



Books without Pages—Novels without Endings

Undoubtedly man will learn to make synthetic rubber more cheaply, undoubtedly his aircraft will fly faster, undoubtedly he will find more specific poisons to destroy his internal parasites without ruining his digestion, but what can he do mechanically to improve a book?

—Vannevar Bush, “Mechanization and the Record” (1939)

What if you had a book that changed every time you read it?

—Michael Joyce (1991)

During the spring of 1998, Flamingo Press began selling softcover versions of the World Wide Web hypertext fiction 253. Simon and Schuster released two versions of *Douglas Adams’ Starship Titanic*, one, a novel in hardcover, written by former Monty Python member Terry Jones from a story by Douglas Adams, the other, an interactive narrative based on the same story that shipped on three CD-ROMs. As the reviews trickled in, the interactive narrative was roundly applauded for its intricate design, lavish graphics, and a cast of characters comprised nearly entirely of animated “bots” (or robots), programmed to respond to words and question marks in the users’ input with over ten thousand responses—or roughly sixteen hours of spoken tidbits.¹ The novel, conversely, was roundly thrashed by most reviewers, who characterized it as “pretty thin and familiar fare.”²

At the same time, as public interest in the fate of the *Titanic*, her passengers, and crew rose with the release of the blockbuster film *Titanic*, visitors strolling through the exhibition of the same name at the Florida International Museum in St. Petersburg crowded around a monitor in a gallery that featured one of the wrought iron windows from the ship’s Verandah Café, china used on the maiden voyage, and corked bottles of champagne recovered by salvage teams after nearly three-quarters of a century on the ocean floor. The images on the mon-

itor, however, drew more viewers than the artifacts themselves, displaying a rapid fly-through of the ship's decks and public rooms, all depicted in meticulous detail faithful to the original. Visitors who purchased the CD-ROM they had just seen in the museum gift shop, however, discovered that the fly-through of the ship was merely a small part of the digital narrative *Titanic: Adventure out of Time*. Published in 1996, *Titanic* features a cast of characters that are alternately drawn directly from the liner's passenger list, sly parodies of Gilded Age robber barons, or historically accurate approximations of the socialites and steerage passengers who might have boarded the White Star liner. As *Titanic: Adventure out of Time* websites encouraged users to tally the number of historical inaccuracies they encountered, newspapers released findings by a marine forensic team and metallurgist pointing out the unusually high concentration of slag in the steel used for *Titanic's* rivets could have caused them to give way after collision with an iceberg, resulting in steel plates in the ship's hull springing open to the sea, a discovery confirmed during dives that revealed six thin holes in the bow, commensurate with opened hull seams.³ Prominent among the subplots in the interactive narrative is an intrigue involving a blackmail scheme by an Irish serving girl in steerage who possesses a letter written to an Andrew Carnegie surrogate named Andrew Conkling, a letter that warns of the inferior steel manufactured at one of Conkling's mills and subsequently used in the construction of the *Titanic's* hull—a plot woven into the narrative at least two years prior to the newspaper revelations about the rivets and the modest size of the holes in *Titanic's* bow.

Readers enter the narrative via a flashback that begins with a close-up of a model of the *Titanic* in an otherwise dilapidated London apartment, seen during World War II's London Blitz.⁴ Here you can rummage through the flat's scant contents, serenaded by the Cockney landlady's threats of eviction heard through the flat's closed front door, and discover a series of postcards that seem to document the central character's downward spiral toward dissipation. Or you can inspect the contents of the kitchen cupboards, complete with scurrying mice, look out the window at the barrage balloons tethered above London—and wait for the flat to take a direct hit from a Luftwaffe buzz bomb. The ensuing fire, in the mysterious means employed by adventure stories in both books and films, situates the user back in a stateroom aboard the *Titanic* on April 14, 1912. It is 9:30 P.M.: you have slightly more than four hours to wend your way through a series of tortuous plots and subplots, deciding which to follow and which to bypass, before the ship begins her plunge to the ocean floor.

Eight possible conclusions finish the narrative—and it turns out that, among the artifacts you need to barter for, recover, steal, or kill for, following the usual CD-ROM adventure conceit, are a painting by Hitler, a rare copy of Omar Khayyám's *Rubáiyat*, a notebook containing the names of Lenin, Trotsky, and other Bolshevik revolutionaries, and a diamond necklace. If you manage to hit on one of the strategies for getting off the ship in time with all the objects, you succeed in changing the course of history. As a British Secret Service agent, you presumably turn the notebook over to your superiors, the Bolsheviks are assassinated, and the Russian Revolution never occurs. Serbian revolutionaries are deprived of the necklace and rare book with which they planned to finance the assassination of Archduke Franz Ferdinand, thus halting one of the principal triggers of World War I. And, as the only painting to be recovered from the now-sunken liner, the work you bring with you in the lifeboat vaults an obscure, talentless painter named Adolf Hitler to public acclaim, neutralizing one of the forces that contributed to World War II. Seven other outcomes, each with alternative histories, are also possible, with the reader discovering the implications of his or her performance during a flash-forward that follows the sinking of the *Titanic*. With its elegiac music, eight decks of public rooms and staterooms for nosing around at your leisure, and well-written characters who do not necessarily assist your progress toward the endgames—a welcome change from the narrowly purposive characters and trajectory of most CD-ROMs, which can feel like old video arcade games with a little more context tossed in—*Titanic* can feel as immersive as an absorbing film or novel, engaging readers in the pleasurable, trancelike state Victor Nell in *Lost in a Book: The Psychology of Reading for Pleasure* defines as “ludic,” the sense of becoming so immersed in a narrative that we become “lost” in it.⁵ In the Age of Obsolescence, in which the average book or film can be consumed in a matter of hours, run-times for interactive narratives like *Titanic* and *The Last Express* can last as long as a regular working week, leading at least one critic to plead for “an ‘adult’ mode to games for those with limited time and patience.”⁶

One of the purposes driving interactive narratives, however, is the desire for the inexhaustible story, the mystery that unspools with a fresh cast of suspects instead of gliding quickly through its denouement to a limited conclusion; the endless fount of stories that spring from Scheherazade during her 1,001 nights; the seemingly limitless versions of long-familiar tales that Homeric rhapsodes spun in response to cues and demands from their audiences. And it is precisely this vision of the book that never read the same way twice that

Michael Joyce claims prodded him into collaborating with Jay Bolter on the hypertext application that became Storyspace, as well as into work on his hypertext novel *afternoon*.⁷ For all that, the book that changes every time you read it, responding to your moods, your whims, your latest fetish is, perhaps tellingly, a fantasy that has never been explored in print—unless, of course, you count the nightmarish, endless book in Borges's short story "The Book of Sand," which so curses its owner with weeks of sleeplessness as he tries to chart its limits that he finally slips it into the bowels of the Argentine National Library—presumably the same collection of tomes over which Borges himself presided during his term as the library's director.⁸

There is, of course, a perfectly sound reason why the kaleidoscopic book has never been attempted: part of the concept of the book is bound up in its fixity, the changelessness of its text. But if it were possible to have stories that really did interact with your choices, they probably would not have the singular endings we are familiar with from countless novels, stories, films, and plays. Part of the pleasure of reading them would come from your ability to decide, say, to execute Charles Darnay and save Sydney Carton in *A Tale of Two Cities*—or to make Philip Carey stop acting like such an utter wimp in *Of Human Bondage*, which means that closure would be something *you* determined, not Dickens or Somerset Maugham. So how would you decide when you were finished reading? And how would you know you were finished with the story for good, especially since your future readings could potentially trigger new twists and fresh narrative possibilities?

Even if you became used to reading this way, it is hardly likely that digital media like hypertext are going to supersede books, regardless of how much critics like Miller or Birkerts fret over the fate of the book and *le mot juste*. Radio and cinema went foraging for slightly different niches once television debuted on the scene, and ballooning numbers of video rentals, airings on premium cable and satellite channels, and pay-per-view showings have all helped recoup losses for films that were absolute dogs at the box office—an unexpected boon for Hollywood. It is hard to imagine books becoming the horse of the twenty-first century—a possession that has lost so much of its utility that only the well-to-do can afford to have one around anymore.

This is especially true since the book as a technology evolved over the course of hundreds of years through innovations like spacing between words, tables of contents and indices, standardized spelling and grammar, the development of genres and conventions, and, ultimately, copyright, aimed at shoring up author's rights and royalties, but which also ensured that readers encountered the author-ized ver-

sion of a work and not a hastily pirated copy that more or less replicated what some quasi literate had made of the author's work.⁹ Hypertext, conversely, has been with us only since the late 1950s in prototype and only for the past fifteen years in mostly primitive applications that offer readers the sketchiest of notions of the contents of nodes, the destinations of links, of where they have navigated within a network of nodes and links, even of how much of the narrative they have consumed.¹⁰

If the book is a highly refined example of a primitive technology, hypertext is a primitive example of a highly refined technology, a technology still at the icebox stage. This is a far cry from the zero-frost refrigerator-freezer version of the technology envisioned by Aarseth and Murray, who anticipate, respectively, machine-made stories and frame-based authoring systems enabling writers to cycle through "the possible plot possibilities, eliminating many of them and specifying appropriate choices or priorities for situations where the story pulls from multiple directions."¹¹ Further, while some genres may migrate to the new technology and undergo sea changes as interactive narratives, others will remain best suited to book form. Countless directors have taken cracks at turning the novels of Jane Austen into films, yet there is little evidence to suggest that, say, the *Pride and Prejudice* production that first aired in 1996 on the Arts and Entertainment network killed off sales of the novel; if anything, the television adaptation bolstered book sales by introducing new audiences to Austen's acerbic wit. And painstaking attempts by both Stanley Kubrick and Adrian Lyne to adapt *Lolita* to celluloid only reinforce how much more powerfully the voice of Humbert Humbert speaks to readers when it exists as mere marks on a page than when it is brought to life by actors, voice-overs, and vivid vignettes. In the entertainment industry, killer technologies generally make only equipment obsolete: the compact disk destroyed the market for turntables and vinyl alike but did not alter so much as a single musical genre. The issue here is not whether the book and interactive narrative can exist comfortably together, so much as whether future readers will begin reading print works differently from the way they do now. If you had become accustomed to seemingly inexhaustible books that altered according to your curiosity or whims, how would you react once you returned to reading print fiction like *The Postman Always Rings Twice*, or even *Ulysses*, where the text just kept saying the same thing, no matter how many times you turned to it?

For some, these scenarios and questions alike sound far-fetched, the sort of futuristic musing that had us believing, back in the seven-

ties, that we would be rocketing from Washington, D.C., to New York on ultrafast trains by the early 1990s—when we are all too aware that passenger trains are still trundling along at speeds that would have been decidedly unimpressive during the Eisenhower administration. But these are legitimate questions one could ask of readers and writers of readily available works of hypertext fiction. Like print fiction, hypertext stories can enthrall, frustrate, amuse, repel, and even frighten their readers. Certainly, readers of print fiction like *The Good Soldier* may interpret what they read completely differently their second time through the novel, after having already learned that the narrator is quite possibly the world's most literal-minded reader of events and what he reports seldom a reliable indicator of what happened. If you were to read Michael Joyce's *afternoon, a story*, one of the first pieces of hypertext fiction ever written, you might also interpret things entirely differently the second time around. But what you were reading—the actual, tangible text itself—would also probably be different from what it was when you first opened the novel. It is not a matter of the river being different each time you cross it so much as it is a matter of your stepping into an entirely different river with each journey you take.

As Michael Heim has pointed out, the prefix *hyper-* can signal a hitherto undiscovered or extra dimension, so the term *hypertext* describes a tool that lets us use the printed word as the basis for a technology that considerably extends writing's reach and repertoire—mostly by removing text from the single dimension it has on the printed page.¹² Within the confines of hypertext, narratives consist of discrete segments of text, some of which may be read or experienced in what may seem like sequential order even when they appear in radically different settings. Hypertext fictions like *afternoon* feature multiple links for every segment of text woven together in a complex web of relationships, associations, and alternative constructions of what might have happened on the morning when the narrator, passing a roadside accident on his way to work, discovers he cannot locate the whereabouts of either his estranged wife or young son. Segments of text within a hypertext—referred to by critics as *pages*, *sites*, *windows*, or *places*—can be as brief as a word or image, or as long, really, as a short story. These are associated with other segments of text, not by their sequential order on a page, but by links, pathways through the text that can be created, in some circumstances, by both readers and authors. Readers following Matthew Miller's "Trip," a World Wide Web-based riff on the seventies road movie, can skip their way across

the narrative by using a map of the continental United States, deciding which state to visit as they follow a hapless narrator who has ended up as caretaker to his ex-girlfriend's two kids and careens around the country in a fruitless effort to rendezvous with their transient mother, who is never quite where she is supposed to be. Within each state, readers can choose links designated by interstates, highways, and county roads, or follow arrow links indicating continuous events in a single scenario. No matter where you click on the United States, you will find the narrator, Jack, and Jill in scenes that retain their comprehensibility and integrity no matter what order they are encountered in. Follow the narrative through Florida and Texas or Michigan and Illinois, and you will always find the threesome, embroiled in some comic or vaguely threatening scenario, usually down to their last dime.

The organization of "Trip" recalls Roland Barthes's schema for *The Pleasure of the Text*, where he uses alphabetic order to place observations in discrete segments of text in what he felt was as close to a random order as possible.¹³ Other interactive narratives, however, rely on causal sequences that branch into a variety of mutually exclusive outcomes. In some readings of "I Have Said Nothing," for instance, readers encounter a punitive mother who whisks away the artifacts her son keeps beneath his pillow—keepsakes from his dead girlfriend that include a segment of her skin—but in others, his mother protects him by following to the scene of his girlfriend's accident and preventing him from committing suicide there. This difference between interactive and print narratives can make comparing accounts of what each reader thought the story was "about" in a literature seminar infinitely more varied and problematic for interactive than for print texts, since the events in the story itself, as well as its interpretation, may differ between students' experiences of the text. While authors of print narratives can never be certain exactly how readers will interpret their fiction, authors of interactive narratives can occasionally be surprised at the permutations and combinations of narrative segments that readers encounter—especially since hypertexts with more than a hundred segments and two to three hundred links will generate hundreds of possible versions of the text, some of which the authors themselves have neither anticipated nor seen.

Books without Covers

It is not that the Author may not "come back" in the Text, in his text, but he then does so as a "guest." . . . He becomes, as

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it were, a paper-author: his life is no longer the origin of his fictions but a fiction contributing to his work.

—Roland Barthes, "From Work to Text" (1971)

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.

—Roland Barthes, "The Death of the Author" (1968)

Of course, critics, many of them steeped in literary theory, have begun noticing affinities between the features of hypertext and the way that poststructuralist theorists had described the Text.¹⁴ Even the neologisms coined to describe print text—*liaison* (link), *toile* (web), *réseau* (network), and *s'y tissent* (interwoven)—seem, uncannily, to anticipate the hallmarks of hypertext. You do not need to be particularly perceptive to see the possibility of producing sequential yet nonlinear discourse with hypertext as an illustration of Jacques Derrida's contrast between linear and nonlinear writing. Nor do you need to be fantastically well versed in the writings of Roland Barthes to recognize hypertext in his description in "From Work to Text" of print text as a network of references to and reflections of other works. Or to seize on Derrida's definition of text as "a differential network, a fabric of traces . . . [overrunning] all the limits assigned to it so far"¹⁵ as a decent sketch of a hypertext like Christiane Paul's *Unreal City: A Hypertext Guide to T.S. Eliot's The Waste Land*, where readers leap seamlessly between extracts of Jessie L. Weston and snatches of Chaucer, from Ezra Pound's contributions to its editing into the familiar, canonized version of the poem, even earlier draft versions of the work, as they traipse through lines of T. S. Eliot's *The Waste Land*—without needing to search through catalogs, wander library stacks, or page through dozens of sources. If activities like these felt familiar the very first time you surfed the World Wide Web, it may well be because you have encountered something like this already in the works of Barthes, Derrida, Foucault, and J. Hillis Miller, theorists who see meaning as distributed within texts through dense networks of associations with other texts reaching past the boundaries of the physical work itself. Or you might be reminded of the relatively recent shift in critical attention from authors and texts to the role of the reader, prefaced by Barthes's famous "Death of the Author" that declares the reader is the single device that ultimately controls the signifying potential of any text.

When you read your first hypertext, your first reaction might be

that the Author has not only been killed outright, but that he or she has been quickkilled. It can be difficult to detect anything that even *smells* like an author or so much as a consistent editorial viewpoint amid the tangled network of texts and links. In, for example, *A Reader's Guide to "The Waste Land,"* lengthy discussions of the influence on Eliot's poem of *From Ritual to Romance* and *The Golden Bough* sit alongside extracts from the works themselves, as well as Pound's dismissal of both the footnotes and Eliot's conviction that the notes supplied readers with information crucial to a full appreciation of the work. Here, also, in Paul's hypertext—as in George P. Landow's *Dickens Web*, and Landow and John Lanestedt's *The "In Memoriam" Web*—critical essays by students and contributions by present-day professors of literature share the same continuous space with a plethora of other voices, including, in *The Dickens Web*, the words of luminaries of Victorian culture. This should hardly astonish anyone who has already encountered the concept of intertextuality or the decentered text. After all, one of the hallmarks of Barthes's notion of text was its plurality, its polyvocality, the legion of voices with which it spoke. But whereas this chorus of voices is strictly implicit in the printed realm, a kind of dragon that every writer faces down (with varying amounts of sweating and dexterity), it is virtually omnipresent in hypertext. By isolating segments of an argument we would normally digest in physically discrete places with a single, unthinking gulp, writers in hypertext can open up apertures into conflicting and even mutually exclusive perspectives.

The polyvocality of hypertext does not mean that it either imitates or induces a kind of schizophrenia in its readers. Since hypertexts are fluid where print texts are fixed, the medium lends itself to circumstances where readers can play out alternative scenarios, even experience all possible outcomes stemming from a single set of circumstances, as in, for example, Shannon Gilligan's Multimedia Murder mysteries, particularly *The Magic Death*—an interactive narrative that invites you to play detective and nail multiple murderers who have vastly different motives (and methods) for knocking off the same victim, who, it turns out, can appear to have been bumped off by various killers in three distinct but equally feasible scenarios. When it comes to building theories of, say, how an accident happened, or how society and technology come together to produce the tools we use, the printed word—static, linear, and relatively austere—does not necessarily stand out as the best way of doing justice to the complexity of experience with all its contingencies and possibilities. Originally fashioned for use in the law courts of ancient Athens as a tool of persuasion, the rhetori-

cal tradition that has most strongly shaped Western print conventions turned writing into a way of reducing multifaceted and indeterminate experience into singular and linear representations of events that removes from them as much ambiguity as possible.¹⁶ Print mostly works in much the same way as a legal decision: a zero-sum game that settles the conflicting claims and elaborate narratives constructed by each side with a single decision, inevitably validating one version of events entirely while suppressing the other. Today our representations of the world have been shaped by philosophical relativism and, in areas like quantum physics and chaos theory, we increasingly embrace a world infinitely more complex, unpredictable, and indeterminate than anything our nineteenth-century forebears could imagine. Yet we still overwhelmingly rely on a medium that, when we bow to the dictates of its conventions and rhetoric, makes us all, more or less, into objectivists or positivists, regardless of our intentions.

These issues can partially account for hypertext's having become a cultural buzzword of sorts—a noun everyone from hard-nosed journalists to sociologists and even professors of English appears on nodding terms with. Media theorists like Marshall McLuhan and Walter Ong have dedicated entire careers to tracing the roots of cultural developments as seemingly disparate as the concepts of intellectual property and universal suffrage to their origins in the moment when Gutenberg adapted an old winepress to the printing of Bibles. So we should not be startled that the arrival of a technology apparently promising a radical shift in the relationship between text, reader, and world—one that has been proclaimed as “the first *literary* electronic form”¹⁷—should be heralded with so much critical attention that critics complain about the disproportionate relationship between the preponderance of articles *on* hypertext fiction and the slender number of actual examples floating around.

These larger claims, nevertheless, can help shed light on the alternatives to print represented by hypertext—and on its potential impact on the domain of both readers and writers. Not a few critics writing on hypertext fiction have already pounced on the similarity between the historical moment described in Plato's *Phaedrus*, where Socrates disparages writing as a form of representation, and our own, where the arrival of hypertext enables us to deride the printed word for roughly the same reasons:¹⁸

The fact is, *Phaedrus*, that writing involves a similar disadvantage to painting. The productions of a painting look like

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living beings, but if you ask them a question they maintain a solemn silence. The same holds true of written words; you might suppose they understand what they are saying, but if you ask them what they mean by anything, they simply return the same answer over and over again. Besides, once a thing is committed to writing, it circulates equally among those who understand the subject and those who have no business with it; a writing cannot distinguish between suitable and unsuitable readers. And if it is ill-treated or unfairly abused it always needs its parents to come to its rescue; it is quite incapable of defending or helping itself.¹⁹

To someone steeped in a primarily oral tradition, the written or printed word has obvious drawbacks: it is singular; it is static; and no matter how many times you read something (or how your purpose shifts from reading to reading), it just keeps saying the same old thing. Between Plato's era and our own, of course, poststructuralist criticism has made these sentiments seem a trifle quaint, and, if the physical text itself is unchanging, our readings of the same text are far from it. My reading of *Flaubert's Parrot* will seem different if I am after a good read than if I am pursuing snippets of critical or biographical wisdom on Flaubert, just as none of us will read Louis Althusser's *Pour Marx* in the same way again after we stagger through *The Future Lasts Forever* and discover there that, as far as Althusser was concerned, a little of Marx went a long way. Rereading Plato is, in fact, no different from either of these cases. Although the text is the same, the sentiments expressed in *Phaedrus* jump from seeming merely historically interesting to strikingly current when I read them after first discovering hypertext.

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Writing, when properly managed . . . is but a different name for conversation. As no one, who knows what he is about in good company, would venture to talk all. The truest respect which you can pay to a reader's understanding, is to halve this matter amicably, and leave him something to imagine, in his turn, as well as yourself.

—Laurence Sterne, *The Life and Opinions of Tristram Shandy* (1759)

Nothing odd will do long. *Tristram Shandy* did not last.

—Samuel Johnson (1776)

Plato, of course, did not remain alone in his mixed feelings about writing (although contemptuous of it, he did, nonetheless, record his dialogues with it) until Vannevar Bush began tinkering around with his plans for the Memex in the thirties. Since print is linear, fiction writers generally also relied on straightforward, chronological narratives for telling their stories from the infancy of print fiction on through the tail end of the Victorian era. Yet if we turn to Laurence Sterne's *Life and Opinions of Tristram Shandy*, we can watch a novelist continuously (and, to his contemporaries, doubtlessly outrageously) playing with, poking fun at, and occasionally doing violence to the constraints of the medium—activities that seem to have more in common with hypertext fiction than they do with the literary conventions of Sterne's day. Ostensibly, Sterne's novel is a bildungsroman—only this first-person narrative attempts to begin with Tristram's conception, not his actual birth. The plot almost immediately grinds to halt as Tristram sets the exchange between his parents in the context of his father's relations with the Shandy family and the prenuptial agreement between his parents that leads to Tristram's mother giving birth down in the country that will lead to the regrettable flattening of Tristram's nose during his delivery . . . The narration of events in a seamlessly linear, chronological fashion is, for Tristram, well-nigh impossible: his retelling of events leaps forward associatively, triggered by similarities in words as well as by memories—a foretaste of the associative power of Proust's madeleine. Each time Tristram attempts to smooth out the jumble of causal relationships and associative episodes into the straightforward, linear story his readers expect, the interpenetration of circumstances, the workings of the mind, and the limitations of the printed text all conspire to snarl them up again.

Was Sterne merely playing with conventions and readers' expectations—or was he already chafing a bit at the confines of the printed page and trying to joke his way past them? Mimicking the epistolary novels of his era that were directed toward a reading subject (who was not, however, the “real” reader but a character within the fiction itself), Tristram directly addresses his surrogate reading public, but in the form of a ridiculous construction—a slightly stuffy female reader. Taking her assumptions at face value, Tristram uses his projections of her responses as jumping-off points in his storytelling, just as he later includes a chapter on whiskers because he claims he had promised it to his reader, as well as a blank page for her to sketch in the features of

Widow Wadman. As Sterne's novel progresses, the narrative occasionally seems to push back the limits of the physical text. Chapter 24 is missing from book 4 because, as Tristram explains in chapter 25, he has torn it out of the book. He then proceeds to recap everything we "missed" in the lost chapter, yet our sense of that "loss" is hard to entirely dispel, since the numbering of pages in chapter 25 continually reminds us that we have skipped a chapter. Elsewhere, Sterne teasingly follows up the misunderstanding between Widow Wadman and Uncle Toby over his war wound—Uncle Toby's promise to show her "something" in the garret has her, not surprisingly, anticipating something else entirely—with two blank chapters, leaving the reader more than a little something to imagine.

Where we might have read a novel like Richardson's epistolary *Pamela* quite comfortably from our position as a voyeur-reader, Sterne's novel makes the whole convention of the fictionalized reader seem faintly ridiculous and, at times, downright inadequate. In constructing a narrative to mimic the conversation he knows the print novel cannot hope to emulate, Sterne reminds us of just how static and fixed print fiction can be. Compared with the interactions required by conversing or reading hypertext fiction, reading print can seem a tad like listening to a monologue or a lecture, where you basically have two choices: listen or leave. While reading hypertext fiction hardly involves the same order of dynamic interaction encountered in conversation (for more on this, see chapter 3), you can interrupt the flow of the narrative or exposition in search of more congenial pastures, leap between conflicting representations of a single subject, dwell a bit more intensively on a moment or topic—and skip others entirely. A work of hypertext fiction can act as a blueprint for a series of potential interactions, and your movements through it, a dance choreographed by an absent author who has anticipated the questions, needs, and whims of imaginary readers. It is an encounter and a performance not terribly distant from the kind shared by ancient rhapsodes, who sifted through memorized, formulaic versions of cherished stories, and the live audiences whose demands partially shaped the versions they heard.

So where, exactly, does this leave the reader: behaving something like an actor improvising within an assigned role in a John Cassavetes film—or like a reader enjoying a mild frisson of pleasure at being able to choose an ending in one of those "Choose Your Own Adventure" stories? Since hypertext fiction does not have the fixed, tangible beginnings and endings of print stories and books, readers decide where their experience of the text ends. While examples exist of print stories

or novels with multiple endings—think of stories like “The Babysitter” in Robert Coover’s *Pricksongs and Descants* or John Fowles’s *French Lieutenant’s Woman*—there is only one episode of closure that can actually end the thing. Whatever comes last tends to seem like the “real” ending, and what reader would close the book after the “ending” encountered midway through Fowles’s novel with a bulging stack of pages and chapters acting as a reminder of what he or she is missing? A hypertext story, on the other hand, can feature as many points of closure as its author can dream up: one, eighteen, or eighty. Which of these points becomes the ending to the story, the place where a reader feels he or she can fold up the tent, so to speak, and be done with it, is entirely up to the reader.

Yet this is no simple “Choose Your Own Adventure” scenario where readers can see for themselves that they have exhausted whatever possibilities the narrative held and pass the book on to their friends. Since hypertexts can include hundreds or even thousands of narrative episodes or segments, connected with an even vaster number of links—and each of these bridges between texts can require readers to satisfy specific conditions to traverse them—a single work of hypertext fiction can have thousands of permutations. As a reader, you can return to the same narrative over and over again, never entirely certain what will happen with each new version of the text you realize. As an author of a hypertext fiction with several links for each segment of text, you yourself may never experience all of its possible permutations, providing you with only a modicum of the control you possess on the printed page over the ways in which your text will be actualized once read. The physical text can change with each reading and reader—so texts can behave unpredictably even during events normally as tame as a public reading. Picture a reading session of the usually unremarkable kind that prefaces book signings where, however, the hypertext writer has roughly the same odds on predicting what she is going to read next as you might enjoy on a little wager at the track, and you can begin to imagine just how radically hypertext fiction can reconfigure the roles of reader and writer alike.

Hypertext—Where Technology and Theory Meet

Hypertext is as much a concept as it is a form of technology. As a technology, hypertext shot into public awareness in the late eighties when Apple began shipping copies of its own hypertext software, Hyper-

Card, with every new Macintosh—although comparatively few HyperCard users were aware they could write hypertext stories or documents with it, since HyperCard was also an all-singing, all-dancing utilities package that boasted clip art, a drawing and painting program, and the digital equivalent of a Rolodex. Individual units known as “cards,” containing text or images or even sounds, could also be organized into stacks and the cards linked together in a variety of sequences. But the component that distinguishes hypertext from your average database—the capacity to link segments—did not reveal itself easily to less than adroit HyperCard users, since cards could be linked only when writers used HyperTalk, HyperCard’s own built-in scripting language, to forge them. Other hypertext software, most notably Guide and Storyspace, was to prove more congenial for would-be hypertext writers—particularly Storyspace, which enables writers to create sophisticated links and attach guardfield conditions to them by simply pointing and clicking. By the late eighties, the first hypertext stories began circulating mostly on a samizdat basis between users, with a speed and efficiency that sometimes startled their authors. While still writing *afternoon* years before its publication, Michael Joyce found himself bombarded with questions from a reader who had managed to lay her hands on a copy of the novel—try to envision that happening with Hemingway working on an early draft of *The Sun Also Rises*, or any other print author you care to imagine.²⁰

However recent a technological development hypertext may be, as a concept, hypertext has been rolling around for decades. The idea was born in the thirties, the child of a science adviser to Franklin Delano Roosevelt, Vannevar Bush, who envisioned a system that could support and improve human memory more efficiently than the printed word. Scientific research, Bush claimed, was being bogged down by the mechanisms used for storing and retrieving information,

largely caused by the artificiality of systems of indexing. When data of any sort are placed in storage, they are filed alphabetically or numerically, and information is found (when it is) by tracing it down from subclass to subclass. . . .

The human mind does not work in that way. It operates by association. With one item in its grasp, it snaps instantly to the next that is suggested by the association of thoughts, in accordance with some intricate web of trails carried by the cells of the brain.²¹

If Bush felt that books and libraries had begun to hinder research as much as they helped it, part of the impetus for his building the Memex also stemmed from a belief that machines could model the processing of information by reproducing the neural structures in the brain that linked information together by association rather than by the linear logic of the printed book.²² Readers using Bush's Memex would collect snippets of information from a huge variety of sources, link them together with "trails," and even insert comments or notes of their own. New kinds of reference materials using the same technology as the Memex could be seamlessly incorporated into the wealth of available information, to which readers could add their own, personalized Memex trails.²³

Ironically, the most striking aspect of the Memex—its potential to radically reorganize the valuing and handling of information as a commodity—was treated by Bush as simply part of a system that made storing and retrieving information more efficient. Nothing in Bush's writings on the Memex remotely addresses the implications of readers customizing and distributing their own versions of the new encyclopedias and reference works he envisions—or the knotty problems that could arise if, say, a user had circulated a highly idiosyncratic and heavily annotated version of *The Oxford English Dictionary* that became the de rigeur version of the OED for thousands of readers. If we assess his probable response based on the strong streak of technological utopianism in Bush's other writings (particularly "The Inscrutable Thirties"), however, we could guess that Bush would have been taken aback by the very question, and, particularly, by the notion of information as a commodity. His invention was, after all, intended to facilitate the sharing and propagation of information to promote scientific progress—perhaps not coincidentally, the same impetus behind the founding of the World Wide Web in the early nineties. Further, Bush's writings and their insistence on making the production of research more efficient may also have taken their cues from a more pragmatic source: the drive toward progress begun during the Second World War and continued during the Cold War era, when scientific research was spurred on primarily by America's adversarial relationship with Germany and, later, the Soviet Union.

Revolutionary potential aside, however, the analog machines that Bush had slated to form the basis of the system were soon superseded by digital technology, and, as a result, the Memex was never built—although Bush's articles served as a direct inspiration for the work of Douglas Engelbart and others who proposed and eventually constructed digital approximations of the Memex. Not surprisingly, the

unexpected by-product of Bush's vision—the concept of a medium that blurred the line between author and reader and between the contents of one work and another—was also to prove both potent and remarkably hardy. In the decades following the publication of Bush's Memex articles, the work of pioneers like Engelbart and Ted Nelson (Nelson dreamed up the label *hypertext* and became its relentless champion) ensured that the concept of a new technology capable of enhancing the roles of reader and writer alike hung on, frequently precariously, to the margins of the public agenda.

The Reader Comes of Age

The reader does not merely passively accept or receive a given literary work but through the act of reading participates along with the author in the creation of the fictional world evoked by the heretofore lifeless text. . . .

At first glance, interactive fiction acts out this process literally. It seems to emancipate the reader from domination by the text putting her in at least partial control of the sequence of events. . . .

. . . interactive fiction looks as though it acts out one particular model of reader response. Iser has suggested that the text of a novel lays down certain limits, but within those limits are gaps which a reader feels impelled to fill. An interactive fiction seems to make this arrangement explicit.

—Anthony Niesz and Norman Holland,
“Interactive Fiction” (1984)

Around the same time that Bush was reflecting on the inadequacies of printed books, indices, and card catalogs, literary critics were beginning to show the first signs of restiveness over the field's intensive preoccupation with the Text. If, in the history of literary criticism, the eighteenth and nineteenth centuries were the era of the Author, then the early twentieth century, with the advent of the New Criticism, belonged to the Text. The first stirrings of critical interest in the reader's share of the author-text-reader triumvirate dates roughly from the thirties, beginning with Louise Rosenblatt and Jean-Paul Sartre, and eventually spread rapidly through everything from structuralism to semiotics by the seventies. One of the reasons the era of the reader took so long to arrive at the forefront of literary criticism most likely lies in the notorious difficulty facing anyone who sets out to describe

the act of reading. Texts are, after all, physical objects that can be scrutinized and cited. Authors produce tangible products and tend to be written about by historians or contemporaries—and to helpfully give interviews or even write extensively about themselves and their titanic struggles with this or that work. But the act of reading is invisible, aside from eye movements and the odd subvocalization here and there. We can assess the marks on the page and the white space around them. We can study what readers say or write afterward in response to prompts, probing questions, or even videotaped images of themselves mulling over the text—and still we cannot isolate what happens when a reader reads. It is a process that is part perception, part convention, and entirely stubbornly, unchangeably intangible. Although we can weigh, measure, and describe texts the way we do brains and neural functions, we can only guess about the way reading and interpretation functions, as we do minds and thoughts.

There are other difficulties, of course, facing the would-be critic attempting to nail down a definition of what, exactly, reading consists of. We can hedge a guess that it involves a certain amount of interaction with a text, which, as most theories of reading agree, works something like a blueprint for potential aesthetic experiences. In the theory of reading articulated by Wolfgang Iser in *The Act of Reading*, readers realize or concretize texts from skeletal structures on the page, since the written word—unlike the spoken—can never completely be tied to a single, determinate meaning. This is where things begin to become wretchedly complicated, making us inclined, perhaps, to recall Plato's complaints in *Phaedrus* more sympathetically. For example, I would be able to correct you if you misconstrued what I meant when I said aloud to you, "I get a nosebleed every time I go above Fourteenth Street." I could remind you that I prefer to spend most of my time in Greenwich Village, tell you that the northernmost boundary of the Village is Fourteenth Street—and point out that the nosebleed is strictly a figure of speech. On the other hand, if I were to include this sentence in an essay or piece of fiction, you might not understand just what I meant by the allusion to Fourteenth Street. Even if you assumed that I was referring to the Fourteenth Street in New York and knew that "above" meant "north," so that "above Fourteenth Street" meant leaving the Village, you might wonder whether I intended to say that the Village was a more Bohemian, or down-to-earth, place than the rest of the city, or whether I was saying that I found neighborhoods like Murray Hill or the Upper West Side a bit headier and more exciting. But you might not even understand that I was referring to the Fourteenth Street in Manhattan and not the Fourteenth Street

of Brooklyn or Queens, also in New York. You could mistake my reference to a specific street in Manhattan and suppose that I was jokingly connecting the size of street numbers and their heights above sea level. Or you might even end up wondering just what it is in the air in Chelsea or around Gramercy Park that provokes nosebleeds.

Indeterminacy can make even a brief sentence into something over which we could easily spill a few paragraphs worth of ink in the interpreting. It is also the one feature that all theorists studying the act of reading agree is the most prominent characteristic of written texts: holes. For Sartre, fiction is rife with "traps" that lure the reader into an act of "directed creation."²⁴ For Roman Ingarden, one of the earliest of the phenomenological theorists, texts were paradoxically filled with "gaps" or "places of indeterminacy."²⁵ For Wolfgang Iser, who was influenced strongly by Ingarden, readers were provoked into fleshing out texts by "gaps," "blanks," "vacancies," and "negations."²⁶ Even theorists examining the process of reading from disciplines outside literary criticism—such as cognitive psychologist Roger Schank and psycholinguist Frank Smith—have claimed that reading is driven by readers' needs to fill in gaps or spots of indeterminacy in the text. This is, of course, part of what makes describing the act of reading so thoroughly baffling a task. Readers not only perform an invisible act; they also would appear to perform it largely by filling in holes in the text that generally do not even appear visible to most of us. We are so accustomed to making assumptions, filling in blanks, and inferring causes and effects as we read, in most cases, that they have become all but automatic.

This ease with which we perform this act daily (on everything from signs in the subway to the likes of *The Bridges of Madison County* or *The House of Mirth*), which helps to render reading well-nigh invisible, can account for some of the neglect the reader has suffered throughout the history of literary criticism. Conversely, it was the critics' recognition of just how little explicit information novels and stories supplied their readers that led to interest in theories of reading. If reading represented such a seething hive of activity, their thinking went, wasn't it rather creative? Sartre was among the first to think so:

Raskolnikov's waiting is *my* waiting which I lend him. Without this impatience of the reader he would remain only a collection of signs. His hatred of the police magistrate who questions him is my hatred which has been solicited and wheedled out of me by signs, and the police magistrate himself would

not exist without the hatred I have for him via Raskolnikov. That is what animates him, it is his very flesh. . . . [T]he words are there like traps to arouse our feelings and to reflect them towards us. . . . Thus for the reader, all is to do and all is already done.²⁷

"Reading," Sartre declared, "is directed creation," which sounds like it accords the reader a measure of freedom hitherto unacknowledged in literary criticism. But what he seems to be granting them is something more oxymoronic: a strictly limited freedom. He is, after all, talking about *directed* creation, which brings to mind a child let loose with a coloring book, provided with already finished pictures drawn out with thick, black lines and nice, inviting white space on either side of them. Dostoyevsky supplies Raskolnikov's hatred, and we bring along our memories of, perhaps, certain junior high school administrators we loved to loathe, or our recollections of the sleazy cops in *Serpico*.

There is also something telling in the language Sartre uses to stake his claim for the inventiveness of the reader's act. The author's collection of signs wheedles and solicits, tricking our emotions out of us like an escort posing as a date. Reading, interpreting, seems to be something we do almost in spite of ourselves. In fact, our contemporary use of the word *read* as a synonym for *interpret* (as in "Yeah, that's how I read his character, too") is rather telling: to read *is* to interpret. Like a carnal streak we cannot quite repress, we respond to the text's machinations the way one might to a come-on, but, according to Sartre, we end up having not so much a moment of interaction as an interlude in which we merely recognize our own emotions reflected back to us. Although Sartre insists the text leaves it "all to do," his "all is already done" conclusion undermines his claim for the reader's relative sovereignty by insisting that the text is, essentially, complete when we get to it. We are simply drawn into moments in the text and then trapped, coaxed into coloring them in with the hues of our own memories. It all seems just a bit like karaoke—no matter how you may sing it or what marvelous vocal flourishes you pump into the song, the melody will always be unchanged, the song never yours.

In its later incarnations, reader-response criticism attempts to crown readers with laurels far more exalted than Sartre's "directed creation." The great phenomenologists of reading—Roman Ingarden, Hans Robert Jauss, and Wolfgang Iser—all tend to see reading as rising out of readers' interactions with a text that can seem less an explicit string of instructions than a sketchy blueprint, inviting something tantamount to artistic license in the interpreting of it. In particular,

Iser—arguably the most influential theorist of reading—seems to stake out generous territory for the reader's share:

[G]uided by the signs of the text, the reader is induced to construct the imaginary object. It follows that the involvement of the reader is essential to the fulfillment of the text, for materially speaking this exists only as a potential reality—it requires a “subject” (i.e., a reader) for the potential to be actualized. The literary text, then, exists primarily as a means of communication, while the process of reading is basically a kind of dyadic interaction.²⁸

In a dyadic interaction, both parties play more or less equal roles, just like people engaged in conversation—an activity widely considered the model for what interactivity should ideally look like. So Iser's version of reading seems a far cry from Sartre's mere “directed creation,” and more like the sort of act that might describe what readers bring to hypertext narratives. In print fiction, readers actualize a text by mostly unconsciously fleshing out adjectives, adverbs, and nouns, by making assumptions and inferences, and framing hypotheses about what is happening and what is coming next. Readers of hypertext fiction, though, perform something a bit more like an act of concretization, by blazing along trails through the dense web of possible hypertextual links, activating conditions with effects that the author may not have even anticipated. In this respect, hypertext has more in common with dance than it has with novels like *Play It As It Lays* or *Ulysses*. Until a reader assembles it, performing it, the text exists only as a set of potential motions, a sequence of steps and maneuvers that become actualized only at the instant that the reader selects a segment of text or fulfills a condition for movement.

Yet, as we find in Iser's theory of reading, hypertext readers are restrained by determinate things in the text, for all their uncertainty about what is going to rear up next. While it is possible for me to construe what happens in the same passage in *afternoon* entirely differently in each of the contexts in which I encounter it—as we will see in chapter 4—certain features of that segment of text remain constant. Although I may be invited to fill in details of what characters are thinking or mull over what hanky-panky might be percolating behind the scenes to inspire their badinage, I cannot interpret the word “restaurant” in that passage to mean “boardwalk” and animate the scene with my own memories of Coney Island: what I already know about the characteristics of restaurants and what people do in them

shapes the content of what I can intelligibly project onto the restaurant scene.

In fact, according to some theorists, my ability to comprehend most of what I read has something to do with a knowledge of restaurants, as well as schools, banks, and lines at cash registers—a vast array of strategies for behavior in the real world. When I venture into a restaurant, I do not wonder what I am supposed to do with the piece of laminated cardboard someone in uniform shoves at me. Nor would I ask the server wielding a pen and notepad if he or she could find someone to take a look at my sick cat. Both my perception and my behavior are more or less directed by my knowledge of what are called, variously, depending on whether you are a cognitive scientist or an art historian, scripts or schemata. Generally, we are not conscious of calling on a script when a situation approximates a familiar one, however distantly, yet, according to schema theory, we use our experience of them constantly at a variety of different levels. In our experience of the world, schemata serve to guide us through driving in heavy traffic, endorsing checks, and even performing the Heimlich maneuver on a dining partner over lunch. When we read, schemata incline us toward forming hypotheses that lead to our making some inferences and excluding others without our ever being aware of the existence of latent, alternative interpretations.

Consider the following passage:

Tony slowly got up from the mat, planning his escape. He hesitated a moment and thought. Things were not going well. What bothered him most was being held, especially since the charge against him had been weak. He considered his present situation. The lock that held him was strong but he thought he could break it. He knew, however, that his timing would have to be perfect. Tony was aware that it was because of his early roughness that he had been penalized so severely—much too severely from his point of view.²⁹

If you think that this passage is about the thoughts of a convict meditating on his escape, you probably focused on the words “escape,” “being held,” “the charge against him,” and “the lock”—all the components of imprisonment, familiar to most of us through stories or films set in prison. If, however, you have a slender knowledge of the rules and regulations of wrestling, you will most likely have read this as a description of a wrestler trying to break free of his opponent’s hold. Here, too, you would focus on many of the same features that

enable you to latch onto the convict scenario, yet you would also probably have seized immediately on the presence of the mat in the first sentence. As readers and viewers, most of us are less than familiar with the wrestling script and, not surprisingly, unlikely to latch on to its cues.

Generally, when we use the jailhouse script to flesh out the details, we simply screen out the stray items here and there that do not fit—like the mat—without being aware that an alternative schema and, with it, an entirely different reading, exist. But if schemata represent a substantial part of what guides and restricts our experience of what we perceive, they help us only while we are operating squarely within the confines of scenarios we can recognize. Let's say, for example, that we are watching a film like *Jacob's Ladder*, one that shuttles rapidly from genre to genre, suggesting by turns that it is a war flick, a thriller about secret military plots, a drama about madness, and a horror film on the order of *Rosemary's Baby*. How do we predict what is going to come next? Which genre constraints does the film—and its ending—need to satisfy? Scripts can help nudge us toward comprehension at a local level only if we can recognize individual elements as part of a larger script. If this sounds like an endless loop—like the hermeneutic circle—it is because the process actually is one. What makes it work, what enables us to understand what we see or read, is the relative fixity of the larger script, as well as the script most of us possess telling us that films and novels tend to follow the single, overarching schema we would call a genre, pretty consistently throughout. Works that violate genre constraints randomly or haphazardly like *Jacob's Ladder* tend to frustrate us, since we need consistency to either identify a new schema or to broaden or modify our concepts of already existing ones. When hypertext readers attempt to build a script, however, even if the story adheres faithfully to our expectations of the genre, the local scripts can seem a bit mercurial. Already, some hypertext narratives, such as *afternoon* and *WOE—Or What Will Be*, have capitalized on our tendency to project scripts and interpret everything we read in light of them (as we will see in chapters 4 and 5), so that you can be jolted when you discover the “she” and “he,” whose identities you thought you had pegged correctly from the start, turn out to have shifted from place to place, referring in each segment to entirely different people.

The reader, we have seen, does not wait until the end to understand the text. Although texts provide information only gradually, they encourage the reader to start integrating data

from the very beginning. From this perspective, reading can be seen as a continuous process of forming hypotheses, reinforcing them, developing them, modifying them, and sometimes replacing them by others or dropping them altogether.³⁰

When you slow down the act of reading and scrutinize it, as we have just done with the prison/wrestling scenario, you cannot help but be struck by the sheer busyness involved. Reading even the most formulaic of genres can turn your mind into the equivalent of the *New York Times* newsroom, as you juggle convictions, conclusions, and predictions about everything in the text from the meaning of a word to a murderer's motives. Even moving from sentence to sentence is something of an acrobatic feat, particularly when we read passages like this one:

Things were getting very tense. Suddenly John punched George and knocked him out. Mary started screaming. I ran to the phone and called the police. Kathy ran for the doctor.³¹

Under normal circumstances, most of us would assume that some dispute or suspected slight had been brewing between the two males in the passage before John decks George, and that Mary's screaming, Kathy's running for the doctor, and the narrator's actions are all related to the fisticuffs they have witnessed. Take a second look, however, and you will see whatever continuity or causality you assumed you had seen there evaporates under your gaze. Syntactically, there is nothing that tells us one event is following another, no adverbs, no phrases that establish a sequence. Nor do any of the sentences refer obviously to any other, no *seeing my distress*, *Kathy ran for the doctor*, no *since*, *if*, *because* formulas that could trigger our recognition of causation, nor any other flags that could prompt us to leap the synapse between sentences. Yet we do—constantly and unconsciously. Why?

First, these sentences seem both referentially coherent and plausibly related, largely because their contents correspond, more or less, to our experience of fistfights—from our days on elementary school playgrounds and hours of watching films or TV cop shows. It is relatively easy to infer that sentences 2 and 3 are causally linked, since Mary's screams would be a perfectly normal response to seeing two people she knows sock one another, or because sane people generally scream only in response to something upsetting they have perceived.³² The remaining sentences appear to belong to the same scenario: running for the doctor and the police appear to be congruent actions when both

occur in response to seeing a fight between two people who need either restraining or medical attention. As we will discover in the next chapter, the media we use for telling stories and conveying information all build off our proclivity to perceive the world in causal terms. We see cause and effect, and, unless discordant features rear their heads to disrupt our assumptions, most of us will leap with scarcely a pause—or conscious effort—from the sentence in which John punches George to Kathy's running for the doctor.

That is not necessarily true, though, of reading interactive narratives, particularly hypertext fiction, which can feel a little like a dimly remembered experience from Driver's Ed, perhaps your first attempt at piloting a car through heavy traffic. If you break down all the assumptions and calculations involved in, say, making a left turn, the sheer number of things you need to manage—monitoring the traffic on both sides of you, watching oncoming cars, keeping an eye out for erratic drivers and defiant pedestrians—seems so overwhelming, you can begin to be impressed with even the incompetent drivers in your family. In a similar fashion, reading hypertext fiction reminds us of just how complex the act of reading is, a condition to which a lifetime of immersion in a highly conventionalized, print-saturated environment has made us virtually immune. This is due, partly, to the absence of any established or even apparent conventions that guide the writers and readers who work with hypertext narratives. At the moment, the medium is an awkward grab-bag of conventions, practices, and techniques adopted from print that are not quite up to the demands posed by the technology. No prior or real-world models for paths or links currently exist, let alone conventions that tell us how to read or write cues that can help readers decide which paths to follow when they are lost or confused.

But we could also attribute this sense of reading as an almost overwhelmingly complex act to reading within an environment where the reader's convictions, predictions, and interpretations make a difference to the text itself. It is not simply a matter of hanging in there until you stumble across something you find vaguely comprehensible, as you can with an article or book, and then clutching on to your understanding of that fragment like a life preserver in heaving seas, hoping it floats you toward more manageable waters. Inside an interactive narrative, your understanding of a particular passage will determine what choices you make for moving on (or for shuffling backward a few paces, if you find yourself truly lost). If you are positive, after you put one murderer behind bars in *The Magic Death*, that the woman's brother or neighbor had equal cause to kill her, your convictions (no

pun intended) can keep the story going. It can last, in this particular instance, until you are heartily sick of interviewing suspects and collecting samples of blood, fingerprints, and carpet fibers, are satisfied that you have nailed the true killer, or have run out of suspects (and murderers).

Because readers of interactive narratives can enjoy this newfound liberty to make choices and decide what deserves to become an “ending” to the stories they read, they also discover something that approximates Archimedes’ fulcrum and level place to stand: a relative freedom that enables them to determine the satisfactions that closure is made of. Before this, closure was something we could describe and codify, but it was not something that we could examine outside of its role as a given. Although we have what seem like endless serials broadcast on television and radio (Britain’s *The Archers*, for example, has been running for more than half a century) and horror films with deathless antagonists in the innumerable *Halloween* and *Nightmare on Elm Street* sequels, we have no existing models for narratives that lack tangible endings. Although you can break down the particular frustrations of an ending like that of *Jacob’s Ladder*, which concludes by metamorphosing for one last time into a fantasy—of the “Oh, it was all a dream” ilk, familiar to us from *The Wizard of Oz*—it is a different task entirely, as we will discover, to see the ingredients of closure as they are defined by readers who can pick an ending, any ending—or none at all.

Examining how readers respond to interactive narratives, at its very least, enables us to nudge the act of reading and the pleasures readers take in it away from the long shadow cast by hundreds of years of readerly and writerly conventions. To do this, you need a more particularized understanding of just what interactivity is, an ant’s-eye view of it that lets you grasp something that has no convenient, tangible likenesses, a virtual object that seems to stubbornly resist tidy analogies. Which leaves us—initially, in chapter 3—with a strategy that is a bit like a theoretical description of reading: a discussion of what interactive narratives are not.