturer's PowerPoint slides and "speaking style" in more detail, but her inclusion of her cognitive process during the composing of the post (most noticeably in her remembrance of her ticket and in her note to herself to add the lecturer's name later) are fascinating. As the person who will evaluate her writing, I am intrigued by this insight into her mental dialog during

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writing, and as a reader of the post, I find it creates a real sense of intimacy with the narrative voice. The blog posts are not intended to replace writing assignments, especially long analytical works. Instead, they are a writer's notebook of sorts, a convenient and easy place to jot down ideas, descriptions, and vignettes. Most of all, they are an opportunity to play with language, to try different ways of communicating or arguing a point in an environment that allows for rapid response and either validation or criticism of the writer's effort. In other words, blogs are an excellent way to help students to develop the habit of writing and the feel for language and its use that we want our students to have.

4.2. COMPOSITION AND MULTIMODAL ARGUMENTATION

Blogs are a useful introduction to digital discourse because they allow for public publishing of writing and because they offer a dialogic environment in which that writing is situated. But blogs also allow composers the ability to engage in multimodal composition – bloggers can include everything from font to font color to sound, photo, and video files in their blog posts. Some blog composers publish posts comprised of nothing but images, constructing visual diaries and essays referred to as *photoblogs*.⁵⁸

Shortly, I will describe two major assignments, part of a larger sequence of assignments designed to balance my desire for my students to gain proficiency with written language with the awareness that multimodal communication is an important, and frequently ignored element of contemporary literacy practices. Additionally, these assignments focus the students' critical

⁵⁸ One of the best resources for photoblogs (as of this writing) is Photoblogs.org, which describes itself as "a resource designed to help people find all kinds of photoblogs." Photoblogs.org may be accessed at http://www.photoblogs.org, and lists thousands of photoblogs from dozens and dozens of countries.

attention in two directions at once – toward the argumentative subject of their composition, and toward the technology they choose to compose their assignments. This double analysis, of an external subject and of the hardware and software that allow them to find, format, and incorporate multimodal elements in their work, is the ultimate goal of these assignments.

4.2.1. Making Theory: An Inductive Basis for Composing

In her essay, "The Sticky Embrace of Beauty: On Some Formal Problems in Teaching about the Visual Aspects of Texts," Anne Frances Wysocki discusses a self-consciously voyeuristic advertisement for *Peek: Photographs from the Kinsey Institute*, which depicts a woman standing in profile, naked except for black thigh-high boots and opera gloves. The ad is deliberately provocative, and Wysocki writes that it evoked within her both "pleasure and offense." Attempting to make sense of this ambivalent reaction, Wysocki turns to the critical literature on graphic and visual theory and design. She writes, however, that:

What I came to understand when I turned to what's already published in the areas of visual composition is that these approaches most often only partially explain my pleasure and none of my offense with the *Peek* composition: not only do these approaches assume a separation of form from content, but they emphasize form in such a way that 'content' can be unremarkably disembodied – a very bad thing when the "content" is a particular body. (149)

As a compositionist, Wysocki is scandalized by the inability or unwillingness of visual theorists to engage with the content of images and their context as composed, historically and socially-situated objects. Wysocki's desire to see the larger network of semiotic meaning and affect analyzed for the *Peek* advertisement mirrors common composition practice: many of us want our

students to be able to analyze the topic at hand not merely in its own particulars, but also – time and space permitting – the larger frame in which the topic operates.

Focusing on the image as a constellation of visual elements privileges what Roland Barthes might consider the *denotated* image, the work itself. It avoids engaging with the far more interesting *connoted* message of the image, which, as Barthes explains, "is the manner in which the society to a certain extent communicates what it thinks of it" ("Photographic Message" 17). It is through the study of connotation that the intensely affective properties of multimodal elements can be identified and explored, and the larger semiotic linkages and patterns in culture and society can be made apparent. Though much of the work on visual analysis fails to grapple with these larger issues of connotation and affect, it offers an important critical vocabulary that teachers and students may use while rectifying that failure. The difficulty, however, enters when one attempts to work a complex body of theoretical and practical expertise into the already overstuffed and overburdened composition curriculum.

In my classes, I bring a variety of multimodal works to my students' attention, from advertisements to video clips to Web pages to works of art. I ask my students to bring to class their own examples of multimodal content, whether in physical or digital form. All of this material is churned through the analytical mill of discussion and contemplation, for besides asking students to find examples that are particularly appealing or repulsive to the student, I also ask that the students prepare a brief analysis of those examples before class. Thus, the class always has recourse to at least one individual – whoever brought the example to the class' attention – who may be considered a provisional "expert" on that work. Sometimes the class expert is myself, but more often it is a student who has not only sought out the work in question,

but has spent some time with it, knowing that she will be expected to have something insightful to add to the class' examination of it.

This approach uses raw data and immediate experience to construct *inductive* aesthetic and critical standards shared – or at least known – by the community of the class. The advantages of this approach are multiple and, I believe, well worth the costs. First, the inductive approach provides students with a mass of primary works to consider and, most importantly, *to write about*. It has long been a tenet of mine that students write best when they are able to find a personal connection to the material under consideration. This may be perfectly obvious, but students often are unaware of this dynamic and, even when it is intuited, often are unaware of how to go about finding an approach to the material that triggers their individual interest or revulsion. The availability of multiple works about which the student may write puts the demand to choose on the student. That choice, in turn, can and should be a topic of discussion during writing workshop. Just as, in the previous chapter, I discussed strategies for making the various processes of reading and enacting visible in the classroom, so too does this move make visible the processes that may lead to good writing (however we may wish to define *that*, of course).

The inductive method also gives rise to a shared vocabulary and a shared body of experience through which that vocabulary is defined, while still valuing the students' own backgrounds and personal experiences. It does not *presume* that students will have a working understanding of canonical graphical and artistic art, but builds upon whatever experiences the students do have, and even in the case of the hypothetical student with *no* experience whatsoever with visual works, generates a small yet functional repertoire of examples on which to draw during analysis. It also foregrounds the *experience* of the visual, as students may come to these works for the first time during in-class discussion. This means, pragmatically, that many

students will have no carefully considered opinions to share with the class, relying instead on their immediate reaction to the image in question. For researchers interested in the study of affect, this is, frankly, ideal. It also leads to less guarded comments from the students, which I find frequently leads to more interesting and challenging discussion, and which gives the students more to think through as they work to produce their own analyses. But for all of these benefits, a troubling question remains: what is it that students are analyzing when they examine multimodal works, and what is it we should be evaluating when they produce their own? Does the melding of modes necessarily lead to the privileging of aesthetic creativity, perhaps even to the extent that the student's *art* overshadows analytical rigor?

4.2.2. Arguing Using Words and ... : Multimodal Composition

In the first chapter I argued that if "literacy" has any meaning left, it would have to include a bewildering array of activities because semiosis is possible across the range of modes of representation. Diana George puts this point succinctly when she writes "Literacy means more than words, and visual literacy means more than play" ("From Analysis to Design" 16). As I discussed in the first chapter, the ludic work has a long, venerable, and still troubling tradition among experimental narratives, but George is discussing a different dynamic. For many researchers and teachers of digital media and works in the distributed mode, visual literacy and visual rhetoric is an inescapable subject to be taught amidst the constellation of digital literacy skills. Visual rhetoric, like the calls for media literacy that preceded it and provided a degree of academic freedom for researchers interested in it, has not been embraced in the United States. Just as composition is still referred to - in certain circles - as less serious work and a less complex research topic than work in literature and critical theory, so too is visual rhetoric

sometimes seen as mere "playing" with pictures. As anyone who has worked or taught in the field knows, and as George asserts, nothing could be farther from the truth.



Figure 6: A recent banner from The Fund for Animals (http://www.fundforanimals.org/fur/).

In a recent class meeting, I asked my students to consider the juxtaposition of words and images on the Web site of an animal advocacy group, The Fund for Animals. At the top of this Fund for Animals Internet Web page was a banner proclaiming "She needs her fur more than you do." The message was straightforward and understandable as an anti-fur slogan, and yet its rhetorical effectiveness was complicated and enhanced by the image placed next to the text. Figure 6 shows the banner as it appeared for our discussion. Analyzing the banner, my students were immediately taken with four things: the size of the image in relation to the size of the text; the emotional appeal exerted by the image; the word-choice of the slogan; and the colors used for the text in the slogan. The image of the kitten in her habitat takes up almost two-thirds of the width of the banner, occupying far more space than the words that may be assumed to be the most important part of the campaign. In multimodal discourse, the image, or spokesmodel, may be more important to the process of conveying the intended message than whatever prose text is also used. In this case, the spokesmodel for the Fund's anti-fur campaign is a kitten, possibly a young bobcat. Telegenic in ways rarely seen outside Disney cartoon films, the Fund's kitten seen in what appears to be her *natural* habitat – triggers the Web page visitor's baby-protecting

instincts through her enormous eyes and ears and slightly tilted head. The head tilt is especially subtle and effective, suggesting puzzlement on the part of the animal that anyone would want to skin her to produce a luxury coat. My students also noticed, however, two ways in which the prose text is rendered on the page. First is the choice of words: by providing the kitten with a gender through the use of the female pronoun, the human viewer's protective instincts are further stimulated.⁵⁹ Second, the text font size and color further shape the affective and cognitive impact of the slogan. By using two different font colors, the Fund separates the slogan into two separate, but related, messages. The first, "she needs her fur," is a simple statement of fact, supported by the biological reality that without her fur – and the skin out of which it grows – the kitten would bleed to death. This message, furthermore, uses a bright white font color, giving the biological statement the sheen of purity, innate goodness, and trustworthiness (nevermind the race-inflected dichotomy established by the white-good/dark-bad visual shorthand). The second part of the message, "more than you do," rendered in dark, small type, uses typography to harden the tone of address to the viewer. The darker, smaller type strengthens the sense of rebuke created by the words of the second phrase and, seemingly reflecting the dark pools of the kitten's eyes, returns the viewer's eyes to the image, closing the cycle of reference between image and prose. Finally, the text size also plays into the meaning of the banner's message. The largest words on the page are the possessive "her fur," reinforcing the notion that fur coats are produced by robbing an animal of her skin. Back and forth, the viewer's attention shuttles between the hypnotic image, with its painful cuteness, and the prose, with its multivalent messages, to conform a meaning far more complex than either could present on its own.

⁵⁹ I am especially interested in the role of gender assumptions in this (and other) digital media works. Here, for instance, no matter the viewer's beliefs about gender, the resulting response is one of protection. For feminist viewers, the banner may represent another example of patriarchal capitalism. For even hardened anti-feminists, the use of "she" may trigger stereotypes of weakness and defenselessness on the part of the non-male kitten, again resulting in a protective reaction.

Rather than positioning image as a competitor against prose text for meaningconveyance, The Fund for Animals' banner shows that image and text work together, synergistically, reinforcing and inflecting each other. In the introduction to their collection *Eloquent Images*, Mary Hocks and Michelle Kendrick argue that this is a fundamental feature of multimodal works, writing that:

> to attempt to characterize new media as a new battleground between word and image is to misunderstand radically the dynamic interplay that *already exists* and has *always existed* between visual and verbal texts and to overlook insights concerning that interplay that new media theories and practices can foster. (1, emphasis in original)

Interplay is the operative concept for Hocks and Kendrick, an interpretive focus that also animated my class discussion of the anti-fur banner. For Cheryl Ball, interplay is the native mode of argumentation in multimodal works. As she writes, "the formation of argument in new media texts, then, becomes not a linear construction linking one sentence-meaning to a consecutive other. It is, instead, a juxtaposition of modal elements from which readers infer meaning" ("Show, Not Tell" 405). The modal elements in Figure 6 are the result of juxtaposition, but the close relation between the elements reduces the shock of the encounter, thus naturalizing the assemblage, and masking its artificialness and artifice. Not all works in the distributed mode, however, share this feature, choosing instead to foreground the modal and narrative disparity among elements. Diana George notes that the potential for experimentation and discovery in the realms of multimodal composition and juxtaposition are endless. As she reminds us, "our students have a much richer imagination for what we might accomplish with the visual than our journals have yet to address" ("From Analysis to Design" 12). If argumentation can operate not merely as the linear presentation of persuasive data, but also as the juxtaposition

of disparate – and sometimes seemingly unrelated – modal elements, then the ability to compose multimodal argumentation is limited only by our imagination and our technologies.

Gunther Kress sees multimodal argumentation and interpretation as calling for a "new theory of semiosis [that] will need to acknowledge and account for the process of synaesthesia, the transduction of meaning from one semiotic mode to another semiotic mode, an activity constantly performed by the brain" ("Design" 159). Kress' conception both of multimodality and of cognitive processing stems from an apparent unwillingness to abandon *text* as the privileged mode of meaning-making. For Kress, any mode that conveys meaning is operating *as text*, and so must be cognitively processed as if it were not of its own mode, but as if it were text. Thus, interpreting images for their semiotic content is akin to the traditional actions of synaesthesia such as smelling the color teal or hearing a prickly sensation. The call for multimodal interpretation and pedagogy is actually far more significant than Kress envisions, as it assumes from the outset that text is not the only – or the best – way to communicate meaning. Our students are surrounded by multimodal works and objects; it is time we addressed this fact of life in our composition courses.⁶⁰

4.2.3. Assignment Sequence, Part I: Multimodal Argument

The first major assignment in my multimodal composition courses is one that requires students to compose an argument using prose text and at least one other mode. Most students choose to incorporate many modes in their arguments, but some choose to focus on only a few. By this

⁶⁰ One prosaic and ubiquitous multimodal element our students are especially proficient with is the *emoticon*. An arrangement of punctuation marks that developed from the pre-graphics days of early personal computing, emoticons are means of indicating mood by the approximation of smiley-faces using nothing more than standard keyboard symbols. As with multimodal argumentation in general, emoticons are limited only by the ingenuity of the sender and the interpretation skills and neck flexibility of the receiver. Sample emoticons include smiley face :-) winking face ;-) frowning face :-(smiley face with big curly hair @:-) and goofy face with tongue sticking out :-p.

point in the semester, we will have examined a number of multimodal arguments, analyzing their composition and effectiveness, and exploring the relationships between their use of multimodality and the media in which each is presented. Figure 7 shows one example of a complex multimodal argument using only prose text, an op-ed column by humorist and *Seinfeld*-creator Larry David that appeared in the *New York Times*. David's screed against the political influence of the so-called "undecideds" in the 2004 election was accompanied by a graphic that ran alongside the text, listing a wide array of dichotomized choices, thus reiterating the incomprehensibility of the undecided position. The utterly pedestrian nature of most of the pairs of choices suggests the sheer number of choices we make every day, choices we feel very comfortable making. The unwillingness of the undecideds to choose a candidate to support is thus cast in the light of a bizarre, and highly suspicious, act of willfulness rather than the lack of will many may assume the undecided possess.

One of my students, whom I will call "Brian Powell," decided to argue that Batman was a better superhero than Superman. After much revision, he narrowed and shifted his focus to the societal reaction to, and embrace of, each hero, arguing that the anti-hero Batman more accurately reflects the current American psyche. Powell's early versions included quite a few images of each hero, but for a later draft he chose to focus instead on his prose and its presentation. Powell decided to recast his argument as a top-secret government dossier, a decision I found intriguing. Figure 8 shows the introduction to Powell's argument.

PAPER OR PLASTIC SOUP OR SALAD KERRY OR BUSH CRUNCHY OR SMOOTH **CHICKEN OR FISH** left or right THIS OR THAT EASY OR HARD TAXI OR SUBWAY SMOKING OR NONSMOKING SINK OR SWIM UP OR DOWN BLACK OR WHITE LENNON OR MCCARTNEY RENT OR OWN SWEET OR SALTY **BLACK OR BROWN** HALF-EMPTY OR HALF-FULL LIFE OR DEATH LOVE 'EM OR LEAVE 'EM MARTIN OR LEWIS YES OR NO PEN OR PENCIL LENO OR LETTERMAN GOOD OR BAD CHENEY OR EDWARDS STAY IN OR GO OUT BETTER OR WORSE YANKEES OR METS CHOOSE OR LOSE FRESH PEPPER? SPEAK OUT OR SHUT UP **KERRY OR BUSH** WHOLE-WHEAT OR WHITE N.Y. OR L.A. US OR THEM IN OR OUT SOONER OR LATER HOT OR COLD GINGER OR MARY ANN CATS OR DOGS STEAMED OR FRIED **RED OR BLUE** BUTTER OR MARGARINE NOW OR NEVER Number 17

Los Angeles —David, Larry. "Are You Undecided? Or Not?" *New York Times* National Edition 16 September 2004, A33.

I'd like to address this to the Undecideds: I'm on to you. You may be fooling everyone else with your little "undecided" act, but you're not fooling me. You know perfectly well whom you're voting for. The only reason you say you're undecided is that it's a cheap ploy to get attention. How do I know? Because I'm the most indecisive person in the world. I set the template, baby, and you're not passing the smell test.

You want to see real undecided? Go out to dinner with me sometime. I'll show you undecided. I look at the menu for 20 minutes, ask everybody what they're ordering, and then, finally, after I copy someone, wind up dashing into the kitchen to tell the waiter I've changed my mind.

Do a little shoe shopping with me. I guarantee you won't be able to stand it. The black ones. No, the brown ones. No, the black ones. Several of my relationships have ended in shoe stores, with women slipping out, unnoticed, never to be seen again. I even got thrown out of a poker game once because I sat there, paralyzed, unable to decide whether or not to fold. It wasn't a pretty sight, but at least it was genuine, not a bluff, like you people.

Oh, I've observed you in action. I've sat next to you at dinner parties and watched while everyone talked themselves silly, trying to get you on board. But you wouldn't budge, would you? You almost seemed to take some pleasure from it, just like my 8-year-old when she makes me beg her to take her medicine, you rascals.

The other night I saw a whole gaggle of you on TV in a focus group. You really liked chatting with professional pollster Frank Luntz, didn't you? He seemed very interested in what you had to say. Afterward, I could imagine all of you piling into a bus and heading for Denny's to discuss your exciting evening with Frank. I could see all of you staying friends even after the election. Maybe go on some trips together. Perhaps a wine tour of Tuscany. On bicycles! Oh, the life of the Undecided. Too bad they can't hold these presidential elections more often. Ah, well, you'll just have to make do.

The truth is, Undecideds, you're getting on our nerves. We Decideds hate all the attention you're getting and that you're jerking us around. Anyone who can't make up his or her mind at this point in the campaign should forget about the election entirely, buy a pint of ice cream and get into bed.

We'd love to tell you to take a hike, but we're afraid to alienate you. If we really had any brains, we wouldn't spend another second on you, but on the people who can truly make a difference: the "unlikely" voters. And there are millions more of them than there are of you. Those people aren't after attention, they're just incredibly lazy. The only way they'll register to vote is if someone shows up at their door with a form. And then the only way they'll actually vote is if you carry them to the booth.

Not only are they lazy, they're also indifferent. They just don't believe that voting can have an effect on their lives. Well, it just so happens that right after I voted for the first time, I landed myself a big fat job in Hollywood, a biopsy came back benign and I met my future wife as soon as I walked out of the voting booth. Coincidence? You decide.

Figure 7: An op-ed column with multimodal accompanying graphic.



MISSION:

Investigate why society would favor a dark and violent character over a defensive and peaceful character

BACKGROUND:

This matter is already evident in the popular comparison between the DC Comic's superheroes; Batman and Superman. They are both very well-liked characters by numerous comic book readers and enthusiasts.

Figure 8: Prose-only multimodality.

Powell's font choice, Courant, creates an official, and highly technological, feeling for his argument, in keeping with his narrative conceit. Throughout, he also uses a grey type color instead of the traditional black. This choice makes the blood-red "confidential" stamp stand out even more than it would normally, but beyond that it creates an odd, tentative mood, as if the grey message were fading from the page. Fans of the television and film series *Mission Impossible* will note the resemblance to the self-destructing nature of the tape recorded mission assignments in that series. Though Powell's prose is not as controlled as either he or I would like in this draft, it represents a radical rethinking of his earlier positions, presentation, and approach to his audience. In the present version, his audience is no longer the essentially passive audience of most arguments, but becomes imaginary agents whose task it is to read the briefing dossier and solve the mystery of the surprisingly popular allegiance to Batman. Powell presents his reader with his own conclusions, and yet manages to present sufficient evidence in support of

Superman's popularity to maintain the necessary fiction of a real contest for the hearts and minds of the public. Had the semester continued, I have no doubt Powell would have been able to refine its prose and thus revise his multimodal argument into a case study of contemporary culture and the superhero mythos.

Other students created PowerPoint presentations, Web pages, and even, in one case, a computer game, bringing a far wider range of multimodal elements into their arguments. However, the fundamental issue here is not the number or type of multimodal elements used in the argument, but rather the presence of any multimodal elements, the compositional activities needed to create the argument, and the interpretive skills needed to make sense of it. George Landow attributes an increased critical attention to the particularities of multimodality in composition to the spatialized network of lexias in hypertext. Regardless of whether we agree completely with this, his conclusions that "writing has become visual as well as alphanumeric" and that "writing requires visual as well as alphanumeric writing" are well justified by the complexity of even minimally multimodal works such as Powell's ("Hypertext as Collage-Writing" 163, emphasis added). The New London Group comes to the same conclusion about the incipient visuality inherent in prose, but approaches the issue from the history of desktop publishing. The mass production of personal computers capable of manipulating text and graphics in even rudimentary ways gave rise to a practice known as desktop publishing – the idea being that sophisticated publishing could be performed far from the printing presses and on the user's desktop. Today's word processing programs are far more powerful than the software that popularized the term desktop publishing, demonstrating that the power to manipulate the appearance of text on a page is an increasingly important one. As the New London Group writes:

Desktop publishing puts a new premium on Visual Design and spreads responsibility for the visual much more broadly than was the case when writing and page layout were separate trades. So, a school project can and should properly be evaluated on the basis of Visual as well as Linguistic Design, and their Multimodal relationships. ("A Pedagogy of Multiliteracies" 29)

Such evaluation is usually obviated by the mandatory use of standardized fonts and the academic preference for prose over other multimodal elements, but multimodality continues to creep into even the most traditional assignments. Mark Taylor and Esa Saarinen's *Imagologies*, the philosophical and graphical descendant of Marshal McLuhan's work with visual designer Quentin Fiore, for instance, argues that "the word is never simply a word but is always also an image" (Styles 3). With the click of a mouse, the modern composer may change the appearance of her prose, and thus change the way it may be received and interpreted by her readers.

4.3. POWERPOINT PHLUFF VS. PERSUASIVE PRESENTATION POTENTIAL?

The teacher's complaint, "I assigned an essay but the student turned in a web page – how do I grade this thing?" is becoming increasingly common as students take the initiative in multimodal composition, even in non-multimodal or digital courses. The challenge for the instructor is to develop a rubric that can evaluate fairly the aesthetic choices and moves made by students, and a critical awareness capable of seeing these choices and moves in the first place. Further complicating matters, the "desktop publishing" phenomenon (now simply understood as "word processing"), has had a tremendous impact on our awareness of the potential for multimodality and the style and format of prose on page or screen. Thus, even traditional prose-only assignments may exhibit critical and significant multimodal elements. No program pushes the

potential tension between form and content to the extreme like Microsoft's PowerPoint application. Through its aggressive suggestion of slide templates, "auto content," and ease of incorporating multimodal elements, PowerPoint presents its users with a frequently irresistible opportunity to run wild with formatting, leaving content and analysis poorly served. As an increasing number of grade schools are assigning PowerPoint presentations to their students, and as PowerPoint is now the *de facto* mode of presentation and communication in the business world, PowerPoint is a compositional tool and environment we must address in our curricula. This section describes an approach to PowerPoint in my composition classes that attempts to instill in my students an awareness of the tensions, opportunities, and dangers present in PowerPoint.

4.3.1. Assignment Sequence, Part II: PowerPoint Presentation

The multimodal argument is an important first move in the assignment sequence. It asks students to think analytically *and* creatively about their argument and their audience. It also asks them to think analytically and creatively about the technology at their disposal, and how best, and most effectively, to use that technology to maximize the argument's persuasiveness for a given audience. Students who choose to compose their argument on their blog, for instance, are writing for a wider audience than students using a word processor or PowerPoint. All of these issues are discussed in class and during writing workshops of drafts of student arguments, and the number and richness of options available to the students have produced challenging and often productive class discussions.

The next major assignment in the sequence asks students to engage in metacritical thinking and writing as they return to their multimodal arguments from the earlier assignment

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and both document their construction and analyze their argumentative strategies and effectiveness. The students presented their meta-analysis in PowerPoint.⁶¹ To help the students gain data to evaluate the effectiveness of their various strategies and the implementation of those strategies, the students exchanged multimodal arguments and peer-reviewed each other's work. The students then used these comments, as well as the comments I provided them on their multimodal arguments, to help them assess the effectiveness of their arguments. PowerPoint presentations, by their very nature as presentations, require a presenter who will deliver an oral report to accompany the slides. For this assignment, the students were asked to type (in MS Word) all of the comments they would make while delivering their oral presentation to a group. They then turned in these prepared remarks with their slideshows.

The multimodal argument focused the students' attention on the interaction between modes, an interaction that is frequently ignored in PowerPoint slide-making. The earlier assignment provided my students with practice in integrating multiple modes to achieve certain goals, a skill they would need in this assignment to avoid the pitfalls and traps of poor and uninteresting slide and presentation design so common to PowerPoint. Grounding our exploration and use of PowerPoint was a long essay by noted visual rhetorician and analytical designer Edward R. Tufte, *The Cognitive Style of PowerPoint*. In it, Tufte argues that PowerPoint "has a distinctive, definite, well-enforced, and widely practiced cognitive style that is contrary to serious thinking" (26). Tufte provides details of what he sees as the particular features of this cognitive style, including:

⁶¹ As an exercise in modeling, I present this assignment to my class in both written and PowerPoint slide format. When first explaining it, though, I present from the slides, which are projected for the entire class to see. The slides exhibit every failing I could manage to cram onto the screen, and my presentation is scarcely better. We discuss my dismal performance, which then becomes an object lesson in *what not to do*, and sets the stage for the students' reading of Edward R. Tufte's *The Cognitive Style of PowerPoint*.

foreshortening of evidence and thought, low spatial resolution, a deeply hierarchical single-path structure as the model for organizing every type of content, breaking up narrative and data into slides and minimal fragments, rapid temporal sequencing of this information rather than focused spatial analysis, conspicuous decoration and Phluff, a preoccupation with format not content, an attitude of commercialism that turns everything into a sales pitch. (4)

Given all this – and Tufte's arguments are extremely persuasive – it would seem almost cruel to require students to compose and present a complex analysis using this software, and yet that is the assignment. As I stress to the students, they should keep in mind what Tufte says: all of the fancy formatting in the world cannot substitute for intelligent analysis. I exhort them to try to make their formatting useful and relevant to what they are presenting. In other words, do not try to use flashy (phluffy) formatting to hide shoddy substance; instead, let the formatting reflect and emphasize a brilliant analysis. Tufte seems to argue that this is impossible, even though in the Postscript he acknowledges that sometimes intelligent PowerPoint presentations do manage to occur (27). As I write in the assignment, "Pay close attention to the examples [Tufte] provides – they're almost all negative examples (i.e., what not to do). Avoid them. This assignment, essentially, is a challenge to you to prove one of the world's foremost experts in visual design and rhetoric wrong. See what you can do."

The assignment is not entirely heartless, however, as it concludes with a concession that "It may be, as Tufte says, that PowerPoint makes intelligent discourse impossible." Later in the semester, I write, "you will have the opportunity to turn in your dissection of your own PowerPoint presentation. For that project, you will be examining what PowerPoint allows you to accomplish, and what it prevents you from accomplishing. Thus, even the most abject failure may result in a brilliant analysis of the medium for this later assignment." The spirit of challenge that I make explicit in this assignment has been surprisingly well received by my students, perhaps because of the snide and condescending tone used throughout Tufte's essay; students want to prove him wrong. At one point, for instance, Tufte juxtaposes the PowerPoint style sheet guidelines presented by the Harvard School of Public Health's Instructional Computing Facility with a page from one of the "Dick and Jane" books.⁶² As Tufte notes in his discussion, Harvard's templates "emulate the format of reading primers for 6-year olds" (19). My students – many of whom in the past few years have self-identified as "visual learners" – usually seem eager for the chance to best the expert.

The PowerPoint presentation is an explanation, an analysis, and a revision of the earlier multimodal argument, all at the same time. One of my students, whom I shall call "Bonnie Alderson," argued that the line of dessert-scented and -flavored cosmetics sold by pop singer Jessica Simpson, "Dessert Beauty," are fundamentally contradictory and psychologically unhealthy for women. In her PowerPoint presentation, Alderson decided to let the multitude of photographs at the Web page for the cosmetics become active parts of her argument, rather than using them merely as illustrations. Figure 9 shows one early slide from Alderson's presentation.

In this slide, Alderson's prose attempts to limn the numerous contradictions represented by Simpson's makeup line. The slide's title comes from the Web page itself, and, as Alderson argues, flies in the face of contemporary female beauty ideals. Meanwhile, the image of Simpson next to the prose sends a host of signals to the viewer and potential Dessert Beauty customer, not the least of which is that though Simpson might be licking the cupcake's icing, she is most definitely not eating the cupcake. The tension identified by Alderson in her prose, between wanting to eat the sweets and wanting to look sexy – while, presumably, wearing makeup that reminds both the wearer and those around her of the very thing she cannot have

⁶² It should be noted that Tufte is Professor Emeritus at Yale University. This bit of biography seems to go some distance toward explaining why so many of Tufte's examples come from Harvard University.

"because she thinks she looks fat, while making her look sexy at the same time" – is palpable, and perfectly mirrored in the image. By changing her strategy for using photographs in her argument, Alderson is able to analyze what she viewed as a failure of her earlier multimodal argument, revise it, and present the revision as part of her analysis, all while strengthening her original point.

"Sexy Girls Have Dessert"

can you say: "ironic statement"? Stereotypically, someone who is sexy has a figure that is thin, toned, and a total weight of about 110 pounds. But what effects does eating dessert have on the human body? Just think about all the carbohydrates and sugar that is in those sweet, delicious, desserts sitting on the plate. The calories are practically begging you to eat them so they can "hang out" on your saggy rear-end and flabby stomach. So the ultimate question here is, do sexy girls *really* have dessert? Here, Jessica Simpson claims that this "dessert" will satisfy every girl with that craving for real dessert, which she can not eat because she thinks she looks fat, while making her look sexy at the same time.



Figure 9: A multimodal PowerPoint slide.

Another student, whom I shall call "Greg Eades," took a very different approach, deciding to emphasize and reconfigure the role of the audience in his presentation. Knowing that his presentation would only be seen by myself, Eades took Tufte's critique of the presenter-

centeredness of PowerPoint to heart and crafted an audience-centered slideshow. Figure 10 shows a pivotal slide in Eades' presentation.

Eades begins his presentation with a series of slides documenting his compositional process for constructing his multimodal argument. This particular slide, a tribute to Sergio Leone's classic film of the same name, is his transitional slide into his analysis of the content of that argument. Each of the three underlined descriptors in the slide is actually a hyperlink to a different set of slides: one set analyzing what Eades felt went well in his argument, one analyzing what did not work as well as he would have liked, and one set (the "ugly" set) containing photographs of Eades' roommate, with the caption "A little humor here and there never hurt anyone."



Figure 10: A multi-linear PowerPoint slideshow.

Eades' use of multilinear navigation – a feature not well supported by PowerPoint – subverts the traditional medium of the software as a tool for presentation and turns it into a

medium for reading and enacting. Diana George's conclusion, mentioned earlier in this chapter, that "our students have a much richer imagination for what we might accomplish with the visual than our journals have yet to address" ("From Analysis to Design" 12), is amply demonstrated by Eades' simple and unorthodox approach to his presentation.

The freedom, flexibility, and encouragement to think outside the box is a crucial component of my multimodal assignments. It is not enough to incorporate multimodality into composition assignments. Instead, we must seriously consider the environment in which the multimodal elements are being composed. I would expect the same from a non-technological visual assignment. Common assignments, such as collages analyzing and/or depicting crucial elements or scenes from essays or narratives, frequently use the students' own actions of gathering materials as an entré to discussing the mass media and its depictions. Rarely, though, do composition classes discuss the multitude of images available online, for instance, or the psychological and sociological assumptions guiding the user interface for Microsoft's ubiquitous Word program, or the templates obnoxiously thrust upon users of PowerPoint. The assignments I have discussed in this chapter are neither visionary nor revolutionary, but they effectively encourage students to develop an awareness of technology not merely as a tool, but also as an environment. Once they begin to see the relationships between themselves and this technological ecosystem, those relationships begin to change. If we are truly committed to digital literacy, we must begin to theorize and teach our students the skills to become aware of the technological spaces in which they compose.

4.3.2. Aesthetics and Evaluation

Cheryl Ball, commenting on multimodal and digital strategies of argumentation, notes that "New media texts, which are experimental if only because audiences are not used to recognizing their meaning-making strategies, typically move freely between theory and practice through their interactive and animated designs" ("Show, Not Tell" 409). Ball's statement points to two important considerations: meaning-making strategies in digital and multimodal works can, and often do, differ significantly from those employed by traditional academic discourse; and digital and multimodal works frequently use structure, tone, voice, modality, and materiality as *methods of argumentation*, quite possibly apart from, or in contradiction to, whatever explicit message may be conveyed by the work. How, then, do we evaluate the academic success of students' multimodal works?

When I graded Greg Eades' PowerPoint presentation, for instance, I was amused by his use of multilinearity. It was unexpected and quite creative, and had very little to do with his analysis of his multimodal argument. The same categories, in other words, could easily have been presented in a linear format in a traditional essay. Eades' subversion of the PowerPoint genre, rather, was an analysis – and a rejection – of the traditions surrounding PowerPoint, an indication of his awareness of the platform in which he was composing his presentation. This might seem to be above and beyond the scope of the assignment, which asked that he analyze not the present medium, but rather the medium he had chosen for his multimodal argument. However, his multimodal argument had been composed in PowerPoint as well, and had been soundly criticized by his peer reviewer and myself for its heavy-handed approach to his audience. He concluded, for instance, "Now its time for you to agree. Take your time, and let everything sink in. The homework help, the bond you will have with your new friends, the parties, and the girls. Joining a fraternity is the right decision to make, and you will not regret doing so." It is, undeniably, a forceful conclusion to an argument. And yet, it remains largely unpersuasive because of its dictatorial and condescending tone. Eades' later presentation rejected the strategy of ordering his audience to believe as he did, and instead worked diligently to make his audience feel not patronized, but empowered. During the semester in which Eades composed his argument and presentation, I did not require that a Composer's Note be included with each of the major assignments, as I do now. Had I not asked Eades *why* he included the multilinear slides in his presentation, I might never have recognized the rhetorical strategies at work in the presentation, and thus my evaluation might have missed a rather substantial element of his work.

Even more challenging, a student whom I shall call "Rob Andrews" used timing effects and animation to convert his PowerPoint presentation into the functional equivalent of a fullyautomated film, complete with theme music. His analysis of his multimodal argument was perfectly adequate, but in revising and remounting his argument (which originally had been presented in MS Word), he managed to enhance the audience's feeling that his topic was of urgent and dire importance. Additionally, Andrews converted his "works cited" page into what appeared to be motion picture credits, complete with text crawling up the black screen and closing credit music. As the citations end and the music draws to a close, leaving only a wistful hornpipe reiterating the melody, Andrews fades in "Digital Discourse – 2004," the name and year of the class. The brief message fades to black as the hornpipe ends its melody, in a sequence whose affective power simply must be seen and heard to be understood. As cinema, it is both trite and common in the extreme. As *bibliography*, though, Andrews displays an innovative understanding of the symbolic value and potential for even the most ordinary and forgettable of essay conventions. Johndan Johnson-Eilola, in his essay "The Database and the Essay," argues for the ability of digital platforms such as blogs to operate as "symbolic-analytic forms of writing," because bloggers can collect provocative or odd materials from the Internet and write their own analyses or glosses on whatever material they have found and posted (215). In this way, bloggers show an interesting blend of aesthetic/symbolic and analytical skill in their online postings, and blog posts can be seen as something akin to the box art of Joseph Cornell or Dale Copeland, shown in Figure 11.



Figure 11: Fern Hill, by Dale Copeland.

Working toward a similar goal, Geoffrey Sirc uses Cornell's box art as a model for composition, seeking "the possibility of student as passionate designer, with heart and soul as compositional factors that need as much attention as hand, eye, or brain" ("Box Logic" 115). Box logic, Sirc's name for his multimodal pedagogy of collage, is Sirc's methodology for "aestheticizing the scene of composition" (116). I agree that the writing process needs to be considered as an aesthetic, affective, and immersive experience, but as I discuss later, the implications for Sirc's "box" pedagogy are substantial.

My own preference is to incorporate multimodality not to make the composed object itself overtly aesthetic, but to allow students to experience an explicitly *creative* and *imaginative* process of composition. For too many students, composition is an essentially analytical exercise, devoid of the spark of imaginative inspiration. In part, this is the predictable result of years of grade-school training in the five-paragraph essay. The five-paragraph essay is traditionally comprised of an introductory paragraph, three paragraphs of supporting examples, and a concluding paragraph. The overall structure of the five-paragraph essay is not at fault – there is nothing inherently wrong with the introduction-body-conclusion format, of course – it is, rather the potential for the strictness of the genre to paralyze free thought and experimentation, and to inculcate a single mode of written academic communication. It should go without saying that not every claim can, or should, be argued with three supporting examples, each of which is able to be fully explained in a single paragraph. The five-paragraph essay serves the admirable purpose of teaching beginning writers the importance of structure, and providing them with a fail-safe guideline within which to develop the skills of written communication. However, if we value experimentation and risk-taking in our students' writing, and if we make these values explicit in our classes, then we must find ways to help our students reconceptualize what writing is, what it does, and what writers think and do. By requiring students to analyze the many ways that objects, words, images, and the constellation of these things can denote and connote, and the ways they can be used to form arguments, I attempt to help my students to reconnect their own

composing practices with their rich imaginations and even richer experiences with visual and auditory modality.

This, of course, puts tremendous pressure on the teacher of composition, who not only must master the myriad skills and abilities of alphabetic writing, but also must become a visual art critic and connoisseur. Gunther Kress argues that this is not a development that is limited to blogs and explicitly multimodal discourse, but that "When in the past image appeared on the page it did so subject to the logic of writing, the relation of image to writing which we still know as 'illustration.' When writing now appears on the screen, it does so subject to the logic of the image" (*Literacy* 9-10). Kress' assessment does not ease the burden on the compositionist, as it suggests that even in monomodal and traditional writing environments, the visual and the aesthetic still intrude.

Kress collaborated with Theo van Leeuwen on a book that may aid teachers of composition as they work to become fluent in multimodality, *Reading Images: The Grammar of Visual Design*. The book addresses the relationship between the denotative design of the visual and the content so denotated, but in a highly dispassionate way. For instance, when discussing an image from an Australian primary school social studies textbook, they write:

in figure 2.1 the relation between the Aborigines and the fire constitutes a second, minor transactional process, subordinated to the "major" process which is constituted by the relation between the British and the Aborigines; and [. . .] participants such as the British or the landscape can themselves be read as analytical structures, with a Carrier (e.g., the landscape) and Possessive Attributes (e.g. rocks and trees). Which of these structures are major and which are minor is, in visuals, determined by the relative size and relative conspicuousness of the elements. (112-113)

Kress and van Leeuwen acknowledge that "In writing a book such as this, one sometimes feels that one is applying a cold, clinical approach to semiotic practices which are, in reality, strongly colored by affective factors" (*Reading* 265). The difficulty in managing all of these discursive registers at the same time – the structural, the relational, and the affective – points to a major challenge facing multimodal discourse. If our theorists struggle with the challenge, are we justified in asking our students to attempt what may be a Sisyphean task?

Once the writer ceases to discuss the formal elements of the image and begins to discuss its affective and aesthetic connotations, the thorny question arises: whose aesthetic sense should guide the analysis? When we use images and symbols drawn largely from popular culture to comprise our shared library of examples, and when we valorize the immediacy and impact of works from the mass media, are we encouraging students to replicate the frequently shallow and sensationalist discourse of the flash image and sound bite? The alternative must lie, as Scott DeWitt argues, in analysis. As I have discussed in previous chapters, the narrative and symbolic works with which our students - as well as we ourselves - are surrounded require careful, analytic attention, and our commitment to literacy requires teaching these analytical skills to our students. As DeWitt argues, "If the sound bite or other aspects of fragmented postmodernism form the texts of our students' worlds, then we need to offer purposeful, alternative writing instruction that teaches them to make connects between sound bites, thus creating more complex texts" (Writing Inventions 22). This project of bringing analysis to bear on the often unexamined mediated messages and modes of discourse in contemporary life must include aesthetics. Heavily-animated PowerPoint slides, complete with sound effects, as so many are, cannot be reduced simply to their prose content – the aesthetic (and the anti-aesthetic seen in many such slides) must also be interpreted, and their affective properties explored.

4.4. PUTTING IT ALL TOGETHER: REFLECTIONS IN/ON PROSE

At the head of this chapter I have a brief but pithy maxim from Brenda Laurel's seminal book, *Computers as Theater*: "Think of the computer, not as a tool, but as a medium" (126). When Laurel's book came out, this injunction was desperately needed in the field of digital textuality. Now, however, and especially in the context of composition pedagogy, we must think of the computer as a medium, a tool, *and a topic*. John Trimbur notes that "writing is a visible language produced and circulated in material forms" ("Delivering" 188). The materiality of writing is foregrounded by the seemingly immaterial state of writing in digital environments. Because digital compositions have no necessary physical state, they may take any form and include any content or medium supported by the composer's technology. The materiality of the digital environment, as well, has a role to play in interpretation. A message received in e-mail will be composed differently and approached differently – and rightly so in both cases – than if it had been composed in PowerPoint, or as a text message on a cellular phone, or in a word processor, or as a Web page or blog.

Anne Frances Wysocki poses the materiality and environmental context of digital communication as a fundamental question to be researched and incorporated into our pedagogies. She writes:

I want to consider how any material we use for communication is not a blank carrier for our meanings, is not a blank that contributes nothing to how readers understand. Instead, I believe that we have a time of opening here, a time to be alert to how these choices of material very much articulate into the other structures that shape writing and our lives – and that being alert to these choices can help us shape changes we might want. ("Opening" 10) As I have argued previously, works in the distributed mode do not need to be digital to be fully distributed, *but it helps*. Similarly, all of the hermeneutical and compositional pedagogies explored here can be successfully carried out using non-digital works and non-digital technologies of composition, but having the computers and the digital works helps to make features like the immensely rich possibilities for multimodal and dialogic expression visible and teachable. It is not enough, however, simply to use technology as an illustration. That approach treats technology as a medium and as a tool. Instead, as Wysocki and Johndan-Eilola posit, we need to ask "What are we likely to carry with us when we ask that our relationship with all technologies should be like that which we have with the technology of printed words?" ("Blinded by the Letter" 349). We need to ask this question as researchers, and we need to ask it in the classroom, making the computer and its power to operate as an environment for the consumption as well as the production of works, a *topic* for inquiry.

4.4.1. Assignment Sequence, Part III: Prose Reflection

The final assignment in this brief sequence asks students to return to their previous work, the multimodal argument and the PowerPoint presentation, and to document the construction, and analyze the argumentative strategies and effectiveness, of each. For the reflection, however, multimodality was forbidden – the reflection was to be composed using only prose text, with a standardized font, font size, font color, and margins. The goals of the reflection assignment are four-fold: the assignment is first a call to revisit earlier work and to revise it in light of new knowledge, skills, and technological capabilities; second, the reflection asks students to perform an analysis of PowerPoint as recent users of the program; third, students are asked to evaluate the

capabilities and limitations of the word processor; and fourth, the reflection assignment asks students to engage in a very complex comparative analysis of a single, self-selected and composed message across modes and media.

Below, I have included the final section of a prose reflection written by a student whom I shall call "Margo Lewis." Lewis' reflection began with a careful description of her processes of composing both her multimodal argument and her PowerPoint presentation. The section in which I am interested for the purposes of this chapter focuses on PowerPoint and what Lewis perceives as its shortcomings.

I am not extremely fond of PowerPoint. My dislike stems from a combination of being forced to do far too many presentations in high school and how ponderous putting a presentation together is. To make a presentation "interesting" requires locating images, animations, sounds, etc. to capture the audience's attention and then somehow attempting to keep it after the novelty of the images and animations has worn off. I think the program can be a useful visual aide on occasion, but simply conveying ideas and information in prose is far easier and clearer than the forced summarization of PowerPoint.

Edward Tufte's essay on PowerPoint's cognitive style is more aimed towards how useful the program is in a business atmosphere. For an analysis tool on a not-very-long persuasive paper, it's actually not terrible, except for the tediousness of organizing and decorating slides to give them the semblance of importance or interestingness. [....]

This experience also reminded me of the fact that PowerPoint is more of a prompt for the presenter than anything at all for the audience, proving correct Tufte's statement ". . PowerPoint is entirely *presenter-oriented*, and *not contentoriented*, *not audience-oriented*" (*The Cognitive Style of PowerPoint*, p.4). The audience learns nothing from slides that are sparse or from ones crammed with words and information. They are disinterested or left to draw their own conclusions, which may be entirely incorrect. Again, PowerPoint is like the presenter's assistant director of a play, prompting the individual when "lines" are forgotten. This raises the question of why we should even bother with PowerPoint when it's known that the presentation isn't meant for the entertainment of the audience. Besides, a presenter could simply mark his notes with highlights. None of the material in my presentation couldn't be reproduced in printouts that would clarify all my points and eliminate all the extraneous "Phluff." The presentation is more informative when accompanied by the prose "talk-through" part of the assignment, so why not cut the presentation entirely? All the information on the slides could be inserted quite effortlessly into the prose. Although the materials in this case were low-resolution, PowerPoint still prevented me from being perfectly crystal-clear about my points and all the relevant data.

Being an avid reader and writer, I am a huge fan of word processing and absolutely believe that it has fewer limitations than PowerPoint. Ideas are not restricted in any way; they may be outlined and then expanded to their full potential and beyond. The product of word processing requires thought and comprehension, and provides greater clarity of analyses. Of course, where charts and graphs are utterly necessary, word processing can't measure up if its multimodal capabilities are ignored or absent. However, word processing is a way to convey gads of information clearly and as pithily or wordily as the writer wishes. The reader has something more to connect to and doesn't have to rely completely on a presenter or speaker to get the data across. This is especially important for people who are more visual than auditory learners. A presenter's words are not going to remain in their heads, and they will more likely retain the incomplete data scattered on a slide, and if they choose to relay those inaccurate nuggets to someone else, severe problems could result, such as in Tufte's example of the Columbia PP presentation. I believe word processing is definitely the way to go. After all, Gutenberg's printing press isn't the most important invention ever for no reason.

As I read it, this section of Lewis' reflection addresses three major issues: the tedium of trying to maintain the illusion of "importance or interestingness" using PowerPoint; the program's lack of consideration for its audience; and the advantage enjoyed by prose text and word processors over PowerPoint. These points all reiterate arguments made by Tufte in *The Cognitive Style of PowerPoint*, but begin to move in more personal and yet still well-grounded directions.

Lewis' first set of claims, that composing for PowerPoint is "ponderous," and that the strain of creating "interesting" slides – which, here, is defined as including "images, animations, sounds, etc." – is necessary "to capture the audience's attention and then somehow attempting to

keep it after the novelty of the images and animations has worn off," both point to a larger critique of discourse in the PowerPoint environment. Lewis' claims are valid and easily supported by even the most cursory glance at the PowerPoint program itself – even students who have not previously used the software report how "easy" it is, how "simple" the templates made assembling their slideshows – but Lewis does not address this. Instead, she seems to be more interested in the dynamic between the presenter and her audience, a dynamic in which neither party is portrayed favorably. If audiences demand, as Lewis writes, "the semblance of importance or interestingness" in their presentations, then they value appearance more highly than content, flash more highly than analysis. Of course, the presenter so willing to accommodate this need for superficiality can hardly be excused or forgiven. Lewis's second major critique is of the fundamental bias toward the presenter in PowerPoint. Not only is the software designed to create slides which are usually capable of nothing more than promptings for the presenter, but should the presenter attempt to communicate data or analysis through her slides, she finds that the resolution possible in the program ensures that "the audience learns nothing from slides that are sparse or from ones crammed with words and information."⁶³ This leads Lewis to ask, rhetorically, "why not cut the presentation entirely" and replace the slideshow with an oral report accompanied by "handouts." Lewis follows Tufte's preference for written text over slides, but in her justification of prose she makes some very interesting observations. First, in arguing for the greater complexity possible in prose text, she notes the utility of outlining, a pre-writing strategy most of my students seem to have dismissed as hopelessly twentieth-century. She also takes a swipe at the prose reflection assignment itself,

⁶³ "Resolution" is a term advanced by Tufte in *The Cognitive Style of PowerPoint* to describe the amount of information per slide which may be visually recognized and understood by audiences. Tufte argues that PowerPoint has an extremely low resolution, resulting in what is known as the "6 by 6" rule, which limits the amount of data per slide to not more than six lines of text, each of which may contain not more than six words (*Cognitive Style* 4, 19). By comparison, this footnote alone contains ninety words.

criticizing the assignment for hobbling the word processor by ignoring its "multimodal capabilities." And finally, Lewis makes an uncommon claim that reading prose text will favor "visual" learners. I have been continually surprised by the diffusion and circulation of the concept of the visual learner, as it has been repeated often in my classes. Usually, however, my students claim to be visual learners, and thus more interested in images than in words. Lewis, here, reminds her readers that prose text is always a visual medium.

These points suggest an interest in the larger modes and practice of discourse in and around PowerPoint, an interest I encouraged for later revision. As the draft illustrates, these ideas are only barely mentioned, and lack critical development and organization. However, it is heartening to see these moves being made, to see the gesture to the larger context, and to see a student attempting to connect the context *and* the particular object of the analysis *to her own writing practices*.

4.4.2. Rhetorical Awareness and Rhetorical Control

In the second chapter, I introduced David Kaufer's theory of rhetoric as world-creation. As Kaufer writes, rhetoric is "the application of language to bring about a world, a cast of characters, and a contest to the listener's here and now" ("From *Tekhne* to Technique" 269). This was central to my approach to interpretation, as the enactor's requirement before, during, and after interpretation is the conformation of the world of the work, the imaginative (re)construction of the rhetorical acts of the composer. From the vantage point of the composition classroom, this is not merely central, it is the *sine qua non* of composition. The composition of worlds for enactors to conform is the work of the composer, regardless of whether she is student, professor, or professional composer.

Preferring a more environmental model, John Duffy, like David Kaufer, divorces rhetoric from "the classical arts of persuasion or the verbal ornamentation of elite discourse." Instead, Duffy writes:

rheroric as I mean it here refers to the use of symbols by institutions or individuals to structure thought and shape conceptions of the world. This means that we may think of rhetorics in the plural rather than imagining a single, coherent, and all-unifying rhetoric. [...] Rhetorics provide the frameworks in which individual acts of reading and writing take place. ("Letters from the Fair City" 226-227, emphasis in original)

Duffy's contribution – looking at both the individual's rhetorical acts and the environment in which the individual is allowed to or constrained from performing those acts – is especially necessary when considering the technologies of composition. It is the traditional work of the composition class to instill in students an awareness of language, and of their own uses of language, thus making possible the conscious, polished performance of rhetorical skill in writing. Many professors of composition also work to instill in their students an awareness of the students' surroundings – whether through an environmental, political, social, or issue-based focus. Few, however, consider the environment of the computer and the Internet, an environment that may affect student composition as much as, or more than, any of these other factors.

The student portfolio is a space in which the individual acts of world-creation generated by a student are combined into something larger and more complex – a galaxy of worlds, so to speak. The student blogs that I assign serve as portfolios in two important ways. First, the blogs provide an always accessible compilation of the student's writing. Many of the assignments are never posted to the blog, but the weekly blogging requirement ensures that each blog will have a wide variety of writing by the students, sometimes on course-related topics and sometimes on more individual interests. I refrain from grading individual blog posts – it would violate the role of the blog as a writer's notebook and make the blog an even less safe space than it otherwise might be. Instead, at the end of the semester the students reexamine their previous posts and select five posts that they think are their best, most interesting, and most representative of themselves, their interests, and their writing. Thus, the blog serves as a *de facto* portfolio and later as an intentioned and crafted portfolio. When the students turn in their blog post portfolio, they also turn in a brief Composer's Note, putting the selected posts into a relevant context. The Composer's Note is intended to serve as an introduction to the student's selected posts, allowing the reader to make sense of them. In this case, even though the blog posts remain public and available, the reader of the collected portfolio is just me. I advise students that they may want to explain what connects these posts, what they find most interesting about them, or what they are surprised to see in them. I also advise students that they may revise their blog posts before they submit them as their portfolio. Bloggers in general revise their content frequently, usually - but not always – noting such changes. It is in the student's interest, I suggest, to review carefully his or her blog posts and revise them as needed. In a particularly broad hint, I note that should a student find that a post needs to be completely re-written, it would be best to compose a new post in which the student links to the earlier post. A post like this (a "wow, what was I thinking?" post), I confide, can be extremely interesting, as it shows an evolving perspective. Whether the students compose any new posts for their portfolios, however, is up to them.

Second, the blog portfolio is an exercise in revision, and thus a test of the students' awareness of, and skill with, their rhetorical prowess. It is also an opportunity to reflect on the environment of the blog as a communicative medium. The Composer's Note, in particular, is a space in which the student can bring these two awarenesses into productive harmony. Had Beth

Roberts, for instance, included her post "Physics Will Make You Tired" in her portfolio, I would have been interested to see what changes, if any, she made to her original post. Roberts indicated that she would return to the post at a later date to include the name of the lecturer – an action she did not perform. As blogs and blog posts are almost infinitely customizable and revisable, her rationale for her writerly actions, whether she chose to add the lecturer's name or not, would be more important than her actual action. After all, the post is intelligible without the name, and the verbal placeholder Roberts uses powerfully conveys the mutability of online writing. Interestingly, *refraining* from making the change indicates the potential for change, while making the change effaces that potential. The Composer's Note for the blog portfolio requires students to analyze the rhetorical moves they make, and to situate those moves within the environment in which they were composed. The Composer's Note also allows students to make explicit their own processes of reading – substantive changes in analysis illustrate analytical reading, and changes to the tone, style, and delivery of the posts indicate writerly and imaginative reading.

The three assignments in the sequence I have described in this chapter also strive to foster in students an awareness of their own rhetorical acts of world creation, as well as the alreadyconstructed worlds in which they are being asked to operate. Much earlier in this chapter, I cited Kathleen Blake Yancey's article, "Made Not Only in Words," which notes the wide array of technologies of communication that our students use, many on a daily basis. In the three assignments of this sequence, I explicitly challenge my students to operate in three very different technological and discursive environments – multimodality, PowerPoint, and prose text on a page. Each assignment requires my students to engage in code-switching, a skill and concept that arose from research in the field of discourse studies. Briefly, code-switching is the cognitive and performative activity of changing one's practice of discourse, usually in response to a change in social context. As noted discourse theorist James Paul Gee writes:

All of us control many different social languages and switch among them in different contexts. In that sense, no one is monolingual. But, also, all of us fail to have mastery of some social languages that use the grammatical resources of our "native language," and, thus, in that sense, we are not (any of us) "native speakers" of the full gamut of social languages which compose "our" language. (*Introduction* 87)

Code-switching is, I believe, the dominant and unheralded skill needed to be compositionally literate in the twenty-first century. The spectrum of environments and applications for composing, each of which gives rise to its own generic practices and traditions, requires that we master many different ways of communicating through writing. Instant Messenger (IM), for instance, is one of the most popular computer applications among our students. IM allows students to type short messages to other computer users, like e-mail, but without any time lag. The instantaneous nature of IM, coupled with its short message lengths, makes it more like conversation than e-mail, which is more akin to postal letters, and hence, monologic. Like IM, short message service (SMS) offers the ability to send short text messages via cell phones. IM and SMS, then, as rapid, conversational tools, have an entire lexicon and grammar associated with them, conventions which facilitate the instant-ness of both technologies. A sample, and hopelessly uncool, IM/SMS message might read: "hA, wotz ^? Im n class nw, bt cnt W8 2 MEt [^] w U. Did U c d shO? OMG LOL." This message, in standard English, reads, "Hey, what's up? I'm in class now, but can't wait to meet up with you. Did you see the show? Oh my God, I'm laughing out loud." In IM/SMS, vowels are frequently dropped, numbers replace letters or even words, and typographic characters are used to indicate words and concepts like "up" and "down." I have had students turn in formal essays with IM/SMS lingo in place of words, and not realize the substitutions.

Regardless of whether we address issues of digital communication, we ask our students to learn a new discourse in our composition courses. As David Bartholomae notes in "Inventing the University," "the student has to learn to speak our language, to speak as we do, to try on the particular ways of knowing, selecting, evaluating, reporting, concluding, and arguing that define the discourse of our community" (589). We ask our students to code-switch from their daily discourses to our academic mode, but if we have no understanding or awareness of the many discourses our students already practice and at which they have become proficient – let alone of the various discourses in which we are asking them to participate, such as PowerPoint and word processors capable of rich multimodality – what are their chances for success, and what burdens have we unfairly placed upon them?

4.5. COMPOSITION AND TECHNOLOGY: CONSTRAINTS, IMPLICATIONS, AND OPPORTUNITIES FOR DIGITAL DISCOURSE

In the introduction to this chapter, I mentioned the NCTE and CCCC's calls for including multimodality and digital media in the composition classroom and for taking seriously experimental research and non-traditional publication venues for tenure and promotion reviews. "That NCTE and CCCC feel the need to call for such changes," I noted, "indicates that conditions throughout education are not yet fully conducive to such practices." In this concluding section, I will focus on those conditions, and their implications for students, teachers, administrators, and the university in general.

As I have written, code-switching is an activity and a skill that our students already possess to a great extent. If we hope for them to be able to consciously control and modulate their uses of, and skills with, the various discourses they are expected to practice fluently, we must make the moves between and among discourses an explicit, analyzable part of our curricula. This is not dissimilar to the moves that many teachers of composition already make (and have for decades), when they assign various genres of essay to their students. Shifting from the personal essay to the argumentative essay to the research paper, for instance – and especially when accompanied by class discussion – can foreground the cognitive processes of becoming aware of discourses and working to operate within their particular purviews. Such discussion and such moves, however, require knowledge and expertise in the various discourses under discussion. For researchers trained in the traditional forms of academic writing, switching codes from prose work to multimodal and computer-based work will require no small amount of effort and attention.

The traditional academic essay, however, is itself undergoing its own evolution, thanks, in large part, to the ubiquity of the computer. Models of what became known as "the writing process," developed from the work in the 1970s of such figures as Janet Emig, Linda Flower, Sondra Perl, and Nancy Sommers, no longer seem to apply. Even at its most reductive and basic formulation, the pre-writing (brainstorming, outlining, free-writing, etc.), writing, and post-writing (editing, revision, restructuring, etc.) model no longer seems to obtain. In most process theories, writers engage in all three stages simultaneously, constantly planning ahead, writing, and revising as they work. And yet, as many of us will acknowledge, there was pragmatic reasoning behind the injunction we were given in our own writing instruction to engage in pre-writing *before* beginning to write. Our students today, for the most part, have never known

school or writing without computers. They have never experienced the terror and pain of composing with the typewriter, for instance. For them, writing drafts in longhand, *on paper*, is an unnecessary luxury, not a time-saving step in the generation of academic work. If finished academic work is work that is typed, and if the technology for producing that finished work is the typewriter, then the composer had better know what it is that she intends to say, how she intends to say it, and her typing skills had better be good. In such a setting, and with that reduced level of technology, writers on the typically rushed academic schedule would not have time to retype their work to incorporate the many revisions that occur between the conception of a writing project (the *ideal work*) and – it is hoped – the final version of that project.

The differences between writing in the age of typewriters and in the age of personal computers are clear and significant. Earlier this year, the *Pittsburgh Post-Gazette* published an article about the new Scholastic Aptitude Test's essay section, including a side-bar with tips for writing the new SAT essay. The tips, from officials at the College Board (the corporate authors and publishers of the SAT), contain such suggestions as:

- Spend the first five minutes planning the essay.
- Readers are trained not to judge essays by handwriting or length, but the handwriting print or script must be legible, and a single paragraph probably isn't long enough.
- Readers won't subtract for misspellings unless they are so distracting they interfere with the message. (Chute "SAT's Essays" A11)

To students who are used to composing *at the keyboard*, the suggestion that they spend one-fifth of their total allotted time *thinking* instead of writing may seem ludicrous. One of the promises of personal computers was that they would make editing, reorganizing, and all other manner of

revision instantaneous and accessible at all times. The ability to change a single word in the middle of the page, and to have that page automatically reformatted to retain its "professional" appearance, for instance, was a revolutionary change from the compositional environment of the typewriter. Given this ability to edit on the fly, however, are our students engaging in the substantial editing and revision that their technology so clearly facilitates? My own experiences with student writing suggest that our composition instruction has largely failed to adapt to the new writing processes.

If we can agree that our pedagogies have failed to adapt to new conditions, then we must acknowledge that the institutional structures of academia risk becoming extinct. George Landow, one of the towering figures of digital humanities theory and research, plaintively writes in a recent article that "Like so many other American institutions, Brown [University] still does not have any way of counting hypertext and most computing work in the humanities toward tenure or promotion" ("Educational Innovation" 113). Brown, as Landow reminds us, was at the forefront of humanities computing, and yet even this innovator remains attached to an older understanding of academic work.

As David Bartholomae writes, "academic writing is the real work of the academy" ("Writing with Teachers" 480). This quote is, of course, taken out of context, and yet it functions in two senses. Bartholomae intends the statement to convey his conviction that the work of the composition course is preparation for everything else students and faculty do in academia. The emphasis, in other words, is on the word "real." If we shift the emphasis to "writing," however, we illuminate the prevailing attitude at most institutions of higher learning. Research which, as Cheryl Ball notes, may "typically move freely between theory and practice through their interactive and animated designs," may be seen as alien to the traditional culture of

the academy. Strangely enough, this is so because "audiences are not used to recognizing their meaning-making strategies" ("Show, Not Tell" 409). Traditional academic writing has always been aesthetic as well as analytical, with the well-turned phrase, clever word-play, or Derridean subversion of language conventions giving the staid and stolid essay a sheen of craft and artistry not always connected with the analytical merit of the piece. But even this intrusion of the aesthetic is carefully modulated and contained. When the academic work itself is formally indistinguishable from the artistic work it purports to analyze, many in the academy may become uncomfortable.

This work, *The Digital Affect*, is itself a product of this culture, a work about the distributed mode in reading and writing composed to resemble the traditional codex work, and availing itself of only the barest affordances open to it as a digital composition. Change, in the form of online, peer-reviewed academic journals, is coming, but its acceptance throughout the structures of the academy is slow. Such change will, in the end, require a fundamental rethinking of what the work of the university is, how multimodality performs that work, how multimodality can and should be evaluated, and what the proper *academic* relationship between prose and multimodality is. Such questions will not be answered quickly, and will not be accepted quickly.

In Chapter 3, I showed how works in the distributed mode can crack open the black box that is reading, allowing us to peek inside to watch, comment upon, and teach those processes. Digital media, and the concept of multimodality in particular, offer some ways to slow down and open the composing process to examination and pedagogical intervention, but in no way do they provide the skeleton key to the treasure chest of composition cognition. And yet, digital media are an inseparable part of contemporary composition. We cannot ignore this. My student,

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Margo Lewis, ended her prose reflection with a justification for her preference for prose over PowerPoint by noting that, "After all, Gutenberg's printing press isn't the most important invention ever for no reason." The jury is – and rightly so – still out on whether the personal computer, and the ability to publish materials to the Internet, rivals Gutenberg. But for our students, and the mediaspheres they inhabit and in which they participate, writing is not what it used to be. It is sometimes stranger, sometimes richer, and always faster than it was even twenty years ago.

Cynthia Selfe notes that "Literacies accumulate rapidly when a culture is undergoing a particularly dramatic or radical transition. And during such periods of rapid change, individuals are often expected to learn, value, and practice both past and present forms of literacy simultaneously and in different spheres of their lives" ("Students" 50). This is certainly one of those times. Teachers, students, and non-academic writers all must come to terms with the new opportunities and limitations offered by the evolving environments of digital technology. Otherwise, we risk enabling the dystopian future predicted by Kathleen Blake Yancey. As Yancey writes:

If we continue to partition [technology] off as just something technical, or outside the parameters governing composing, or limit it to the screen of the course management system, or think of it in terms of the bells and whistles and templates of the PowerPoint screen, students in our classes learn only to *fill up* those templates and *fill in* those electronic boxes – which, in their ability to invite intellectual work, are the moral equivalent of the dots on a multiple choice test. Students will not compose and create, making use of all the means of persuasion and all the possible resources thereto; rather, they will complete someone else's software package; they will be the invention of that package. ("Made Not Only in Words" 320)

5. CONCLUSION(S)

Works composed in the digital mode – digital as well as quasi-digital – are saturated with affective strategies. Likewise, our uses of digital media and technology frequently are heavily shaded by our own affective engagement with both the user interfaces and the content presented All too often, technology effects its own disappearance, becoming by digital media. "transparent" to the user and thus fading into the natural world. When this happens, we begin to lose the ability to question the communication media, by which we are surrounded, and their messages, with which we are saturated. This familiarization process is now almost complete with the technology of the codex book. Most of us no longer see the book as a technological marvel with a human-contrived structure and interface that limits some, and makes possible other, modes of communication. Instead, the book is a transparent gateway to narrative or informative realms. Italo Calvino's If on a winter's night a traveler is, as I mentioned previously, almost always read as a battle between reading and writing. It is also, of course, a scathing critique of the technology of the modern novel and of the book publishing industry. It is the technology of the book, and of the industries that produce books, that makes possible the forgeries and narrative sabotage of Ermes Merana and Silas Flannery.

The name "Ermes Merana" brings us back to the figure of Hermes, the messenger of the gods, Olympian trickster, and patron deity of the study and practice of textual interpretation – hermeneutics. In this dissertation, I have attempted to describe a hermeneutical approach to digital media, one that, in other words, looks at the works themselves and also at the ways we try

to make sense of them. Classical hermeneutics encompasses only the consumption and interpretation of already-produced works. This, I feel, is an oversight. Drawing on an understanding of literacy that moves beyond reading to include all forms of interpretation and meaning-making allows me to think of composition and multimodal argumentation as fully literate practices, for instance. If we want to think of writing as an opportunity to discover and form new knowledge, then we must include composition in the field of hermeneutics, for without the lived and meaningful processes of interpretation and understanding, writing becomes merely an exercise in recording pre-digested and already-shaped messages. Besides, as a trickster god, Hermes would be offended at the suggestion that we leave composition out of his particular sphere of influence. Hermes is undoubtedly well acquainted with the mischief that may come from writing.

In the Preface to The Digital Affect I mentioned that this work is only a beginning, the framing of a conversation (sometimes intriguing, sometimes contentious, I hope) concerning our understanding of and engagement with digital media. The complexity of digital narratives and their inclusion in practically all facets of twenty-first century life render moot the question of a single next step to take in continuing research. Instead, what I see is a web of interrelated inquiries, each of which, rhizome-like, links to others being investigated now by other digital researchers, and to some yet to be devised.

In Harold Ramis' 1993 film, Groundhog Day, Bill Murray plays Pittsburgh TV weatherman Phil Connors, who is sent to Punxsutawney, Pennsylvania, to report on the annual Groundhog Day festivities. An unexpected blizzard traps Connors and his film crew in Punxsutawney overnight, but Connors wakes the next morning to find himself reliving the previous day. Through an unexplained loop in time and space, every day is Groundhog Day, and

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Connors appears doomed to repeat the same day, seemingly forever. This use (or abuse, from Connor's initial perspective) of repetition is a common feature of works in the distributed mode, which may send enactors to the same lexia over and over again in what is termed recursion. Each time the enactor reaches an already-seen lexia, however, she comes to that lexia with a different perspective on the world of the work, and a different, greater understanding of the work as a whole. In Groundhog Day, Connors uses his recursive experiences as practice time to seduce women, commit crimes, and eventually win the love of his TV producer, played by Andie McDowell. Each time through the loop of Groundhog Day provides Connors with new insights and another chance to succeed at whatever task he has set for himself, until finally he finds true love and the recursive spell is broken.

Literary theory has a history of making progress over the mangled corpses of those who came before, as if English Studies were a zero-sum game. One of the features of digital theory that makes it such an intriguing field of inquiry is that the theory – along with the body of works it studies – is rapidly evolving. From a hermeneutical perspective, though I do not agree with all of the work that has come before, even the most disputed efforts can be seen as providing insight into the field and its future directions. As advances in digital media allow the production and distribution of ever more daring and outré works, digital theory continues to try to keep pace. It promises to be a wild ride.

We shall not cease from exploration And the end of all our exploring Will be to arrive where we started And know the place for the first time. (T.S. Eliot, "Little Gidding" 145)

APPENDIX A

SELECTED CODEX WORKS FREQUENTLY APPEARING IN DIGITAL MEDIA THEORY: A BRIEF BIBLIOGRAPHY

APOLLINAIRE, GUILLAUME

Calligrammes

Aarseth, Espen. *Cybertext*. 10+. Bolter, Jay David. *Writing Space*. 153. Ryan, Marie-Laure. *Narrative as Virtual Reality*. 216+.

BORGES, JORGE LUIS

"The Aleph"

Landow, George. Hypertext 2.0. 37+. Ryan, Marie-Laure. "Introduction: From Possible Worlds." 178+. Ryan, Marie-Laure. "Will New Media Produce New Narratives?" 340. "The Book of Sand" Douglas, Jane Yellowlees. The End of Books. 14+. Glazier, Loss Pequeño. Digital Poetics. 19-21. Landow, George P. "What's a Critic to Do?" 38. "The Garden of Forking Paths" Bolter, Jay David. Writing Space. 145-148. Coover, Robert. "The End of Books." 23. Douglas, Jane Yellowlees. The End of Books. 60+. Herman, David. "Toward a Transmedial Narratology." 63. Landow, George P. "What's a Critic to Do?" 38. Landow, George P. Hypertext 2.0. 56. Montfort, Nick. Twisty Little Passages. 45. Moulthrop, Stuart. "Rhizome and Resistance." 213+. Moulthrop, Stuart and Nancy Kaplan. "They Became What They Beheld." 228+. Murray, Janet H. Hamlet on the Holodeck. 30-32+. Ryan, Marie-Laure. Narrative as Virtual Reality. 65+. "The Library of Babel" Bolter, Jay David. Writing Space. 145-148. Glazier, Loss Pequeño. Digital Poetics. 47.

"A Survey of the Work of Herbert Quain"

Bolter, Jay David. Writing Space. 145-148.

Ryan, Marie-Laure. Narrative as Virtual Reality. 204+.

CALVINO, ITALO

If on a winter's night a traveler

Aarseth, Espen. *Cybertext.* 7+. Aarseth, Espen. "Aporia and Epiphany." 35. Murray, Janet H. *Hamlet on the Holodeck.* 38-39+. Rabinowitz, Peter. "Music, Genre, and Narrative Theory." 315. Ryan, Marie-Laure. *Narrative as Virtual Reality.* 200+. Ryan, Marie-Laure. "Cyberage Narratology." 124+.

CHOOSE YOUR OWN ADVENTURE BOOKS

Aarseth, Espen. *Cybertext*. 66+.
Aarseth, Espen. "Quest Games as Post-Narrative Discourse." 366.
Bolter, Jay David. *Writing Space*. 148.
Montfort, Nick. *Twisty Little Passages*. 71, 125, 131.
Murray, Janet H. "Pedagogy of Cyberfiction." 160n3.
Ryan, Marie-Laure. *Narrative as Virtual Reality*. 248+.
Ryan, Marie-Laure. "Introduction [to *Cyberspace Textuality*]." 7.
Ryan, Marie-Laure. "Will New Media Produce New Narratives?" 341.

FOWLES, JOHN

The French Lieutenant's Woman

Douglas, Jane Yellowlees. "How Do I Stop This Thing?" 162+. Douglas, Jane Yellowlees. *The End of Books*. 24+. Rabinowitz, Peter. "Music, Genre, and Narrative Theory." 315. Ryan, Marie-Laure. *Narrative as Virtual Reality*. 252+. Ryan, Marie-Laure. "Cyberage Narratology." 134.

GIBSON, WILLIAM

Neuromancer

Bolter, Jay David. *Writing Space*. 201. Joyce, Michael. *Of Two Minds*. 103, 118-119. Lahti, Martti. "As We Become Machines." 157. Moulthrop, Stuart. "Rhizome and Resistance." 299. Moulthrop, Stuart. "The Shadow of an Informand." 60. Murray, Janet H. *Hamlet on the Holodeck*. 22. Ryan, Marie-Laure. *Narrative as Virtual Reality*. 52+. Ryan, Marie-Laure. "Cyberspace, Virtuality, and the Text." 78+. Ryan, Marie-Laure. "Introduction: From Possible Worlds." 178+.

JOYCE, JAMES

Finnegan's Wake

Aarseth, Espen. "Aporia and Epiphany." 33. Bolter, Jay David. *Writing Space*. 142-145. Douglas, Jane Yellowlees. *The End of Books* 123+. Joyce, Michael. *Of Two Minds*. 137. Landow, George P. *Hypertext 2.0.* 182+. Moulthrop, Stuart. "Rhizome and Resistance." 309+. Ryan, Marie-Laure. *Narrative as Virtual Reality.* 55+. Ryan, Marie-Laure. "Introduction [to *Cyberspace Textuality*]." 15.

Ulysses

Bolter, Jay David. *Writing Space*. 142-145. Douglas, Jane Yellowlees. "How Do I Stop This Thing?" 162+. Landow, George P. *Hypertext 2.0*. 182+. Murray, Janet H. "Pedagogy of Cyberfiction." 140+.

PAVIĆ, MILORAD

Landscape Painted with Tea

Aarseth, Espen. "Nonlinearity and Literary Theory." 54. Aarseth, Espen. *Cybertext*. 10+.

Dictionary of the Khazars

Joyce, Michael. *Of 2 Minds*. 105+. Keep, Christopher J. "Disturbing Liveliness." 168. Landow, George P. *Hypertext 2.0*. 188+. Moulthrop, Stuart. "Pushing Back." 668. Murray, Janet H. *Hamlet on the Holodeck*. 37+. Murray, Janet H. "Pedagogy of Cyberfiction." 138+. Ryan, Marie-Laure. *Narrative as Virtual Reality*. 94+.

QUENEAU, RAYMOND

"A Hundred Thousand Billion Poems" ("Cent Mille Milliads de Poèms")

Rpt. in *The New Media Reader*, eds. Waldrip-Fruin and Montfort. 149-169.

Aarseth, Espen. "Nonlinearity and Literary Theory." 66-67. Aarseth, Espen. *Cybertext*. 10+.

Landow, George P. "What's a Critic to Do?" 34.

Montfort, Nick. Twisty Little Passages. 70.

Ryan, Marie-Laure. Narrative as Virtual Reality. 185+.

Ryan, Marie-Laure. "Cyberspace, Virtuality, and the Text." 97.

"Yours for the Telling" ("Un Conte à Votre Façon")

Rpt. in *The New Media Reader*, eds. Waldrip-Fruin and Montfort. 171-178.

ROBBE-GRILLET, ALAIN

In the Labyrinth

Douglas, Jane Yellowlees. "How Do I Stop This Thing?" 161+. Douglas, Jane Yellowlees. *The End of Books*. 92+. Ryan, Marie-Laure. *Narrative as Virtual Reality*. 124+.

STERNE, LAURENCE

Tristram Shandy

Bolter, Jay David. Writing Space. 140+.

Douglas, Jane Yellowlees. *The End of Books*. 60+. Joyce, Michael. *Of Two Minds*. 22, 137. Keep, Christopher J. "Disturbing Liveliness." 168. Landow, George P. *Hypertext 2.0*. 182+. Murray, Janet H. *Hamlet on the Holodeck*. 104+. Murray, Janet H. "Pedagogy of Cyberfiction." 150. Ryan, Marie-Laure. "Cyberage Narratology." 123+.

APPENDIX B

COURSE SYLLABUS: FRESHMAN SEMINAR 0003: DIGITAL DISCOURSE

Freshman Studies: Digital Discourse FS 0003 CRN: 29963 Fall 2004 (05-1) 138 Gardener Steel Building (GSCC) Wednesdays 6-8:30pm http://courseweb.pitt.edu Instructor: Richard Parent Office: CL 617V Office Hours: Tuesdays, 11:15am-1pm *or by arrangement* E-Mail: richard.parent@earthlink.net http://www.richardparent.net/FS0003

DIGITAL DISCOURSE

REQUIRED TEXTBOOKS

Castro, Elizabeth. *HTML for the World Wide Web* (with XHTML & CSS), 5th ed. Little, Brown Handbook Pavic, Milorad. *Dictionary of the Khazars* (either Male **or** Female editions) Rall, Ted. *To Afghanistan and Back* Tufte, Edward. *The Cognitive Style of PowerPoint* Works and sites available online (*consult the course schedule for details*)

COURSE OVERVIEW

This section of Freshman Seminar will explore the ways that digital technology has affected our modes of communication. When we are online, IM (instant messenger) provides a more immediate connection than e-mail. In business and educational settings, PowerPoint has become the new lingua franca for presenting material. Wherever we are, SMS text messaging (on mobile phones) allows us to send prose messages to anyone, anywhere. Regardless of where we live, Internet Web logs

("blogs"), online newspapers, and discussion forums keep us up to date on the world's events. In these environments we are constantly writing messages for others and reading the messages of others – but this writing and reading can be very different from that done by previous generations. Specifically, digital technology allows us to use multimodality and fragmentation and connection in our "written" communications in new and sometimes startling ways.

Whether we consider the hyperlinked multimodal assemblage of the World Wide Web (individual sites and pages representing fragments of all of the data available on the Web, and connected to each other via hyperlinks), or a simple text-only file created with a word processing program like Microsoft Word (each letter, word, sentence, paragraph, and page is divisible from the others, and movable throughout the document or to other documents), technology now allows us to acknowledge the fragmentary and multimedia nature of information and to bring together disparate bits of data to create new knowledge.

Mutlimodality modern computers and digital technology allow us to incorporate multiple modes of representation in our messages. This means that we now have the ability to include prose text. graphics, sound clips, links to web sites or other files, movie clips, animation - and we can do this quickly, easily, and at practically no cost.

Fragmentation & Connection another important affordance of digital technology is the ability to assemble quickly and easilv collections of data, files, or sites, and just as quickly and easily explode to assemblages back into their constituent elements.

In this class we will be engaging in what literacy researchers call "code switching," that is, changing from one form of discourse to another, in response to context. We will be reading and writing a variety of forms of discourse, including such diverse examples as blog postings and comments, word processors, PowerPoint presentations, and hypertext markup language – switching our reading and writing styles as necessary and appropriate. We also will be reading and writing about the switching that the different forms require of us.

This is a composition course and, as such, you will be required to compose on a weekly basis. Each week, regardless of whether there is a major assignment due, you will be required to compose. There also will be weekly reading requirements, to supplement our class discussions and to provide us with new insights into our writing. Seminar in Composition is traditionally a high-work-load course, and this section will be no exception.

Because this is a four-credit course, you will spend at least 10 additional hours during the term on out-of-class Freshman Studies activities that will complement and enrich coursework, while providing you with knowledge of the educational opportunities at the University, the cultural events on campus and off, and an understanding of what it means to study the liberal arts.

WORKSHOP SCHEDULE

Every week we will explore the compositions of our classmates, reading and experiencing the work your fellow students have constructed for this course. We will discuss the works, focusing on the strengths we notice and providing constructive suggestions for improving the areas we feel are not realizing their full potential. In this way, we will all learn from each others' efforts, both as composers and as critics. Each student will be required to sign up for one workshop day on the workshop signup schedule. Students whose work is scheduled to be workshopped are required to submit their work to me no later than 5pm on the Monday of the week in which we will be examining the work.

GRADING:

Weekly blogging:	10%	(starts Sept. 8)
Afghanistan assignment:	15%	(Sept. 22)
PowerPoint presentation:	10%	(Oct. 6)
PowerPoint reflection:	15%	(Oct. 27)
HyperFiction analysis:	10%	(Nov. 10)
<i>Khazars</i> project:	15%	(Dec. 1)
HTML final project:	15%	(Dec. 8)
Class Participation:	<u>10%</u>	
-	100%	

WEEKLY BLOGGING

In many composition classes, the hard work and effort that students put into their work goes unnoticed and unappreciated by all but the few people in the students' particular class. In this section, you will be creating and posting much of your work to your own Blogspot blogs. By the second week of class, you will form small groups (3-4 students each) and create your own group blog on Blogspot. Your blog groups will be based on common interests, and hopefully will allow you to interact closely with your classmates on specific topics and happenings.

You will be required to compose at least one substantive blog post each week. Sometimes I will provide you with a topic to address; other times you will be free to post on whatever strikes your fancy. And, because the blogosphere (the world-wide assortment of blogs) operates as an ad-hoc community of people sharing ideas and exchanging viewpoints, you will also be required each week to post comments on at least two blog posts by others. You may comment on any blog post you wish, but at least one comment each week must be on a post by a classmate. Additionally, you will be required to blog about at least two of the four Freshman Lectures this fall semester. The Freshman Studies department will provide more information about these as the semester progresses.

Each week, before class, you will be required to e-mail Jennifer Dodson, the TA for this section, with links to your blog posts and comments for that week.

MULTIMODAL AFGHANISTAN ASSIGNMENT

Ted Rall is a journalist and cartoonist who traveled to Afghanistan shortly after the U.S. invasion of the country following the events of September 11, 2001. Rall recorded his thoughts and observations about the country, its people, and the effects of the war, in prose, photographs, and cartoons. Rall's book is an excellent example of the uses of multimodality to convey a wide range of impressions and to create a wide range of reactions in its readers. For this assignment, you will use Rall's book as a model and compose your own multimodal argument. You also will write a short analytical piece examining you're the multimodal material you chose to include in your project, your rationales for using them, and the effectiveness of their use. Further details will be provided later in the semester.

POWERPOINT PRESENTATION & REFLECTION

Microsoft's PowerPoint has become the default presentation medium for business and for many disciplines in the academy as well. As such, it is incumbent upon us to explore the rich potential and serious drawbacks of this program. For this assignment, students will initially compose a 5-10 minute presentation using PowerPoint, incorporating the wide range of features and media supported by the program.

Later in the semester, students will compose a reflection on their experience using PowerPoint as a mode of communication. This reflection will discuss the students' intention motivating the PowerPoint presentation, delivering the same information in a purely prose form. Finally, the reflection will be an opportunity for students to compare the effectiveness of PowerPoint and prose-only documents.

HYPERFICTION ANALYSIS

Throughout the semester, we will be reading and experiencing a range of online narratives constructed in variously fragmented ways, using a variety of representational modes. These stories relate their multimodal narratives in much the same way that the World Wide Web relates information across countless hyperlinked sites and pages. Literary theorists frequently refer to these online narratives as *hyperfictions*. You will be required to compose at least one blog entry on your thoughts about hyperfiction in general, and on the particular works we explore in class. Your blog entries should be a space for beginning this assignment, a longer and more in-depth examination of one particular hyperfiction. Further details will be provided later in the semester.

KHAZARS PROJECT

Milorad Pavic's Dictionary of the Khazars is a "lexicon novel" - that is, it is a novel written in the form of a lexicon, which is to say that the novel takes the form of a dictionary. In fact, the book is comprised of three dictionaries, each with cross-references to the others, all discussing various aspects of the mythical (?) ancient Khazar people and their practices and history (mythology?). Since it is not a traditional narrative that unfolds through a clear beginning, middle, and end, but rather a system of interlinked dictionary entries (perhaps not unlike the WWW?), the book can be read in countless ways. You may choose to read the book from start to finish. You may choose to begin with one of the three dictionaries, and then read the others as you wish. You may choose to skim the book and begin with an entry that interests you, allowing the crossreferences throughout the book to guide you. Your reading path and style may partake of elements of all of these methods (or none) - again, the form of the novel leaves this particular choice completely up to you. During the semester, we will be reading Dictionary three different times, each time approaching the novel in a different way. Your assignment for this work will require you to engage critically with the form of the novel, as well as with your own reading patterns and choices. Further details will be provided later in the semester.

HTML FINAL PROJECT

For your final project in this class, you will select an aspect of digital discourse, or a particular manifestation of digital discourse or technology that intrigues, disturbs, or otherwise piques your interest. There are two requirements for this project – the first is that you compose your project in HTML (or XML, if you prefer); the second is that your project demonstrate clear critical thinking and inquiry into the nature and implications of your topic. You will prepare a proposal for your final project that will briefly explain your topic and the format in which you plan to produce your final project. This proposal will be due by November 3rd. Final projects will be presented to the entire class during the last class meeting. More detailed directions for this assignment will be provided as the semester progresses.

CLASS PARTICIPATION

Attendance is mandatory. Since composition courses focus primarily not on a textbook but on the work of students themselves, whose writing and reading are central to class discussion, this course is designed to function as a seminar – which means that your participation in class discussion is necessary for the success of the course. Because of this, and because of the truncated meeting schedule, students who miss three or more classes **risk failing the course**. We have a lot of material to work with in a short amount of time. Be prepared for the heavy commitment that the time spent writing and reading for this course will require. As you can see from the Course Calendar, we will be quite busy. Come to class on time and prepared to take part in conversation about the materials under study. If you cannot come to class, it is your responsibility to communicate directly with me, to arrange to turn in written work on time, and to find out about subsequent assignments. You will be considered absent if you do not turn in a written assignment the day it is due. Students who miss more than two classes should consider withdrawing from the course and taking it again under better circumstances.

Students who feel that they are too shy to participate in class discussions must meet with me during my office hours to receive full credit for class participation. If you would feel more comfortable sharing your comments with me than with the entire class, I am willing to discuss your ideas with you and then bring your comments (anonymously reported) to the class' attention for further exploration. For many of you, this may be your first university seminar, so if you have any questions about class participation in a seminar course, or about my attendance policy, I encourage you to ask me.

FRESHMAN STUDIES GRADING

Freshman Studies is a pass/fail 1-hour component of your Freshman Seminar course. To receive a passing grade in Freshman Studies, you will need to read all of the articles posted to the CourseWeb page under each module and complete the following six assignments:

- 1) Freshman Studies (FS) Module 3: Transition from High School to College
 - \rightarrow Photoblog or blog on roommate or blog on transition to college
- 2) FS Module 4: Academic Skills and Services
 - → Library Tour & Info on Using Electronic Resources
- 3) FS Module 5: Academic Integrity
 - → Meta-blog post on linking vs. stealing
- 4) FS Module 6: The Nature & Value of a Liberal Arts Education
 - ightarrow Current event media comparison blog the results
- 5) FS Module 7: Relationships with the Academic Community
 - \rightarrow Take a prof to lunch or Prof interview or Form a study group
- 6) FS Module 8: Educational & Life Goals
 - \rightarrow Declare a major & blog your reasons for choosing that major

The course calendar lists the weeks that we will be addressing each of the Freshman Studies modules. On those weeks you will be required to read the materials on our CourseWeb page included in that week's module and complete the Freshman Studies assignment for that module.

ACADEMIC RESPONSIBILITY

The University defines plagiarism as having occurred: "When a student presents as his/her own, for academic evaluation, the ideas, representations, or works of another person or persons without customary and proper acknowledgment of sources; When a student submits work of another person in a manner which represents the work to be his/her own; When a student knowingly permits his/her work to be submitted by another person without the instructor's authorization." More information on the University policies concerning found at the following URL: plagiarism can be (http://clover.slavic.pitt.edu/~tales/02-1/plagiarism.html). be Plagiarism will not tolerated in this course.

AN IMPORTANT NOTE

If you have (or suspect that you may have) a disability for which you are or may be requesting an accommodation, you are encouraged to contact both myself and the University Office of Disability Resources and Services (DRS), 216 William Pitt Union, 412-648-7890 or 412-383-7355 (TTY) as early as possible in the term. The DRS Office will verify your disability and determine reasonable accommodation for this course.

COURSE CALENDAR

September 1-	First day of class: Course Syllabus Intro to room/computer lab First Digital Work: "Soothcircuit"
September 8 –	Read: To Afghanistan & Back pages 1-33 HTML pages 13-24, 30-35, 117-125 In-Class: Form blog groups Discuss Afghanistan & HTML **Weekly blogging requirement begins** Freshman Studies: Module 3: Transition from High School to College
September 15 –	Read: To Afghanistan & Back pages 35-110 HTML tba Due: FS Module 3 – College Transition (blog or photoblog) Workshop: First blog entries (photo/university/roomie blog) Freshman Studies: Module 4: Academic Skills and Services
September 22 –	Read: The Cognitive Style of PowerPoint HTML tba Due: Multimodal Afghanistan assignment Workshop: Multimodal Afghanistan assignment Freshman Studies: Module 7.1: Relationships with the Academic Community

September 29 –	Read: 3+ News/Political <i>blogs</i> & 3+ News/Political <i>sites</i> <i>HTML</i> tba Due: FS Unit 5 – Plagiarism (conventions re: linking vs. stealing) Workshop: Meta-blog post on linking vs. stealing Freshman Studies: Module 5: Academic Integrity
October 6 –	Read: Dictionary of the Khazars, 1st iteration Due: PowerPoint presentation E-mail re: Khazars (reflection 1) Workshop: PowerPoint presentations Freshman Studies: Module 7.2: Relationships with the Academic Community
October 13 –	Read:TheCaseCollection <http: intro.html="" nature="" turbulence.org="" works="">Due:Blog on HyperFiction as a narrative formWorkshop:HyperFiction as a narrative form blog entries</http:>
October 20 –	Read: Dictionary of the Khazars, 2 nd iteration Due: Khazars reflection 2 (blog or otherwise) Workshop: Khazars reflection 2 (blog or otherwise)

Остовег 27 –	Read: Scholarly Hypertext (<i>Ashes, Sparks & Hypertext</i>) <i>HTML</i> tba Due: PowerPoint reflection Workshop: PowerPoint reflections
NOVEMBER 3 –	Read: HyperFiction (to be decided <i>en masse</i>) Due: Media comparison blog entries Final Project Proposals Workshop: Media comparison blog entries Freshman Studies: Module 6: The Nature & Value of a Liberal Arts Education
NOVEMBER 10 –	Read: HyperText as Knowledge Aggregator Tool (Wikipedia) 10+ Wiki articles Due: HyperFiction analysis Workshop: HyperFiction analysis
NOVEMBER 17 –	Read: Dictionary of the Khazars, 3 rd iteration Due: Declaration of majors blog entries Workshop: Declaration of majors blog entries Freshman Studies: Module 8: Educational & Life Goals

NOVEMBER 24 – THANKSGIVING HOLLIDAY (no classes)

ALL FRESHMAN STUDIES REQUIREMENTS MUST BE COMPLETED

DECEMBER I-	Read: HyperMedia tba Due: <i>Khazars</i> project Workshop: <i>Khazars</i> project
DECEMBER 8 -	In-Class: Presentations of HTML Final Project Due: HTML Final Project

BIBLIOGRAPHY

- Aarseth, Espen. "Aporia and Epiphany in Doom and The Speaking Clock: The Temporality of Ergodic Art." Cyberspace Textuality: Computer Technology and Literary Theory. Ed. Marie-Laure Ryan. Bloomington and Indianapolis: Indiana UP, 1999.
- Aarseth, Espen J. Cybertext: Perspectives on Ergodic Literature. Baltimore and London: Johns Hopkins UP, 1997.
- Aarseth, Espen. "Nonlinearity and Literary Theory." *Hyper/Text/Theory*. Ed. George P. Landow. Baltimore and London: Johns Hopkins UP, 1994.
- Aarseth, Espen. "Quest Games as Post-Narrative Discourse." Narrative Across Media: The Languages of Storytelling. Ed. Marie-Laure Ryan. Lincoln and London: U of Nebraska P, 2004.
- Amerika, Mark. Grammatron. WWW Hypermedia, ongoing. http://www.grammatron.com>
- Apollinaire, Guillaume. *Calligrammes: Poems of Peace and War 1913-1916*. Trans. Ann Hyde Greet. Berkeley: U of California P, 1980.
- Aristotle. On Rhetoric: A Theory of Civil Discourse. Trans. George A. Kennedy. New York and Oxford: Oxford UP, 1991.

Aristotle. Poetics. Trans. S. H. Butcher. New York: Hill and Wang, 1961, 1997.

Ball, Cheryl E. "Show, Not Tell: The Value of New Media Scholarship." *Computers and Composition* 21.4 (2004): 403-425.

Baraka. Dir. Ron Fricke. 1992. DVD: MPI Home Video, 2001.

- Barthes, Roland. "The Death of the Author." *Image Music Text*. Trans. Stephen Heath. New York: Hill and Wang, 1977.
- Barthes, Roland. "From Work to Text." *Image Music Text.* Trans. Stephen Heath. New York: Hill and Wang, 1977.
- Barthes, Roland. "The Old Rhetoric: An Aide-Mémoire." *The Semiotic Challenge*. New York: Hill and Wang, 1988.
- Barthes, Roland. "The Photographic Message." *Image Music Text.* Trans. Stephen Heath. New York: Hill and Wang, 1977.
- Barthes, Roland. *The Pleasure of the Text.* Trans. Richard Miller. New York: Hill and Wang, 1975.
- Barthes, Roland. *Roland Barthes*. Trans. Richard Howard. Berkeley and Los Angeles: U of California P, 1977, 1994.

Barthes, Roland. S/Z. Trans. Richard Miller. New York: Hill and Wang, 1974.

Bartholomae, David. "Inventing the University." *Cross-Talk in Comp Theory: A Reader*. Ed. Victor Villanueva, Jr. Urbana: National Council of Teachers of English, 1997.

- Bartholomae, David. "Writing with Teachers: A Conversation with Peter Elbow." *Cross-Talk in Comp Theory: A Reader*. Ed. Victor Villanueva, Jr. Urbana: National Council of Teachers of English, 1997.
- Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." *Illuminations*. Trans. Harry Zohn. New York: Schocken Books, 1968.
- Berets, Ralph. "The Magus: A Study in the Creation of a Personal Myth." Twentieth Century Literature 19.2, April (1973). 89-98.
- Best in Show. Dir. Christopher Guest. Perf. Parker Posy, Michael Hitchcock, Cathetine O'Hara, Eugene Levy, Christopher Guest, Michael McKean, John Michael Higgins. Warner Brothers, 2000.
- Birkerts, Sven. *The Gutenberg Elegies: The Fate of Reading in an Electronic Age.* New York: Fawcett Columbine, 1994.
- Birkerts, Sven. "Present at the Re-Creation." New York Times Book Review 18 May 2003, late ed., sec. 7:12.
- Bloom, Harold. *How to Read and Why*. New York, London, Toronto, Sydney and Singapore: Touchstone Book, 2000.
- Bolter, Jay David. "Critical Theory and the Challenge of New Media." *Eloquent Images: Word and Image in the Age of New Media*. Ed. Mary E. Hocks and Michelle R. Kendrick. Cambridge, MA and London: MIT Press, 2003.
- Bolter, Jay David. *Writing Space: Computers, Hypertext, and the Remediation of Print*. Second Edition. Mahwah, NJ and London: Lawrence Erlbaum Associates, 2001.

- Borges, Jorge Luis. "The Aleph." *Collected Fictions*. Trans. Andrew Hurley. New York, Penguin Books, 1949, 1998.
- Borges, Jorge Luis. "The Book of Sand." *Collected Fictions*. Trans. Andrew Hurley. New York: Penguin Books, 1941, 1998.
- Borges, Jorge Luis. "The Garden of Forking Paths." *Collected Fictions*. Trans. Andrew Hurley. New York, Penguin Books, 1941, 1998.
- Borges, Jorge Luis. "The Library of Babel." *Collected Fictions*. Trans. Andrew Hurley. New York, Penguin Books, 1941, 1998.
- Borges, Jorge Luis. "A Survey of the Works of Herbert Quain." *Collected Fictions*. Trans. Andrew Hurley. New York, Penguin Books, 1941, 1998.
- Borges, Jorge Luis. "Tlön, Uqbar, Orbis Tertius." *Collected Fictions*. Trans. Andrew Hurley. New York: Penguin Books, 1941, 1998.
- Braun, Terry, Gabriella Braun and London Sinfonietta. *3D Music*. World Wide Web distributed symphony, 2002. http://www.braunarts.com/3dmusic/
- Brecht, Bertolt. "On Chinese Acting." Trans. Eric Bentley. Incl. in *Brecht Sourcebook*. Carol Martin and Henry Bial, eds. London and New York: Routledge, 2000.
- Brooks, Cleanth. "Irony as a Principle of Structure." Incl. in *The Critical Tradition: Classical Texts and Contemporary Trends*. Ed. David H. Richter. Boston: Bedford Books, 1998.
- Brugman, Claudia. *The Story of* Over: *Polysemy, Semantics, and the Structure of the Lexicon*. New York: Garland Publishing, Inc., 1988.

- Buck-Morss. "The Flaneur, the Sandwichman and the Whore: The Politics of Loitering." New German Critique 39 (Fall 1986). 99-140.
- Buddha. *The Dhammapada: The Sayings of the Buddha*. Trans. Thomas Byrom. Photography by Sandra Weiner. New York: Vintage Books, 1976.
- Butler, Judith. "Imitation and Gender Insubordination." Rpt. in *The Critical Tradition: Classic Texts and Contemporary Trends*. Second Ed. Ed. David H. Richter. Boston: Bedford Books, 1998.
- Calvino, Italo. *If on a winter's night a traveler*. Trans. William Weaver. New York and Toronto: Everyman's Library, 1979, 1993.
- Carver, Raymond. *Where I'm Calling From: Stories*. New York: Vintage Contemporaries, 1989.
- Charney, Davida. "The Effect of Hypertext on Processes of Reading and Writing." Literacy and Computers: The Complications of Teaching and Learning with Technology. Eds. Cynthia L. Selfe and Susan Hilligoss. New York: Modern Language Association of America, 1994.
- Chute, Eleanor. "SAT's Essays Will Get Long Look." *Pittsburgh Post-Gazette* 23 January 2005, A1, A11.
- Coleridge, Samuel Taylor. *Biographia Litteraria*. Incl. in *The Norton Anthology of English Literature*. Volume 2. Sixth Edition. Ed. M. H. Abrams et al. New York and London: W.W. Norton and Company, 1993.
- Coles, William E., Jr. *The Plural I: The Teaching of Writing*. New York and Chicago: Holt, Reinhart and Winston, 1978.

- Collins, Jeff and Howard Selina. Introducing Heidegger. Cambridge: Icon Books UK, 1998, 2001.
- Conference on College Composition and Communication. "Scholarship in Composition Guidelines for Faculty, Deans, and Department Chairs." *CCCC Position Statements*. (n.d.). Last accessed 21 February 2005 from < http://www.ncte.org/about/over/positions/level/coll/107681.htm>.
- Conklin, Jeff. "Hypertext: An Introduction and Survey." IEEE Computer 20 (1987): 17-41. Qtd.. in Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology. Landow, George P. Baltimore and London: Johns Hopkins UP, 1992, 1997. 115.
- Coover, Robert. "The End of Books." New York Times Book Review 21 June 1992. Section 7. 1, 23-25.
- Cope, Bill and Mary Kalantzis. "Introduction: Multiliteracies: The Beginnings of an Idea." *Multiliteracies: Literacy Learning and the Design of Social Futures*. Ed. Bill Cope and Mary Kalantzis for the New London Group. London and New York: Routledge, 2000.
- Copeland, Dale. *Fern Hill.* N.d. Accessible via the artist's personal Internet site, <<u>http://outofsight.co.nz/Dale/Room3/dale72.htm</u>>.
- Cortázar, Julio. Hopscotch. Trans. Gregory Rabassa. New York: Pantheon Books, 1963, 1966.
- Culler, Jonathan. On Deconstruction: Theory and Criticism after Structuralism. Ithaca: Cornell University Press, 1982.

Damasio, Antonio R. Descartes' Error. New York: G.P. Putnam, 1994.

- David, Larry. "Are You Undecided? Or Not?" *New York Times* National Edition 16 September 2004, A33.
- Delaney, Paul and George P. Landow, eds. *Hypermedia and Literary Studies*. Cambridge, MA and London: MIT Press, 1991.
- Delaney, Samuel R. Triton: An Ambiguous Heterotopia. New York: Bantam Books, 1976.
- Deleuze, Gilles and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Trans. Brian Massumi. Minneapolis and London: University of Minnesota P, 1987.
- DeWitt, Scott Lloyd. *Writing Inventions: Identities, Technologies, Pedagogies*. Albany: State U of New York P, 2001.
- Dickey, William. "Poem Descending a Staircase: Hypertext and the Simultaneity of Experience." *Hypermedia and Literary Studies*. Eds. Paul Delaney and George P. Landow. Cambridge, MA: MIT Press, 1991.
- Dilthey, Wilhelm. Gesammelte Schriften. 14 vols. Göttingen: Vanderhoeck & Ruprecht, 1913-1967. Vols. 1-12 reissued Stuttgart: B.G. Teubner, 1958. Vol. 5 qtd. in Palmer, Richard. Hermeneutics: Interpretation Theory in Schleiermacher, Dilthey, Heidegger, and Gadamer. Evanston: Northwestern UP, 1969. 104.
- Doob, Penelope Reed. The Idea of the Labyrinth from Classical Antiquity through the Middle Ages. Ithaca, NY and London: Cornell UP, 1990.
- Douglas, J. Yellowlees. *The End of Books Or Books Without End? Reading Interactive Narratives*. Ann Arbor: U of Michigan P, 2000.

- Douglas, J. Yellowlees. "'How Do I Stop This Thing?': Closure and Indeterminacy in Interactive Narratives." *Hyper/Text/Theory*. Ed. George P. Landow. Baltimore and London: Johns Hopkins UP, 1994.
- Downing, David B. and James J. Sosnoski. "Coming to Terms with Terms in Academic Cyberculture." *The Emerging Cyberculture: Literacy, Paradigm, and Paradox.* Ed. Stephanie B. Gibson and Ollie O. Oviedo. Cresskill, NJ: Hampton Press, Inc., 2000.
- Duffy, John. "Letters from the Fair City: A Rhetorical Conception of Literacy." College Composition and Communication 56.2 (2004): 223-250.
- Eco, Umberto. *The Limits of Interpretation*. Bloomington and Indianapolis: Indiana UP, 1990, 1994.
- Eco, Umberto. The Open Work. Trans. Anna Cancogni. Cambridge, MA: Harvard UP, 1989.
- Eco, Umberto. *The Role of the Reader: Explorations in the Semiotics of Texts*. Bloomington: Indiana UP, 1979, 1984.
- Eco, Umberto. Semiotics and the Philosophy of Language. London: Macmillan Press, Ltd., 1984.
- Eliot, T. S. "Little Gidding." *The Complete Poems and Plays: 1909-1950.* New York: Harcourt, Brace and Company, 1952.
- Eliot, T. S. "The Waste Land." *The Complete Poems and Plays: 1909-1950.* New York: Harcourt, Brace and Company, 1922, 1952.
- Farber, Jerry. "Aesthetic Subjectivity and the Teaching of Literature." *Reader* 44 (Spring 2001), 14-30.

Faulkner, William. The Sound and the Fury. New York: The Modern Library, 1929, 1946.

Fowles, John. *The French Lieutenant's Woman*. Boston and Toronto: Little, Brown and Company, 1969.

Fowles, John. The Magus. New York: Laurel Books, 1965, 1978.

Franzen, Jonathan. The Corrections. New York: Farrar, Straus and Giroux, 2001.

- Gadamer, Hans-Georg. "Art and Imitation." *The Relevance of the Beautiful and Other Essays*. Trans. Nicholas Walker. Ed. Robert Bernasconi. Cambridge, New York, Port Chester, Melbourne and Sydney: Cambridge UP, 1986.
- Gadamer, Hans-Georg. *Gadamer on Celan: "Who Am I and Who Are You?" and Other Essays.* Ed. and trans. Richard Heinemann and Bruce Krajewski. Albany: State U of New York P, 1997.
- Gadamer, Hans-Georg. "Image and Gesture." *The Relevance of the Beautiful and Other Essays.* Trans. Nicholas Walker. Ed. Robert Bernasconi. Cambridge: Cambridge UP, 1986.
- Gadamer, Hans-Georg. "On the Problem of Self-Understanding." *Philosophical Hermeneutics*. Trans. and ed. David E. Linge. Berkeley, Los Angeles and London: U of California P, 1962, 1976.
- Gadamer, Hans-Georg. "On the Scope and Function of Hermeneutical Reflection." *Philosophical Hermeneutics*. Trans. and ed. David E. Linge. Berkeley, Los Angeles and London: U of California P, 1976.

- Gadamer, Hans-Georg. "The Play of Art." *The Relevance of the Beautiful and Other Essays*. Trans. Nicholas Walker. Ed. Robert Bernasconi. Cambridge, New York, Port Chester, Melbourne and Sydney: Cambridge UP, 1986.
- Gadamer, Hans-Georg. "The Speechless Image." *The Relevance of the Beautiful and Other Essays.* Trans. Nicholas Walker. Ed. Robert Bernasconi. Cambridge: Cambridge UP, 1986.
- Gadamer, Hans-Georg. *Truth and Method*. Second, revised edition. Trans. revised by Joel Weinsheimer and Donald G. Marshall. New York: Continuum, 1989, 2000.
- Gadamer, Hans-Georg. "The Universality of the Hermeneutical Problem." *Philosophical Hermeneutics*. Trans. and ed. David E. Linge. Berkeley, Los Angeles and London: U of California P, 1976.
- Gaggi, Silvio. From Text to Hypertext: Decentering the Subject in Fiction, Film, the Visual Arts, and Electronic Media. Philadelphia: U Pennsylvania P, 1997, 1998.
- The Game. Dir. David Fincher. Perf. Michael Douglas and Sean Penn. MCA, 1997.
- Gamer, Michael. "Fictionalizing the Disciplines: Literature and the Boundaries of Knowledge." *College English* 57.3 (March 1995), 281-286.
- Gee, James Paul. An Introduction to Discourse Analysis: Theory and Method. London and New York: Routledge, 1999.
- Gee, James Paul. "Literacy, Discourse, and Linguistics: Introduction *and* What Is Literacy?" *Literacy: A Critical Sourcebook.* Eds. Ellen Cushman, Eugene R. Kintgen, Barry M. Kroll, and Mike Rose. Boston and New York: Bedford/St. Martin's, 2001.

- Gee, James Paul. *What Video Games Have to Teach Us About Learning and Literacy*. New York: Palgrave Macmillan, 2003.
- George, Diana. "From Analysis to Design: Visual Communication in the Teaching of Writing." *College Composition and Communication* 54.1 (2002): 11-39.

Gibson, William. Neuromancer. New York: Ace Books, 1984.

- von Glaserfeld, Ernst. "Reflections on John Fowles's *The Magus* and the Construction of Reality." *Georgia Review* 33.2, Summer (1979). 444-448.
- Glazier, Loss Pequeño. *Digital Poetics: The Making of E-Poetries*. Tuscaloosa and London: U of Alabama P, 2002.
- Goldman, William. The Princess Bride: S. Morgenstern's Classic Tale of True Love and High Adventure. New York, San Diego, and London: Harcourt Brace & Company, 1973.
- The Good, the Bad, and the Ugly. (Il Buono, il Brutto, il Catto.) Dir. Leone, Sergio. Perf. Clint Eastwood, Lee Van Cleef, and Eli Wallach. Metro-Goldwyn-Mayer, 1967.
- Green, Geoffrey. "Ghosts and Shadows: Reading and Writing in Italo Calvino's *If on a winter's night a traveler.*" *Review of Contemporary Fiction* 6.2 (1986), 101-105.
- Grigar, Dene. "A Dialog on the Reality of Writing in Virtual Environments." New Worlds, New Words: Exploring Pathways for Writing about and in Electronic Environments. Ed. John F. Barber and Dene Grigar. Cresskill, NJ: Hampton Press, Inc., 2001.
- Grimm, Reinhold. "Marc Saporta: The Novel as Card Game." *Contemporary Literature* 19:3 (1978), 280-299.

Groundhog Day. Dir. Harold Ramis. Perf. Bill Murray, Andie McDowell, and Chris Elliott. Columbia Pictures, 1993.

Guyer, Carolyn and Martha Petry. Izme Pass. Hyperfiction. Writing on the Edge 2.2, 1991.

- Hafner, Katie and Matthew Lyon. *Where Wizards Stay Up Late: The Origins of the Internet.* New York: Touchstone, 1996.
- Hardin, Michael. "Seducing the Male-Reader: Julio Cortázar's *Hopscotch* and the Pleasure of Losing." *International Fiction Review* 25.1-2 (1998). 50-62.
- Hayles, N. Katherine. Writing Machines. Cambridge, MA and London: MIT P, 2002.
- Heidegger, Martin. An Introduction to Metaphysics. Trans. Ralph Manheim. New Haven: Yale UP, 1959.
- Herman, David. "Toward a Transmedial Narratology." *Narrative Across Media: The Languages of Storytelling*. Ed. Marie-Laure Ryan. Lincoln and London: U of Nebraska P, 2004.
- Hocks, Mary E. and Michelle R. Kendrick. "Introduction: Eloquent Images." *Eloquent Images:* Word and Image in the Age of New Media. Ed. Mary E. Hocks and Michelle R. Kendrick. Cambridge, MA and London: MIT Press, 2003.
- *The Holy Bible, Revised Standard Version*. Second Edition. Nashville, Camden and New York: Thomas Nelson, Inc., 1946, 1952, 1971.
- Huizinga, Johan. *Homo Ludens: A Study of the Play Element of Culture*. Boston: Beacon Press, 1950, 1955.

- Hutcheon, Linda. *The Politics of Postmodernism*. New York and London: Routledge, 1989-1995.
- Immersion Corporation. World Wide Web site. http://www.immersion.com/consumer_electronics/applications/mice_trackballs.php>.
- Iser, Wolfgang. *The Act of Reading: A Theory of Aesthetic Response*. Baltimore: Johns Hopkins University Press, 1978.
- Iser, Wolfgang. *The Implied Reader: Patterns of Communication in Prose Fiction from Bunyan* to Beckett. Baltimore and London: Johns Hopkins UP, 1974.
- Iser, Wolfgang. "The Reading Process: A Phenomenological Approach." From *The Implied Reader*. Baltimore: Johns Hopkins University Press, 1972. Incl. in *The Critical Tradition: Classic Texts and Contemporary Trends*. Second Edition. Ed. David H. Richter. Boston: Bedford Books, 1998.
- Jackson, Shelly. *Patchwork Girl*. Distributed narrative. Environment: Storyspace. Cambridge, MA: Eastgate Systems, 1995.
- Jameson, Fredric. Postmodernism, or, The Cultural Logic of Late Capitalism. Durham: Duke UP, 1991.
- Jarratt, Susan C. *Rereading the Sophists: Classical Rhetoric Refigured*. Carbondale and Edwardsville: Southern Illinois UP, 1991.
- Johnson-Eilola, Johndan. "The Database and the Essay: Understanding Composition as Articulation." *Writing New Media: Theory and Applications for the Teaching of Composition*. Ed. Anne Frances Wysocki, Johndan Johnson-Eilola, Cynthia L. Selfe, and Geoffrey Sirc. Logan: Utah State UP, 2004.

Johnson-Eilola, Johndan. "Overview: Reading and Writing in Hypertext: Vertigo and Euphoria." *Literacy and Computers: The Complications of Teaching and Learning with Technology*. Eds. Cynthia L. Selfe and Susan Hilligoss. New York: Modern Language Association of America, 1994.

Joyce, James. Finnegan's Wake. New York: Viking Press, 1939.

Joyce, James. Ulysses. Ed. Hans Walter Gabler. New York: Vintage Books, 1986.

- Joyce, Michael. *Afternoon, A Story*. Hypertext. Environment: Storyspace. Cambridge, MA: Eastgate Systems, 1987, 1990.
- Joyce, Michael. "New Stories for New Readers: Contour, Coherence and Constructive Hypertext." *Page to Screen: Taking Literacy into the Electronic Era*. Ed. Ilana Snyder. London and New York: Routledge, 1998.
- Joyce, Michael. *Of Two Minds: Hypertext Pedagogy and Poetics*. Ann Arbor: U of Michigan P, 1995, 1996.
- Kakutani, Michiko. "Never-Ending Saga." New York Times 28 September 1997, Section 6. 40, 42.
- Kaufer, David S. "From *Tekhne* to Technique: Rhetoric as a Design Art." *Rhetorical Hermeneutics: Invention and Interpretation in the Age of Science*. Ed. Alan G. Gross and William M. Keith. Albany, State U of New York P, 1997.
- Keep, Christopher J. "The Disturbing Liveliness of Machines: Rethinking the Body in Hypertext Theory and Fiction." *Cyberspace Textuality: Computer Technology and Literary Theory*. Ed. Marie-Laure Ryan. Bloomington and Indianapolis: Indiana UP, 1999.
- Kelly, Kevin. Out of Control: The New Biology of Machines, Social Systems, and the Economic World. Cambridge, MA: Perseus Books, 1994.

- Kermode, Frank. *The Genesis of Secrecy: On the Interpretation of Narrative*. Cambridge, MA and London: Harvard UP, 1979.
- Kermode, Frank. *The Sense of an Ending: Studies in the Theories of Fiction*. Oxford and London: Oxford UP, 1966.

Koyaanisqatsi: Life Out of Balance. Dir. Godfrey Reggio. Music Philip Glass. MGM, 1983.

- Kress, Gunther. "Design and Transformation: New Theories of Meaning." *Multiliteracies: Literacy Learning and the Design of Social Futures*. Ed. Bill Cope and Mary Kalantzis for the New London Group. Routledge: London and New York, 2000.
- Kress, Gunther. Literacy in the New Media Age. London and New York: Routledge, 2003.
- Kress, Gunther and Theo van Leeuwen. *Multimodal Discourse: The Modes and Media of Contemporary Communication*. London: Arnold; New York: Oxford UP, 2001.
- Kress, Gunther and Theo van Leeuwen. *Reading Images: The Grammar of Visual Design.* London and New York: Routledge, 1996.
- Kuleshov, Lev. *The Art of Cinema (My Experience)*. Trans. Nina. Belenkaya. Incl. in *Lev Kuleshov Fifty Years in Film: Selected Works*. Trans. Dmitri Agrachev and Nina Belenkaya. Moscow: Raduga Publishers, 1987.
- Kuleshov, Lev. "In the Maloi Gnezdnikovsky Lane." Kuleshov on Film: Writings by Lev Kuleshov. Trans. and ed. Ronald Levaco. Berkeley, Los Angeles, and London: U of California P, 1974.

- Lahti, Martti. "As We Become Machines: Corporealized Pleasures in Video Games." *The Video Game Theory Reader*. Eds. Mark J. P. Wolf and Bernard Perron. New York and London: Routledge, 2003.
- Lakoff, George. Women, Fire, and Dangerous Things: What Categories Reveal About the Mind. Chicago: U of Chicago P, 1987.
- Landow, George P. "Educational Innovation and Hypertext: One University's Successes and Failures in Supporting New Technology." *Silicon Literacies: Communication, Innovation and Education in the Electronic Age.* Ed. Ilana Snyder. London and New York: Routledge, 2002.
- Landow, George P. Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology. Baltimore: Johns Hopkins UP, 1997, 1992.
- Landow, George P. "Hypertext as Collage-Writing." *The Digital Dialectic: New Essays on New Media*. Ed. Peter Lunenfeld. Cambridge, MA and London: MIT Press, 1999.
- Landow, George P. "The Rhetoric of Hypermedia: Some Rules for Authors." *Hypermedia and Literary Studies*. Eds. Paul Delaney and George P. Landow. Cambridge, MA and London: MIT Press, 1991.
- Landow, George P. "What's a Critic to Do?: Critical Theory in the Age of Hypertext." *Hyper/Text/Theory*. Ed. George P. Landow. Baltimore and London: Johns Hopkins UP, 1994.
- Lanham, Richard A. *A Handlist of Rhetorical Terms*. Second Ed. Berkeley, Los Angeles and London: U of California P, 1991.
- Laurel, Brenda. Computers as Theater. Reading, MA, Harlow, UK, and Menlo Park, CA: Addison-Wesley, 1991, 1993.

- Lindemann, Erika. "Freshman Composition: No Place for Literature." College English 55.3 (March 1993), 311-316.
- Lindemann, Erika. "Three Views of English 101." College English 57.3 (March 1995), 287-302.
- Loizeaux, Elizabeth Bergmann and Neil Fraistat, eds. *Reimagining Textuality: Textual Studies* and the Late Age of Print. Madison: U of Wisconsin P, 2002.
- Lukács, Georg. The Theory of the Novel: A Historico-Philosophical Essay on the Forms of Great Epic Literature. Trans. Anna Bostock. Cambridge, MA: MIT Press, 1971, 1999.

Mailloux, Steven. Rhetorical Power. Ithaca and London: Cornell UP, 1989.

- Malmgren, Carl D. "Romancing the Reader: Calvino's *If on a winter's night a traveler*." *Review of Contemporary Fiction* 6.2 (1986), 106-116.
- The Matrix. Dir. Andy Wachowski and Larry Wachowski. Perf. Keanu Reeves, Laurence Fishburne, Carrie-Anne Moss, Hugo Weaving and Joe Pantoliano. Warner Brothers, 1999.
- Maurer, David W. *The Big Con: The Story of the Confidence Man.* New York: Anchor Books, 1940, 1999.
- McComiskey, Bruce. "Disassembling Plato's Critique of Rhetoric in the *Gorgias* (447a-466a)." *Rhetoric Review* 11.1 (Fall 1992), 79-90.
- McDaid, John. Uncle Buddy's Phantom Funhouse. Hyperfiction. Environment: Storyspace. Cambridge, MA: Eastgate Systems, 1993.

- McLuhan, Marshall. Understanding Media: The Extensions of Man. Cambridge, MA and London: MIT Press, 1994, 2001.
- Memento. Dir. Christopher Nolan. Perf. Guy Pearce, Carrie-Ann Moss and Joe Pantoliano. Columbia-Tristar, 2001.
- Miller, Laura. "www.claptrap.com." New York Times Book Review 15 March 1998. 43.
- Miller, Robyn, and Rand Miller. *Myst: Masterpiece Edition*. CD-ROM. Mead, WA: Cyan, Inc., 1993, 1999.
- Milton, John. *Complete Poetry and Selected Prose of John Milton*. New York: Modern Library, 1942.
- Montfort, Nick. *Twisty Little Passages: An Approach to Interactive Fiction*. Cambridge, MA and London: MIT Press, 2003.
- Moulthrop, Stuart. Chaos. Hypertext computer program. Atlanta, 1991.
- Moulthrop, Stuart. "Pushing Back: Living and Writing in Broken Space." Modern Fiction Studies 43.3 Fall (1997), 651-674.
- Moulthrop, Stuart. *Reagan Library*. World Wide Web Hypermedia, 1999. http://iat.ubalt.edu/moulthrop/hypertexts/rl/.
- Moulthrop, Stuart. "Rhizome and Resistance: Hypertext and the Dreams of a New Culture." *Hyper/Text/Theory*. Ed. George P. Landow. Baltimore and London: Johns Hopkins UP, 1994.

- Moulthrop, Stuart. "The Shadow of an Informand: A Rhetorical Experiment in Hypertext." *Perforations* 2.3 (1992). Available online at: http://www.pd.org/topos/perforations/>.
- Moulthrop, Stuart and Nancy Kaplan. "They Became What They Beheld: The Futility of Resistance in the Space of Electronic Writing." *Literacy and Computers: The Complications of Teaching and Learning with Technology*. Eds. Cynthia L. Selfe and Susan Hilligoss. New York: Modern Language Association of America, 1994.
- Moulthrop, Stuart. "Traveling in the Breakdown Lane: A Principle of Resistance for Hypertext." *Mosaic* 28.4 (1995): 55-77.
- Moulthrop, Stuart. Victory Garden. Hypertext. Environment: Storyspace. Cambridge, MA: Eastgate Systems, 1991.
- Murray, Janet H. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. New York: Free Press, 1997.
- Murray, Janet H. "The Pedagogy of Cyberfiction: Teaching a Course on Reading and Writing Interactive Narrative." *Contextual Media: Multimedia and Interpretation*. Ed. Edward Barrett and Marie Redmond. Cambridge, MA and London: MIT Press, 1995, 1997.

Naqoyqatsi: Life as War. Dir. Godfrey Reggio. Music Philip Glass. Miramax: 2002.

- National Council of Teachers of English (NCTE) Executive Committee, Writing Study Group. "NCTE Beliefs about the Teaching of Writing." *NCTE Guidelines*. November 2004. Last accessed 21 February 2005, from http://www.ncte.org/prog/writing/research/118876.htm>.
- New London Group. "A Pedagogy of Multiliteracies: Designing Social Futures." *Multiliteracies: Literacy Learning and the Design of Social Futures*. Eds. Bill Cope and Mary Kalantzis for the New London Group. London and New York: Routledge, 2000.

- Nietzsche, Friedrich. "Description of Ancient Rhetoric." *Friedrich Nietzsche on Rhetoric and Language*. Eds. and trans. Sander L. Gilman, Carole Blair and David J. Parent. New York and Oxford: Oxford UP, 1989.
- Oulipo. La Littérature potentielle: Creations, Re-Creations, Recreations. "Anthologie des Travaux Realises par L'Ouvroir de Littérature Potentielle." Paris, Gallimard, 1973.
- Ovid. The Metamorphoses. Trans. Horace Gregory. New York: Mentor, 1958, 1960.
- Palmer, Richard E. Hermeneutics: Interpretation Theory in Schleiermacher, Dilthey, Heidegger, and Gadamer. Evanston: Northwestern UP, 1969.
- Parent, Richard. "The Office of Faith-Based and Community Initiatives: An Ongoing Case Study of American Belief, Symbol, and Ritual." *Journal of Ritual Studies* 17.1 (2003). 19-31.
- Parker, Jeff. "A Poetics of the Link." *Electronic Book Review* 30 January 2003. http://www.electronicbookreview.com (not paginated).
- Parks, Tim. "Tales Told by the Computer." New York Review of Books 24 October 2002. 49-51.
- Patchett, Ann. Bel Canto. New York: Perennial, 2001.
- Patterson, Jane. "Through the Looking-Glass: A Response." College English 57.3 (March 1995), 310-318.
- Pavić, Milorad. *Dictionary of the Khazars: A Lexicon Novel in 100,000 Words*. Trans. Christina Pribićević-Zorić. New York: Vintage International, 1989.

Pavić, Milorad. Landscape Painted with Tea. Trans. Christina Pribićević-Zorić. New York: Vintage International, 1990

Plato. Phaedrus. Trans. Walter Hamilton. London and New York: Penguin Books, 1973.

Powaqqatsi: Life in Transformation. Dir. Godfrey Reggio. Music Philip Glass. MGM: 1988.

Pynchon, Thomas. The Crying of Lot 49. New York. Perennial Library, 1965, 1966.

- Queneau, Raymond. "Cent Mille Milliards de Poèms." The New Media Reader. Eds. Noah Waldrip-Fruin and Nick Montfort. Cambridge, MA and London: MIT Press, 2003.
- Queneau, Raymond. "Un Conte à Votre Façon." ("Yours for the Telling.") The New Media Reader. Eds. Noah Waldrip-Fruin and Nick Montfort. Cambridge, MA and London: MIT Press, 2003.
- The Phantom Menace: Star Wars, Episode 1. Dir. George Lucas. Perf. Liam Neeson, Ewan McGregor, and Nathalie Portman. Twentieth Century Fox, 1999.
- Rabinowitz, Peter J. "Music, Genre, and Narrative Theory." *Narrative Across Media: The Languages of Storytelling*. Ed. Marie-Laure Ryan. Lincoln and London: U of Nebraska P, 2004.
- Rainey, Lee. "The State of Blogging." January 2005. A publication of the Pew Internet and American Life Project. Last accessed on 27 February 2005, at http://www.pewinternet.org/pdfs/PIP_blogging_data.pdf>.
- Rankin, Ian. "The Role of the Reader in Italo Calvino's *If on a winter's night a traveler*." *Review of Contemporary Fiction* 6.2 (1986), 124-129.

- Raper, Julius Rowan. "John Fowles: The Psychological Complexity of *The Magus*." *American Imago* 45.1, Spring (1988). 61-83.
- Richards, I.A. The Philosophy of Rhetoric. Oxford: Oxford UP, 1936.
- Ricoeur, Paul. "The Hermeneutical Function of Distanciation." *Hermeneutics and the Human Sciences: Essays on Language, Action, and Interpretation.* Ed. and trans. John B. Thompson. Cambridge: Cambridge UP, 1981.
- Riley, Duncan. "Blog Numbers are Closer to 34.5 Million Worldwide." *The Blog Herald* 10 January 2005, n.p. Last accessed on 27 February 2005, at http://www.blogherald.com/2005/01/10/blog-numbers-are-closer-to-345-million-wordwide/>.
- Robbe-Grillet, Alain. In the Labyrtinth. Incl. in Two Novels by Robbe-Grillet. Trans. Richard Howard. New York: Grove Press, 1965.
- Robbins, Tom. Still Life with Woodpecker. New York: Bantam Books, 1980.
- Rosenblatt, Louise M. *Literature as Exploration*. Fifth Edition. New York: Modern Language Association, 1995.
- Rosenblatt, Louise. *The Reader the Text the Poem: The Transactional Theory of the Literary Work.* Carbondale and Edwardsville: Southern Illinois UP, 1978, 1974.
- Ryan, Marie-Laure ed. *Cyberspace Textuality: Computer Technology and Literacy Theory*. Bloomington and Indianapolis: Indiana UP, 1999.
- Ryan, Marie-Laure. "Cyberage Narratology: Computers, Metaphor, and Narrative." *Narratologies: New Perspectives on Narrative Analysis.* Ed. David Herman. Columbus: Ohio State UP, 1999.

- Ryan, Marie-Laure. "Cyberspace, Virtuality, and the Text." *Cyberspace Textuality: Computer Technology and Literacy Theory*. Ed. Marie-Laure Ryan. Bloomington and Indianapolis: Indiana UP, 1999.
- Ryan, Marie-Laure. "Introduction: From Possible Worlds to Virtual Reality." *Style* 29.2 Summer (1995): 173-183.
- Ryan, Marie-Laure. Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media. Baltimore and London: Johns Hopkins UP, 2001.
- Ryan, Marie-Laure. "Will New Media Produce New Narratives?" *Narrative Across Media: The Languages of Storytelling*. Ed. Marie-Laure Ryan. Lincoln and London: U of Nebraska P, 2004.
- Salvatori, Mariolina. "Italo Calvino's *If on a winter's night a traveler*: Writer's Authority, Reader's Autonomy." *Contemporary Literature* 27.2 (Summer 1986), 182-212.
- Salvatori, Mariolina. "Toward a Hermeneutics of Difficulty." *Audits of Meaning: A Festschrift in Honor of Ann E. Bertoff.* Ed. Louise Z. Smith. Upper Montclair, NJ: Boynton, 1988.
- Salvatori, Mariolina Rizzi. "Understanding Difficulties: A Heuristic." *Teaching/Writing in the Late Age of Print*. Eds. Jeffrey Galin, Carol Peterson Haviland and J. Paul Johnson. Cresskill, NJ: Hampton Press, Inc. 2003.
- Salvatori, Mariolina Rizzi and Patricia Donahue. *The Elements (and Pleasures) of Difficulty.* New York and San Francisco: Pearson Longman, 2005.
- Saporta, Marc. Composition No. 1. Trans. Richard Howard. New York: Simon and Schuster, 1963.

- Sartre, Jean Paul. "What Is Literature?" and Other Essays. Cambridge, MA: Harvard UP, 1949, 1988.
- Schiappa, Edward. "Sophistic Rhetoric: Oasis or Mirage?" *Rhetoric Review* 10.1 (Fall 1991), 5-18.
- Schmundt, Hilmar. "Hyperfiction: The Romanticism of the Information Revolution." *Southern Humanities Review* 29.4 (1995): 309-321.
- Seitz, James E. Motives for Metaphor: Literacy, Curriculum Reform, and the Teaching of English. Pittsburgh: U of Pittsburgh P, 1999.
- Selfe, Cynthia L. "Students Who Teach Us: A Case Study of a New Media Text Designer." Writing New Media: Theory and Applications for the Teaching of Composition. Ed. Anne Frances Wysocki, Johndan Johnson-Eilola, Cynthia L. Selfe, and Geoffrey Sirc. Logan: Utah State UP, 2004.
- Selfe, Cynthia L. "Toward New Media Texts: Taking Up the Challenges of Visual Literacy." Writing New Media: Theory and Applications for the Teaching of Composition. Ed. Anne Frances Wysocki, Johndan Johnson-Eilola, Cynthia L. Selfe, and Geoffrey Sirc. Logan: Utah State UP, 2004.

Seuss, Dr. (Theodor Seuss Geisel). Green Eggs and Ham. New York: Beginner Books, 1960.

Shakespeare, William. King Lear. London: Everyman, and Rutland, VT: Charles E. Tuttle, 1993.

Shelley, Mary. Frankenstein. New York: Dover Publications, 1994.

- Shelley, Percy Bysshe. "A Defense of Poetry." 1821, 1840. Incl. in *The Norton Anthology of English Literature* vol. 2, sixth edition. Gen. ed. M. H. Abrams. New York and London: W. W. Norton and Company, 1993.
- *The Shining*. Dir. Stanley Kubrick. Perf. Jack Nicholson, Shelley Duvall, Danny Lloyd, and Scatman Crothers. Warner Brothers, 1980.
- The Silence of the Lambs. Dir. Jonathan Demme. Perf. Jody Foster, Anthony Hopkins, Scott Glenn, Anthony Heald, and Ted Levine. MGM, 1991.
- Silverman, Kaja. "On Suture." *Film Theory and Criticism: Introductory Readings*. Fifth Ed. Eds. Leo Braudy and Marshall Cohen. New York and Oxford: Oxford UP, 1999.
- Sirc, Geoffrey. "Box-Logic." Writing New Media: Theory and Applications for the Teaching of Composition. Ed. Anne Frances Wysocki, Johndan Johnson-Eilola, Cynthia L. Selfe, and Geoffrey Sirc. Logan: Utah State UP, 2004.
- Sir Gawain and the Green Knight: A New Verse Translation. Trans. Marie Boroff. New York and London: W. W. Norton & Company, 1967.
- Slatin, John M. "Reading Hypertext: Order and Coherence in a New Medium." *College English* 52.8 (1990): 870-883.
- Sokol, Benoit. Syberia. CD-ROM. Montreal: Microïds/Dream Catcher Interactive, Inc., 2002.
- Sophocles. *The Theban Plays*. Trans. E. F. Watling. London and New York: Penguin Books, 1947, 1974.
- Sorapure, Madeleine. "Being in the Midst: Italo Calvino's *If on a winter's night a traveler.*" *Modern Fiction Studies* 31.4 (Winter 1985), 702-709.

- Steinberg, Erwin R. "Imaginative Literature in the Composition Classrooms?" *College English* 57.3 (March 1995), 266-280.
- Stephenson, Neal. *The Diamond Age; or, A Young Lady's Illustrated Primer*. New York: Bantam Books, 1995.
- Sterne, Laurence. *The Life and Opinion of Tristram Shandy, Gentleman*. Greenwich, CT: Fawcett Publications, 1962.
- Suits, Bernard. *The Grasshopper: Games, Life and Utopia*. Toronto and Buffalo: U of Toronto P, 1978.
- Sweetser, Eve. From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure. Cambridge: Cambridge UP, 1990.
- Tate, Gary. "Notes on the Dying of a Conversation." *College English* 57.3 (March 1995), 303-309.
- Tate, Gary. "A Place for Literature in Freshman Composition." *College English* 55.3 (March 1993), 317-321.
- Taylor, Mark C. and Esa Saarinen. *Imagologies: Media Philosophy*. London and New York: Routledge, 1994.
- Thackeray, William Makepeace. Vanity Fair: A Novel Without a Hero. Oxford and New York: Oxford UP, 1983.
- Tolkien, J. R. R. *The Fellowship of the Ring*. Second Edition. Boston: Houghton Mifflin Company, 1954, 1965.

- Tolstoy, Leo. *Anna Karenina*. Trans. Richard Pevear and Larissa Volokhonsky. New York and London: Penguin Books, 2000.
- Traupman, John C. *The New College Latin & English Dictionary*. Toronto, New York, London and Sydney: Bantam Books, 1966.
- Trimbur, John. "Delivering the Message: Typography and the Materiality of Writing." *Composition and Intellectual Work*. Ed. Gary Olson. Carbondale: Southern Illinois UP, 2002. 188-202. Qtd. in George, Diana. "From Analysis to Design: Visual Communication in the Teaching of Writing." *College Composition and Communication* 54.1 (2002): 25.
- Tufte, Edward R. The Cognitive Style of PowerPoint. Cheshire, CT: Graphics Press LLC, 2003.
- Turner, Mark. *The Literary Mind: The Origins of Thought and Language*. Oxford and New York: Oxford UP, 1996.
- Ulmer, Gregory L. "Response: Text Culture Grammatology." *Reimagining Textuality: Textual Studies and the Late Age of Print*. Eds. Elizabeth Bergmann Loizeaux and Neil Fraistat. Madison: U of Wisconsin P, 2002.
- Utting, Kenneth and Nicole Yankelovich. "Context and Orientation in Hypermedia Networks." *ACM Transactions on Information Systems* 7 (1989): 58-84. Qtd. in *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology*. Landow, George P. Baltimore and London: Johns Hopkins UP, 1992, 1997. 115.
- Varsava, Jerry A. "Calvino's Combinative Aesthetics: Theory and Practice." *Review of Contemporary Fiction* 6.2 (1986), 11-18.
- Wallace, David Foster. Infinite Jest. Boston, New York, Toronto and London: Little, Brown and Company, 1996.

- Watts, Melissa. "Reinscribing a Dead Author in *If on a winter's night a traveler.*" Modern *Fiction Studies* 37.4 (Winter 1991), 705-716.
- Weinsheimer, Joel. *Philosophical Hermeneutics and Literary Theory*. New Haven and London: Yale UP, 1991.
- Wilson, Robert Rawdon. "Godgames and Labyrinths: The Logic of Entrapment." *Mosaic* 15.4, December (1982). 1-22.
- Wilson, Robert Rawdon. "Spooking Oedipa: On Godgames." *Canadian Review of Comparative Literature*, Spring (1977). 186-204.
- Wilson, Robert Rawdon. "Three Prolusions: Toward a Game Model in Literary Theory." *Candian Review of Comparative Literature* 8.1, Winter (1981). 79-92.
- *Willy Wonka and the Chocolate Factory*. Dir. Mel Stuart. Perf. Gene Wilder, Jack Albertson, and Peter Ostrum. Warner Brothers, 1971.
- *The Wizard of Oz.* Dir. Victor Flemming. Perf. Judy Garland, Frank Morgan, Ray Bolger, Bert Lahr, Jack Haley, Billie Burke, Margaret Hamilton, and the Munchkins. Metro-Goldwyn-Mayer, 1939.
- Wright, Craig. The Maze and the Warrior: Symbols in Architecture, Theology, and Music. Cambridge, MA and London: Harvard UP, 2001.
- Wysocki, Anne and Johndan Johnson-Eilola. "Blinded by the Letter: Why Are We Using Literacy as a Metaphor for Everything Else?" *Passions, Pedagogies, and 21st Century Technologies.* Eds. Gail E. Hawisher and Cynthia L. Selfe. Logan and Urbana: Utah State UP and National Council of Teachers of English, 1999.

- Wysocki, Anne Frances. "Opening New Media to Writing: Openings and Justifications." Writing New Media: Theory and Applications for the Teaching of Composition. Ed. Anne Frances Wysocki, Johndan Johnson-Eilola, Cynthia L. Selfe, and Geoffrey Sirc. Logan: Utah State UP, 2004.
- Wysocki, Anne Frances. "The Sticky Embrace of Beauty: On Some Formal Problems in Teaching about the Visual Aspects of Texts." Writing New Media: Theory and Applications for the Teaching of Composition. Ed. Anne Frances Wysocki, Johndan Johnson-Eilola, Cynthia L. Selfe, and Geoffrey Sirc. Logan: Utah State UP, 2004.
- Yancy, Kathleen Blake. "Made Not Only in Words: Composition in a New Key." College Composition and Communication 56.2 (2004): 297-328.