



Introduction: The Book Is Dead, Long Live the Book!

In early 1998, some dedicated bibliophiles were discovering they could download the Jane Austen novel *Emma* from the World Wide Web to their printers at no cost—if you did not count the price of a ream of paper and a couple of hours of local telephone charges and connect time, which amounted to slightly more than the price of a softcover compendium edition of Jane Austen's works. At the same time, Flamingo, a British imprint of HarperCollins, published science fiction writer Geoff Ryman's 253: *The Print Remix*, a paperback version of a hypertext narrative anyone could view on the World Wide Web, theoretically, for free.

Less than six months before Ryman's hypertext novel appeared in print, W. W. Norton, the publisher whose anthologies have created the fodder for English literature courses and curricula across America, rolled out its latest anthology, *Postmodern American Fiction*. Its table of contents listed innovators in American fiction between 1945 and 1997, including William S. Burroughs, Norman Mailer, Thomas Pynchon, Don DeLillo, Donald Barthelme, and the authors of two hypertext narratives, Michael Joyce, author of the first hypertext novel, *afternoon*, and J. Yellowlees Douglas, author of the hypertext short story "I Have Said Nothing." On the book's inside back cover the publishers had also affixed a white sticker listing the URL (Universal Resource Locator) of the anthology's accompanying website and a single-user password, enabling readers to sample Web-based versions of the two hypertexts, also represented in brief printed extracts within the anthology itself.

HarperCollins and W. W. Norton have acknowledged hypertext fiction, ironically, by trotting out versions of it in print—exciting a brief flurry of critical applause and a few tut-tuts in online companions to print periodicals including *Atlantic Unbound*, *AP Online*, and *The Cybertimes*, while earning a jeremiad in the *New York Times Book Review* from, all of things, the editor of a Web-based magazine

named for the literary salons once frequented by the giants of nineteenth- and early-twentieth-century print fiction. Welcome to the world of interactive narratives: the Book is dead; long live the Book.

A mere fourteen years ago, Norman Holland and Anthony Niesz noted that “interactive fiction is mostly a fiction”—great concept, a shame about the demo models.¹ Today, we have hypertext novels, novellas, and short stories on disk, CD-ROM, and the World Wide Web, journals both in print and online publishing special hypertext issues, academic treatises mulling over the possibilities for computers and storytelling, clusters of websites listing interactive narratives and criticism, undergraduate and graduate courses exploring the poetics and aesthetics of interactive narratives. Interactive narratives have been the subject of articles on National Public Radio, as well as in *Spin*, *Details*, the *New York Times Book Review*, the *New York Times Cybertimes*, and the *Guardian*—Britain’s only left-leaning daily—plus no fewer than two documentaries by the BBC. But if interactive narratives seem as omnipresent these days as the World Wide Web, examples of them are still nearly as thin on the ground, proportionately speaking, as they were ten years ago, when Internet use was mostly still restricted to academics, hard-core researchers, techies, and geeks.

Some of this avalanche of attention comes from interactive narratives representing something distinctly new in an era when newness, in fashion, in film, and in our cultural mainstream, is restricted mostly to revived artifacts that have been sitting out the past few decades: bell-bottoms and platforms, Volkswagen Beetles, hip-hop retreads of Herb Alpert and Joni Mitchell, cinematic remakes of *Mission Impossible*, *The Saint*, and *The Avengers*, postmodern pastiches, borrowings accompanied with a wink and a nudge. Some critics are excited at the possibilities of harnessing fiction to the power of a computer, realizing, perhaps, a reader-centered text, elevating the reader’s historically humble role to something approximating the creative energies of its author. Others are equally exercised at the sacrilege potential in, say, yoking the art of fiction once practiced by the cast of authors straight out of F. R. Leavis’s *The Great Tradition* to an apparatus in which Bill Gates is a stakeholder.

If you survey all the print, both tangible and online, that has been dedicated to interactive narratives, however, both enthusiast and Lud-dite camps share two features in common. Only a handful of critics on either side have read more than one or two examples of works in the new medium. Fewer still appear to have performed what could pass for

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a close reading on even a single interactive narrative before arriving at pronouncements about the medium's value and future potential—a bit like deciding cinema could never yield up a work of the sophistication of *Citizen Kane* or *The Godfather* after watching Fred Ott's nickelodeon-era short *The Sneeze*. And, for all the critical hand-waving and hand-wringing about interactive narratives being reader-centered, fewer than a dozen articles have ever deigned to give the experiences of reading them so much as a cursory glance.² Probe more deeply into the field, and you will discover that remarkably little consensus exists as to the definition of interactive narratives as a genre—or even if such a thing exists—let alone the definitions of what constitutes “hypertext,” “interactive,” and, even, “narrative.”

Much of the literature dedicated to codifying, evaluating, and criticizing interactive narratives tends to sift the wheat from the chaff entirely on the basis of a purely imaginary ideal. Even when addressing the experience of reading actual interactive narratives, critics seem to focus less on the texts than on their own treasured memories of reading, fond recollections of live-action game-playing, or vague notions of what a marriage of digital fluidity and narrative fiction ought, ideally, to achieve. Sven Birkerts in *The Gutenberg Elegies* and Laura Miller in the *New York Times Book Review* admit to—as Miller puts it—“meandering” through one and three works, respectively. Miller briefly describes an amble through *afternoon*, *Victory Garden*, and Mark Amerika's Web-based *Grammatron*, while Birkerts bases his assessment of the medium on what appears to be little more than an hour spent with a single text. More bizarrely, pieces in recent scholarly journals have attempted to survey the strengths and weaknesses of the field with nary a mention of a specific writer, text, or concrete example. In “Poles in Your Face” in the *Mississippi Review*, the only text author Jurgen Fauth mentions by name is Klaus Kieslowski's film *Blind Chance*, a linear narrative that features three distinctly different plot outcomes, while his references to hypertext fiction are limited entirely to citations from brief World Wide Web articles that mostly misquote hypertext theorists Joyce and Jay Bolter.³ A review in *Postmodern Culture* of hypertext fiction is confined to a deadpan semiotic reading of publisher Eastgate's catalog cover and the contents listed in it—a bit like a *New York Times* reviewer recommending or condemning a novel solely on the strength of the design on the dust cover, or the look of the author's photograph on the inside back flap.⁴ Kids, please, don't try this at home.

Just How Interactive Is Interactive?

Even critics who have conscientiously read the works about which they write, like Espen Aarseth in *Cybertext: Perspectives on Ergodic Literature* (1997) and Janet Murray in *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (1997), do not exactly see eye to eye, arriving, for example, at wildly different interpretations of the term *interactive*. Guided by the definition supplied by Andy Lippman of the Media Lab at the Massachusetts Institute of Technology (for a detailed description of this, see chapter 3), Aarseth insists that what some critics call interaction “is perhaps better described as participation, play, or even use. It is not an apt description of a work where the user can contribute discursive elements to the effect that the ‘theme’ of the ‘discourse itself’ is unknown in advance or subject to change.”⁵

While Aarseth’s definition of interactive does not shove interactive narratives off the board entirely, he does rank it hierarchically below what he calls “cybertext . . . a machine for the production of a variety of expression.”⁶ In cybertext, the actual content of the text may be determined by a script that enables the computer to evolve its own stories, as in *Talespin*, a program that generated fables according to parameters written into the application, or *Racter*, a program that solicited user input with a Rogerian model for interaction as fodder for vaguely surreal or downright dadaesque poetry.⁷ Other forms of cybertext include users working within in a Multi-User Dimension (more commonly known by its acronym, MUD) or an Object-Oriented MUD (usually referred to as a MOO) to create both content and formal shapes of a text, or games like *Adventure*, where the content of the grail quest requires the players to tussle with a requisite number of trolls or labyrinthine caves but does not require that the player confront all of them or even a prescribed number and sequence of trolls, gates, or caves. Cybertext, Aarseth argues, is dynamic, whereas hypertext is static: both the content of the hypertext and the permutations of it potentially open to the reader are fixed.⁸ In some readings of “I Have Said Nothing,” for example, the narrator’s brother may drive to the spot where his girlfriend was killed and step in front of a speeding car. In others, he may be restrained by his mother, standing at the curb—or may not even revisit the scene of his girlfriend’s car accident at all. Yet the reader is merely following links already constructed by the author, realizing several of the author’s scripted permutations of the narrative, Aarseth argues, even though he acknowledges, “When a system is sufficiently complex, it will, by intention, fault, or coincidence, inevitably produce results that could not be

predicted even by the system designer."⁹ Thickets of links for each segment of text and specific conditions under which readers activate them can create a hypertext capable of generating loops or narrative permutations even its author never imagined. While the number of narrative versions may be fixed in theory—since content, links, and linking conditions are set by the author—the experience of reading it may, however, feel dynamic, as few readers return to any hypertext sufficiently persistently to exhaust all its possible iterations. If introducing the computer into the formerly cozy Author-Text-Reader triangle creates an Author-Computer-Text-Reader rectangle, Aarseth is plainly more interested in the Author-Computer-Text triangle nested within it.

Murray, on the other hand, steers mostly clear of the term *interactive* and plumps for *participatory*, texts in which “we can induce the behavior. They are responsive to our input. . . . This is what is most often meant when we say that computers are interactive.”¹⁰ In Murray’s view, the text exists less as an apparatus to produce a collaboration of human and machine than as a conduit for an immersive, aesthetic experience that invites readers’ participation.¹¹ While she is wary of genres and texts that limit readers’ sense of agency—evident in her critique of genres like participatory dinner theater that merely situate participants within preexisting scripts—unlike Aarseth, she is not concerned with the cogs grinding away beneath the surface of the narrative. Instead, she values the reader’s sense of participation in the unfolding of a narrative and the impact of participation on our experience of art: graphic, auditory, word-based. “Agency,” she notes, “is the satisfying power to take meaningful action and see the results of our decisions and choices” (126), an emphasis that gives her survey of what she calls “digital narrative” (51) the scope to consider everything from Joseph Weitzenbaum’s *Eliza*, the digital Rogerian therapist, to disk-based hypertext fiction like *afternoon* and the popular CD-ROM game *Myst*. Murray’s notion of digital narrative is also congruent with Jay Bolter’s definition of interactive fiction in *Writing Space: The Computer, Hypertext, and the History of Writing* as electronic writing containing episodes or topics, connected by decision points or links.¹² For Bolter, the primitive adventure games circulating during the seventies and eighties were themselves a type of narrative, examples of what he called “the nickelodeon era of interactive fiction.”¹³

For our purposes, we will rely on the understanding shared by Bolter and Murray and consider *interactive* texts to be those that contain episodes in the form of chunked text and a range of action accompanying a single decision—as in a player’s decision to make his or her

way to the port side of the sinking *Titanic*, in hopes of getting off the doomed ship in the CD-ROM *Titanic: Adventure Out of Time*. Unlike the pages of a book, however, these episodes are joined together by links, which may be available to readers as choices for navigating through the narrative, like the map of the United States and interstate routes in Matthew Miller's World Wide Web fiction "Trip." Links may also be invisible, triggered when players click on suggestive words in *afternoon* or decide to sweet-talk the deskbot in *Douglas Adams' Starship Titanic*.¹⁴ The experience of reading Michael Joyce's rich prose in his hypertext fiction written for the World Wide Web, "Twelve Blue," however, is radically different from maneuvering one's way through the characters and Orient Express cars in Jordan Mechner's *The Last Express*. To distinguish between different kinds of interactive narratives, we will call text-based narratives like "Twelve Blue" and Stuart Moulthrop's *Victory Garden* "hypertext fiction" and, following Janet Murray's lead, refer to image-based texts like *The Last Express* and Shannon Gilligan's Multimedia Murder series as "digital narratives."

Hypertext Fiction versus Digital Narrative

Much of the ink, both physical and virtual, spilled over interactivity has been focused on hypertext fiction, in part because its most prominent titles have been created by writers laboring over characters, plots, and prose in much the same way Henry James, James Joyce, and other luminaries of English fiction toiled over their stories and novels—and because the whole notion of readers making tangible decisions to experience works of fiction calls into question the roles of author and reader and, even, exactly why we read for pleasure. Digital narratives, on the other hand, hardly threaten to, as Sven Birkerts puts it in his *Gutenberg Elegies*, eclipse "le mot juste and . . . gradually, the idea of the author as a sovereign maker."¹⁵ Like films, digital narratives are produced by teams; even when well-known writers like Jordan Mechner, author of the best-selling game *Prince of Persia*, create scripts for works like *The Last Express*, the origin of the story and identity of the writer is considered about as essential to the final narrative as Herman Mankiewicz's screenplay was to *Citizen Kane*, a fact known mostly by the bona-fide aficionados. Moreover, digital narratives primarily follow the trajectory of *Adventure*, a work considered venerable only by the techies who first played it in the 1970s, cybergaming geeks, and the writers, theorists, and practitioners who deal with interactivity. Hypertext fiction, on the other hand, follows and furthers the trajec-

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tory of hallowed touchstones of print culture, especially the avant-garde novel. In the single article that arguably has made more readers aware of hypertext fiction and inflamed more critics than any other, Robert Coover commented on the relationship between print and hypertext in "The End of Books," published in that bastion of print criticism, the *New York Times Book Review*:

In the real world nowadays . . . *you will often hear it said* that the print medium is a doomed and outdated technology. . . . Indeed, the very proliferation of books and other print-based media, so prevalent in this forest-harvesting, paper-wasting age, *is held to be a sign* of its feverish moribundity, the last futile gasp of a once vital form before it finally passes away forever, dead as God.

Which would mean of course that the novel, too, as we know it, has come to its end. Not that *those* announcing its demise are grieving. For all its passing charm, the traditional novel . . . *is perceived by its would-be executioners* as the virulent carrier of the patriarchal, colonial, canonical, proprietary, hierarchical and authoritarian values of a past that is no longer with us.¹⁶

A careful reading of the piece reveals just how adroitly Coover can both suggest fiction is ready for its next evolutionary leap and describe the aesthetic potential of hypertext fiction without ever personally and explicitly pronouncing the novel's imminent demise himself—a smart move, coming from an early champion of hypertext fiction who still turns out highly readable novels with a fair degree of regularity. "The End of Books," nonetheless, enraged some critics, a few proving to be literal-minded readers adept at glomming onto the big picture but poor at taking in subtle details. Writing in the *New York Times Book Review* nearly six years later, critic Laura Miller still splutters with palpable rage as she recalls Coover's suggestion: "Instead of following a linear story dictated by the author, the reader could now navigate at will through an 'endless expansion' of words."¹⁷ In "The End of Books," however, Coover perceived that expansion as problematic, a tendency that could turn narrative flow to slurry, making it "run the risk of being so distended and slackly driven as to lose its centripetal force."¹⁸ When Miller tells us that "[p]roclamations about the death of the novel . . . can still get a rise out of a surprising number of people," we know she is speaking from experience.

Unlike digital narratives, hypertext fiction consists of words,

characters, plots—all the constituents of the Great Novel—and seems to present itself as narrative fiction's next leap, threatening a genre that is more than two hundred years old and that, according to Coover's "End of Books" and John Barth's article in a 1967 issue of the *Atlantic*, "The Literature of Exhaustion," can seem just about out of gas. The fear that hypermedia is what media ecologists once called a "killer technology," the equivalent of the Model T that ultimately supplanted the horse, accounts partly for the note of hysteria in some critical responses to hypertext. According to this view, the inclusion of Michael Joyce's *afternoon* in the *Norton Anthology of Postmodern American Fiction* signaled not just the arrival of the barbarian at the gate, but the presence of the barbarian on the living room sofa with its feet propped up and a hand already snaking out for control of the remote.¹⁹ With their slow or jerky video clips, animation, and often clumsy interfaces, however, digital narratives threaten to obtrude on no such exalted tradition. While increasing sophistication in digital production and gains in hardware capacity and speeds have improved the quality of digital narratives exponentially during the past decade, there is still little risk anyone's going to mistake the likes of *Midnight Stranger* for *Chinatown*—or even for *Debbie Does Dallas*.

Yet for all their apparent differences, both hypertext fiction and digital narratives function like any medium in what historian Elizabeth Eisenstein calls its incunabular stage—an evolving form that in its infancy absorbs the media and genres that preceded it.²⁰ Both forms contain recognizable genres still borrowed from print, with digital narratives focusing primarily on popular genres: adventures, fantasy, mystery, and science fiction. Similarly, hypertext fiction mostly follows the path of late-twentieth-century fiction, characterized by multiple perspectives and voices, episodes linked with associative logic and memory, and rejection of the conventional, often pat, final awarding of marriages, happiness, money, and recognition that wrap up narratives in mainstream and genre fiction alike. Both forms speak, potentially, to questions that remain valuable, regardless of whether we pose them of works in print, on a multiplex screen, or on a flickering fourteen-inch monitor. What holds a narrative together, once you subtract its successive paragraphs and sequential pages or its linear scenes and sequences? What sorts of stories lend themselves to a medium in which readers can return to the same narrative—as they can with the likes of *Myst*—for more than forty-five hours without exhausting its full range of possible developments and outcomes? How will interactivity change the stories we tell in future? If a story has no physical ending, how do readers know when it—or, at any rate, they, are

finished? What makes a narrative enjoyable? And, finally, why we read for pleasure—a question that critic Wolfgang Iser acknowledges in *The Reader in the Text* “has so far been barely touched on. If it is true that something happens to us by way of the literary text and that we cannot do without our fictions—regardless of what we consider them to be—the question arises as to the actual function of literature in the overall make-up of man.”²¹

The chapters that follow aim to tackle some of these questions by forging comparisons between avant-garde print and hypertext fiction, examining readers’ encounters with hypertext and with chunked print narratives to inspect the invisible, intangible “glue” that can cement even discrete pieces of text together, and scrutinizing, in particular, what happens to our sense of stories when they lack the closure of print narratives. While *afternoon*, *WOE*, and *Victory Garden*, the fodder for some of these explorations, can no longer be considered isolated examples of substantial hyperfictions, they remain some of the most complex in the medium, due, in part, to the number and types of links featured in all three works, as well as to conditional links and cognitive maps not yet available in hypertext fiction on the World Wide Web.²² The version in chapter 4 of Stuart Moulthrop’s “Forking Paths” that so tormented my class at New York University in the mid-1980s represents an isolated case of a roomful of canny readers who’d never before so much as *heard* the word *hypertext* and an author’s intentions in creating a structure for interaction that followed what seemed like sound theories about how readers interpret print literary texts—but sheds significant light on the accuracy of theories of reading when readers discover how some theories of reading print texts may have entirely different effects and consequences for readers navigating through hyperspace.

The pages to come also focus on the aesthetic, cognitive, and physical aspects of reading actual interactive narratives—partly to address the current dearth of such studies, but, more important, to explore what happens to readers’ comprehension of and pleasure in fiction when narratives have no singular, physical ending. By examining in detail both the similarities and differences between interactive and print stories, we can begin to understand the satisfactions we derive from being drawn into fictional worlds not of our inventing—one of the opportunities afforded us when we encounter reading, stories, plots, and characters outside a print environment so familiar to us that we are scarcely aware of print as both medium and technology. By bringing together disparate studies in the fields of psychology, narratology, artificial intelligence, and literary theory, we can begin to

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understand which elements of storytelling are changeable, open to further development and invention in interactive narratives, and which are changeless and immutable across media and millennia alike. We might even, perhaps, anticipate the look and feel of narratives in the future when we discover for ourselves the adrenaline rush of navigating between Scylla and Charybdis as we wend our way through a twenty-first century simulacrum of the tales of brave Odysseus.