

49. [Introduction] The End of Books

What is the end of books? Provocation, the communication of different perspectives, the pleasing rearrangement of thought through language and narrative—these are a few possible ends. They are certainly ones that Robert Coover has worked toward in his postmodern fiction, provided in codex format in *Pricksongs and Descants*, *The Universal Baseball Association*, *The Public Burning*, and *Briar Rose*, among others. What Coover found in teaching a hypertext writing workshop was that allowing students to write on the computer in this form actually furthered the end of books.

“Getting [writing students] to try out alternative or innovative forms is harder than talking them into chastity as a life style,” Coover writes. “But confronted with hyperspace, they have no choice: all the comforting structures have been erased.” What resulted from the confrontation between an unusual hypertext writing opportunity and a well-read, conservative student was, Coover found, high-quality and copious literary output. The benefits seen in this workshop came with the help of Brown’s robust and well-supported systems for composition—and these systems were important, since students did not have the same access to programmers that collaborating artists did in earlier projects. They did have, within the environment provided in Coover’s class, the ability to collaborate on the authorship of hypertext systems before the Web was invented, working on projects in groups that met in person and interacting with each other via online writing.

J. Yellowlees Douglas, in her post-“The End of Books” book which takes its name from this essay, calls this “the single article that arguably has made more readers aware of hypertext fiction and inflamed more critics than any other” (7). Coover has managed not only to provoke students into writing innovative fiction, but also to provoke critics into writing sweeping denunciations of the idea of electronic literature. These critical inflammations have resulted in heated humanist tracts but little illumination. Some have had difficulty getting beyond the title of this essay, at least emotionally; the alternate reading of the title described in the first paragraph may help, in this case.

Since this essay’s 1992 appearance in the *New York Times Book Review*, Coover has declared that the Golden Age of literary hypertext has ended, and that that heavily textual era of innovation in the form has given way to the world of the Web. (Although many who weren’t bothered by “The End of Books” have bemoaned this more recent declaration, Coover himself foresees, at the very least, an enjoyable Silver Age, and hopes that reading will continue to have a place in our computerized experiences.) If the sunlit afternoon of hypertext has ended, that can only mean that some of those comforting structures that were lacking in 1990’s hypertext composition class do currently exist—and the system shock that hypertext writing produced in 1992 can no longer be administered in the same way. Perhaps the next way to stimulate students into literary creativity using the computer will involve something more novel than link-and-node hypertext?

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Further Reading

Coover, Robert. “Literary Hypertext: The Passing of the Golden Age.” Keynote Address at Digital Arts and Culture 99, Atlanta, Georgia. 29 October 1999. <http://nickm.com/vox/golden_age.html>.

Birkerts, Sven. *The Gutenberg Elegies*. Boston: Faber and Faber, 1994.

Douglas, J. Yellowlees. *The End of Books—Or Books Without End?: Reading Interactive Narratives*. Ann Arbor: University of Michigan Press, 2000.

Landow, George. *Hypertext: The Convergence of Contemporary Critical Theory and Technology*. Baltimore: Johns Hopkins University Press, 1992.

Although it was radical for college writing students to compose hypertexts in 1990, the idea of providing the computer as a creative platform had been promoted for decades, often with younger students in mind by Alan Kay (◊26), Seymour Papert (◊28), and Ted Nelson (◊21) among others.

Constructive hypertext systems were advocated by hypertext fiction’s Homeric figure, Michael Joyce (◊42). Joyce wrote *Afternoon, a story*, as described in Coover’s essay.

“Izme Pass” by Carolyn Guyer and Martha Petry, which Coover mentions in this selection, is included on the CD.

Coover has already taken electronic writing in a different direction, or along a different dimension, by having writers in Spring 2002 create text for display in Brown University’s CAVE (CAVE Automatic Virtual Environment, further described in the introduction to Myron Krueger’s essay (◊25)). These efforts bring writerly concerns and perspectives to shared virtual environments, where text has seldom had any place at all. The 3D display of text in space had been explored earlier in different types of systems by MIT’s Visible Language Workshop under the direction of Muriel Cooper.

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The End of Books

Robert Coover

In the real world nowadays, that is to say, in the world of video transmissions, cellular phones, fax machines, computer networks, and in particular out in the humming digitalized precincts of avant-garde computer hackers, cyberpunks and hyperspace freaks, you will often hear it said that the print medium is a doomed and outdated technology, a mere curiosity of bygone days destined soon to be consigned forever to those dusty unattended museums we now call libraries. 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, which took center stage at the same time that industrial mercantile democracies arose—and which Hegel called “the epic of the middle-class world”—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.

Much of the novel’s alleged power is embedded in the line, that compulsory author-directed movement from the beginning of a sentence to its period, from the top of the page to the bottom, from the first page to the last. Of course, through print’s long history, there have been countless strategies to counter the line’s power, from marginalia and footnotes to the creative innovations of novelists like Laurence Sterne, James Joyce, Raymond Queneau, Julio Cortázar, Italo Calvino and Milorad Pavić, not to exclude the form’s father, Cervantes himself. But true freedom from the tyranny of the line is perceived as only really possible now at last with the advent of hypertext, written and read on the computer, where the line in fact does not exist unless one invents and implants it in the text.

“Hypertext” is not a system but a generic term, coined a quarter of a century ago by a computer populist named Ted

Nelson to describe the writing done in the nonlinear or nonsequential space made possible by the computer. Moreover, unlike print text, hypertext provides multiple paths between text segments, now often called “lexias” in a borrowing from the pre-hypertextual but prescient Roland Barthes. With its webs of linked lexias, its networks of alternate routes (as opposed to print’s fixed unidirectional page-turning) hypertext presents a radically divergent technology, interactive and polyvocal, favoring a plurality of discourses over definitive utterance and freeing the reader from domination by the author. Hypertext reader and writer are said to become co-learners or co-writers, as it were, fellow-travelers in the mapping and remapping of textual (and visual, kinetic and aural) components, not all of which are provided by what used to be called the author.

Though used at first primarily as a radically new teaching arena, by the mid-1980’s hyperspace was drawing fiction writers into its intricate and infinitely expandable, infinitely alluring webs, its green-limned gardens of multiple forking paths, to allude to another author popular with hypertext buffs, Jorge Luis Borges.

Several systems support the configuring of this space for fiction writing. Some use simple randomized linking like the shuffling of cards, others (such as Guide and HyperCard) offer a kind of do-it-yourself basic tool set, and still others (more elaborate systems like Storyspace, which is currently the software of choice among fiction writers in this country, and Intermedia, developed at Brown University) provide a complete package of sophisticated structuring and navigational devices.

Although hypertext’s champions often assail the arrogance of the novel, their own claims are hardly modest. You will often hear them proclaim, quite seriously, that there have been three great events in the history of literacy: the invention of writing, the invention of movable type and the invention of hypertext. As hyperspace-walker George P. Landow puts it in his recent book surveying the field, *Hypertext*: “Electronic text processing marks the next major shift in information technology after the development of the printed book. It promises (or threatens) to produce effects on our culture, particularly on our literature, education, criticism and scholarship, just as radical as those produced by Gutenberg’s movable type.”

Noting that the “movement from the tactile to the digital is the primary fact about the contemporary world,” Mr.

Landow observes that, whereas most writings of print-bound critics working in an exhausted technology are “models of scholarly solemnity, records of disillusionment and brave sacrifice of humanistic positions,” writers in and on hypertext “are downright celebratory. . . . Most poststructuralists write from within the twilight of a wished-for coming day; most writers of hypertext write of many of the same things from within the dawn.”

Dawn it is, to be sure. The granddaddy of full-length hypertext fictions is Michael Joyce’s landmark *Afternoon*, first released on floppy disk in 1987 and moved into a new Storyspace “reader,” partly developed by Mr. Joyce himself, in 1990.

Mr. Joyce, who is also the author of a printed novel, *The War Outside Ireland: A History of the Doyles in North America With an Account of their Migrations*, wrote in the on-line journal *Postmodern Culture* that hyperfiction “is the first instance of the true electronic text, what we will come to conceive as the natural form of multimodal, multisensual writing,” but it is still so radically new it is hard to be certain just what it is. No fixed center, for starters—and no edges either, no ends or boundaries. The traditional narrative time line vanishes into a geographical landscape or exitless maze, with beginnings, middles and ends being no longer part of the immediate display. Instead: branching options, menus, link markers and mapped networks. There are no hierarchies in these topless (and bottomless) networks, as paragraphs, chapters and other conventional text divisions are replaced by evenly empowered and equally ephemeral window-sized blocks of text and graphics—soon to be supplemented with sound, animation, and film.

As Carolyn Guyer and Martha Petry put it in the opening “directions” to their hypertext fiction “Izme Pass,” which was published (if “published” is the word) on a disk included in the spring 1991 issue of the magazine *Writing on the Edge*:

This is a new kind of fiction, and a new kind of reading. The form of the text is rhythmic, looping on itself in patterns and layers that gradually accrete meaning, just as the passage of time and events does in one’s lifetime. Trying the textlinks embedded within the work will bring the narrative together in new configurations, fluid constellations formed by the path of your interest. The difference between reading hyperfiction and reading traditional printed fiction may be the difference between sailing the

islands and standing on the dock watching the sea. One is not necessarily better than the other.

I must confess at this point that I am not myself an expert navigator of hyperspace, nor am I—as I am entering my seventh decade and thus rather committed, for better or for worse, to the obsolescent print technology—likely to engage in any major hypertext fictions of my own. But, interested as ever in the subversion of the traditional bourgeois novel and in fictions that challenge linearity, I felt that something was happening out (or in) there and that I ought to know what it was: if I were not going to sail the Guyer-Petry islands, I had at least better run to the shore with my field glasses. And what better way to learn than to teach a course in the subject?

Thus began the Brown University Hypertext Fiction Workshop, two spring semesters (and already as many software generations) old, a course devoted as much to the changing of reading habits as to the creation of new narratives.

Writing students are notoriously conservative creatures. They write stubbornly and hopefully within the tradition of what they have read. Getting them to try out alternative or innovative forms is harder than talking them into chastity as a life style. But confronted with hyperspace, they have no choice: all the comforting structures have been erased. It’s improvise or go home. Some frantically rebuild those old structures, some just get lost and drift out of sight, most leap in fearlessly without even asking how deep it is (infinitely deep) and admit, even as they paddle for dear life, that this new arena is indeed an exciting, provocative if frequently frustrating medium for the creation of new narratives, a potentially revolutionary space, capable, exactly as advertised, of transforming the very art of fiction, even if it now remains somewhat at the fringe, remote still, in these very early days, from the mainstream.

With hypertext we focus, both as writers and as readers, on structure as much as on prose, for we are made aware suddenly of the shapes of narratives that are often hidden in print stories. The most radical new element that comes to the fore in hypertext is the system of multidirectional and often labyrinthine linkages we are invited or obliged to create. Indeed the creative imagination often becomes more preoccupied with linkage, routing and mapping than with statement or style, or with what we would call character or plot (two traditional narrative elements that are decidedly in jeopardy). We are always astonished to discover how much of

the reading and writing experience occurs in the interstices and trajectories between text fragments. That is to say, the text fragments are like stepping stones, there for our safety, but the real current of the narratives runs between them.

“The great thing,” as one young writer, Alvin Lu, put it in an on-line class essay, is “the degree to which narrative is completely destructed into its constituent bits. Bits of information convey knowledge, but the juxtaposition of bits creates narrative. The emphasis of a hypertext (narrative) should be the degree to which the reader is given power, not to read, but to organize the texts made available to her. Anyone can read, but not everyone has sophisticated methods of organization made available to them.”

The fictions developed in the workshop, all of which are “still in progress,” have ranged from geographically anchored narratives similar to *Our Town* and *Choose-Your-Own-Adventure* stories to parodies of the classics, nested narratives, spatial poems, interactive comedy, metamorphic dreams, irresolvable murder mysteries, moving comic books and Chinese sex manuals.

In hypertext, multivocalism is popular, graphic elements, both drawn and scanned, have been incorporated into the narratives, imaginative font changes have been employed to identify various voices or plot elements, and there has also been a very effective use of formal documents not typically used in fictions—statistical charts, song lyrics, newspaper articles, film scripts, doodles and photographs, baseball cards and box scores, dictionary entries, rock music album covers, astrological forecasts, board games, and medical and police reports.

At our weekly workshops, selected writers display, on an overhead projector, their developing narrative structures, then face the usual critique of their writing, design, development of character, emotional impact, attention to detail and so on, as appropriate. But they also engage in continuous on-line dialogue with one another, exchanging criticism, enthusiasm, doubts, speculations, theorizing, wisecracks. So much fun is all of this, so compelling this “downright celebratory” experience, as Mr. Landow would have it, that the creative output, so far anyway, has been much greater than that of ordinary undergraduate writing workshops, and certainly of as high a quality.

In addition to the individual fictions, which are more or less protected from tampering in the old proprietary way, we

in the workshop have also played freely and often quite anarchically in a group fiction space called “Hotel.” Here, writers are free to check in, to open up new rooms, new corridors, new intrigues, to unlink texts or create new links, to intrude upon or subvert the texts of others, to alter plot trajectories, manipulate time and space, to engage in dialogue through invented characters, then kill off one another’s characters or even to sabotage the hotel’s plumbing. Thus one day we might find a man and woman encountering each other in the hotel bar, working up some kind of sexual liaison, only to return a few days later and discover that one or both had sex changes. During one of my hypertext workshops, a certain reading tension was caused when we found that there was more than one bartender in our hotel: was this the same bar or not? One of the students—Alvin Lu again—responded by linking all the bartenders to Room 666, which he called the “Production Center,” where some imprisoned alien monster was giving birth to full-grown bartenders on demand.

This space of essentially anonymous text fragments remains on line and each new set of workshop students is invited to check in there and continue the story of the Hypertext Hotel. I would like to see it stay open for a century or two.

However, as all of us have discovered, even though the basic technology of hypertext may be with us for centuries to come, perhaps even as long as the technology of the book, its hardware and software seem to be fragile and short-lived; whole new generations of equipment and programs arrive before we can finish reading the instructions of the old. Even as I write, Brown University’s highly sophisticated Intermedia system, on which we have been writing our hypertext fictions, is being phased out because it is too expensive to maintain and incompatible with Apple’s new operating-system software, System 7.0. A good portion of our last semester was spent transporting our documents from Intermedia to Storyspace (which Brown is now adopting) and adjusting to the new environment.

This problem of operating-system standards is being urgently addressed and debated now by hypertext writers; if interaction is to be a hallmark of the new technology, all its players must have a common and consistent language and all must be equally empowered in its use. There are other problems too. Navigational procedures: how do you move around in infinity without getting lost? The structuring of

the space can be so compelling and confusing as to utterly absorb and neutralize the narrator and to exhaust the reader. And there is the related problem of filtering. With an unstable text that can be intruded upon by other author-readers, how do you, caught in the maze, avoid the trivial? How do you duck the garbage? Venerable novelistic values like unity, integrity, coherence, vision, voice seem to be in danger. Eloquence is being redefined. "Text" has lost its canonical certainty. How does one judge, analyze, write about a work that never reads the same way twice?

And what of narrative flow? There is still movement, but in hyperspace's dimensionless infinity, it is more like endless expansion; it runs the risk of being so distended and slackly driven as to lose its centripetal force, to give way to a kind of static low-charged lyricism—that dreamy gravityless lost-in-space feeling of the early sci-fi films. How does one resolve the conflict between the reader's desire for coherence and closure and the text's desire for continuance, its fear of death? Indeed, what is closure in such an environment? If everything is middle, how do you know when you are done, either as reader or writer? If the author is free to take a story anywhere at any time and in as many directions as she or he wishes, does that not become the obligation to do so?

No doubt, this will be a major theme for narrative artists of the future, even those locked into the old print technologies. And that's nothing new. The problem of closure was a major theme—was it not?—of the *Epic of Gilgamesh* as it was chopped out in clay at the dawn of literacy, and of the

Homeric rhapsodies as they were committed to papyrus by technologically innovative Greek literati some 26 centuries ago. There is continuity, after all, across the ages riven by shifting technologies.

Much of this I might have guessed—and in fact did guess—before entering hyperspace, before I ever picked up a mouse, and my thoughts have been tempered only slightly by on-line experience. What I had not clearly foreseen, however, was that this is a technology that both absorbs and totally displaces. Print documents may be read in hyperspace, but hypertext does not translate into print. It is not like film, which is really just the dead end of linear narrative, just as 12-tone music is the dead end of music by the stave.

Hypertext is truly a new and unique environment. Artists who work there must be read there. And they will probably be judged there as well: criticism, like fiction, is moving off the page and on line, and it is itself susceptible to continuous changes of mind and text. Fluidity, contingency, indeterminacy, plurality, discontinuity are the hypertext buzzwords of the day, and they seem to be fast becoming principles, in the same way that relativity not so long ago displaced the falling apple.

