“Hyping the Text”: Hypertext, Postmodernism, and the Historian

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In 1989 David Harlan warned historians in the American Historical Review to pay attention to the hurricane winds of postmodernism furiously threatening the shores of the historical profession. In “Intellectual History and the Return of Literature,” Harlan railed against what he considered the rather dogmatic insistence of historians on narrowly contextualist practice, unexamined and simplistic assumptions about the role of narration, and dated notions about authorial intentionality. For Harlan, “literature has returned to history, unfurling her circus silks of metaphor and allegory, misprision and aporia, trace and sign, demanding that historians accept her mocking presence.” This hauntingly triumphal “return of literature,” Harlan concluded, “has plunged historical studies into an extended epistemological crisis.”

Harlan’s jeremiad did not go unanswered at the time, and since publication it has become something like a foundational text for citation as historians slowly stick their heads out of the sands of past historical practice to consider more fully the implications of literature and postmodernism. In response to Harlan, David A. Hollinger called for a middle-ground approach while recognizing many of the important implications of postmodernism for traditional history. But Hollinger did not find that the return of literature or the increased penetration of theory into historical discourse must necessarily banish from the historical kingdom traditional methods of historical analysis dependent upon context, authorial intention, or narration. Instead, Hollinger posited a plurality of approaches that would, in the
tradition of American pragmatism, be evaluated less on the basis of theoretical grandeur or novelty than on exactly how well such new methods enriched the monographic literature that constituted historical practice.  

Most recently, in the pages of *American Studies*, Saul Cornell, Barry Shank, Nancy Isenberg, and Jonathan Arac have returned to these issues, with sophistication and nuance, but still without considering how the development of computers and computer programs such as Hypertext might not only be postmodern, but in what manner they might pose new challenges or develop new exemplifications of the postmodernist condition—for good or ill. Cornell, in particular, is to be congratulated for at least posing the question about how Hypertext might be able to create “a truly post-modern narrative.”

To be sure, Hypertext can create such a narrative, and in the process it may serve to shed necessary light on Harlan’s postmodernist vision. With the introduction of Hypertext computer programs, the memory capacity of CD-ROM [computer disk-read only memory], and the increasing scope of Internet and World Wide Web, the postmodernist universe that Harlan imagined and celebrated, may actually be upon us. Would it be helpful to jump fully into the churning waters of the Hypertext, computer information world to gain a sense of perspective on the debate, to see perhaps if issues of concern to those in American Studies might be comprehended in a different manner?

Hypertext computer programs have been firmly situated, at least theoretically, within the mainstream of postmodernism. Hypertext promotes, in the words of its most important humanities academic proponent, George Landow, the abandonment of “center, margin, hierarchy, and linearity” and replaces them with the postmodernist icons of multiplicity, open-endedness, and non-sequentiality. The technological implications of Hypertext are to be the final nails in the coffin of the ideal of the author and the tyranny of narrative structure. In fact, it is hardly unusual for those writing about Hypertext to see it as inaugurating a new paradigm or technological revolution with effects similar to those first introduced by the printing press on oral traditions and ways of understanding and communicating. Within a generation or two, some imagine, our minds’ ability to organize and process data will no longer resemble what it is at present. In one of the more stirring renditions of this song of change, Sherry Turkle declares that “Computers embody postmodern theory and bring it down to earth;” furthermore, cyberspace and hypertext technologies make “more complex” and may also obliterate “old distinctions between what is specifically human and specifically technological.”

All of this from a computer program such as Hypertext? It might be necessary at this point to pause to approach the question: What is Hypertext? Hypertext is a general term that captures how a computer program can effectively and massively revise the way we organize and look at text, and in turn how we think about it. Hypertext organizes data into units, called lexia or nodes; each of these units contains varying amounts of data, from what would be the text inscribed on a small index card to the entire text of *Finnegan’s Wake*. These data units are relational or can be, one to another, but not in the manner of a traditional
computer directory, which is organized schematically as a tree with a central
directory that branches out into discrete sub-units or files. The levels of data
available through Hypertext programs and through CD-ROM are immense,
immediately retrievable, and easily combined or displayed alongside one an-
other. In addition, with the ability of the computer instantaneously to control or
transform the typeface and position of data, the reader, in effect, destroys or
effaces the traditional line between significant text and minor text, such as
footnote. All data is grist for the mill of computational examination and recom-
bination.

As information sources (not limited to the written word, it must be empha-
sized, but including illustrations, video or film, and music), Hypertext program-
ning can bring forth all sorts of information in untold combinations and in
amazing quantities. While at first glance Hypertext materials might resemble
traditional research and reading practices, they actually move such endeavors
onto another plane. Consider, for example, how a Hypertext program dealing with
Ralph Ellison’s classic novel, *Invisible Man* (1952) might function. First, the
network would obviously contain the complete text of the novel, as well as the

Figure 1: From Socrates in the Labyrinth: Hypertext, Argument, Phi-
losophy, by David Kolb, copyright © 1994. A map view, showing some
of the many interlinked writing spaces of the work.
new introduction that Ellison composed in 1981. Here there is little to distinguish the computer version from the Modern Library reprint. But if the text were organized in Hypertext fashion, then the number of possibilities for researching and rethinking the text and its parts would rise exponentially. No longer confined to the text, the reader could stop at particular words or phrases, double click the mouse and find take-off points where additional information sources might be found. Thus, for instance, in reading the chapter on Trueblood, the “disgraced” sharecropper who meets up with the Invisible Man early in the novel, the reader might jump off into other data bases to find information on incest, philanthropists, tenant farming practices, and blues idiom. Since the language and content of the blues is central to the chapter, the reader might suddenly find him- or herself not confined to a footnote or phrase at the bottom of the traditional page citing Houston Baker’s analysis of Ellison’s chapter in his Blues, Ideology, and Afro-American Literature (1984) but to the entire text. Through links to other information sources, vast quantities of material on the blues or on how the blues have been represented in other novels could be perused. In Hypertext, one need not be confined to the written word. For, while on this journey into the blues, the “reader” could enter into Jeff Todd Tilton’s Worlds of Music where on a single screen one encounters a movie animation of the Reverend C. L. Franklin performing a gospel number, the lyrics, as well as an analysis of the lyrics and a history of the blues or gospel mode of expression in Afro-American culture.6 If these still constituted an insufficient amount of information, then the fully annotated Hypermedia program could launch the reader into the two collections of Ellison’s collected writings, with immediate access to all his locations on the blues. And further Hypermedia forays could suddenly propel the reader into a lexia where Jimmy Rushing’s singing might be heard while reading Ellison’s comments about how important a figure Rushing was in his early years.

One might protest that such a research plunge into the multi-dimensionality of Ellison’s text might easily be accomplished by traditional means—one imagines a student in the stacks of the library in the section where Ellison’s books are to be found, perusing the material in quick fashion. But there are quantitative differences that transform themselves into qualitative differences. After all, the material in the Hypertext program is immediately available as original texts, but also as music and animation, as well as providing instant access to archival material on the blues generally. The theoretically possible collection of diverse material by the individual in the library is in Hypertext or CD-ROM multi-media, hyper-extenuated, making possible the spinning of an immense web of information, not limited to the size of the desk upon which materials are to be spread nor to the holdings of a particular library. Here the analyst of Ellison, with a sufficiently full Hypertext program and links to materials from around the world is in the position of traveling in a Porsche in comparison with a pogo stick.

Historians are in practice already turning to CD-ROM Hypertext programs to good effect, although without jettisoning traditional aspects of book organiza-
tion. The CD-ROM version of "Who Built America?" as described by two of its authors, greatly increases the amount of material immediately accessible to the student, including full-length books to be consulted for context on turn-of-the-century America. The computer technology makes word searches instantaneously accomplishable, and allows the reader to shift around from one subject to another within the available database. Finally, the authors note the obvious advantages of audio- and film documents in the CD-ROM version that cannot be present in the printed text. And as George Landow's classes at Brown University have proven, and as other seminars organized in Hypertext fashion around the country are indicating, the material that is shared by users of the network (The In Memoriam web) increases in size as each student adds to its database and as each student's paper becomes part of the web. The subject matter for analysis is thus part of an extended conversation or dialogue, out of which new connections and understandings naturally ensue.

Philosophers are also beginning to write in a Hypertextual mode. David Kolb's *Socrates in the Labyrinth* is a well modulated consideration, composed in

![Figure 2: From Socrates in the Labyrinth: Hypertext, Argument, Philosophy, by David Kolb, copyright © 1994. Two Storyspace windows, one showing a map view of a small portion of the work, the other showing the text within one writing space.](image-url)
Hypertext format, about the possibilities for the practice of philosophy offered by the new technology. His text is indeed a labyrinth that constantly presents the reader with take-off points for different explorations into the philosophical consequences of Hypertext. While Kolb clearly celebrates the postmodernist intentions and challenges of Hypertext, he chooses not to leave the reader in a wasteland of random transitions. But despite his authorial intentions to limit movement *ad nauseum*, reading his text is akin to riding on a roller coaster, full of thrills but also quite frightening, at times.  

The amount of material, its various forms, and the ability of the reader to choose where to pursue links within links, thus leading away from the original text, promises and promotes an active reader and the possibility of ever new connections being developed through abrupt juxtapositions (perhaps the ultimate form of mechanical reproduction imagined by Walter Benjamin to break down the aura around the work of art) and hence to gain “profane illumination.” Thus, in a sense, the hypertexter may be said to navigate through data, much like the *flâneur* image that Benjamin made central to his own work. In fact, Hypertext data, strung along in a manner of the reader’s own choosing, might resemble Benjamin’s famous desire to have a collection of quotes, without transitional or introductory material, whose presence would, in and of themselves, as fragments, jar the reader out of the familiar and into the esoteric realm of illumination and liberation. Quotes could be shuffled into multiple, self-sustaining relations, in surrealist fashion. Even the tyranny of the page number, the domination of sequentiality and linearity, would, obviously in Hypertext, no longer have the power to direct attention and to define meaning.

Fiction-writing (and there is no reason to suppose that other forms of exposition would be any differently effected) in the Hypertext mode resembles what has already been hinted at by works such as Joyce’s *Finnegan’s Wake*, Borges’s labyrinthine inventions, or in Milorad Pavic’s brilliant recent novel, *The Dictionary of the Khazars*. In Pavic’s work, there are three separate texts, each organized into discrete sections, with the reader cordially invited to enter into the text at any point desired. Not only is entry unrestricted, but the book exists in two distinct versions, one called “male” the other “female.” But even with Pavic’s intense experimentalism in the form and substance of fiction, the shuffling of his text is still limited and constrained by the ingrained nature of the bound volume. Under the reign of Hypertext, the text will be opened up in a variety of ways and at many levels. This means that one could—or must—begin reading a novel in Hypertext at an arbitrary point, or by a command, begin at what is the presumed “beginning.” In either case, the reader might retain the option, at a particular anchor, to continue with the “preexisting” or specially created linear development as envisaged by the “author” of the text or to branch out by going into a data node that will be linked to other nodes without necessary, only contingent relationships. As one creates a path within the text, one in essence co-authors or re-authors the novel.

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This can be illustrated by looking at what is perhaps the most famous Hypertext novel *Afternoon, A Story* (1987) by Michael Joyce. The novel has 539 nodes and 951 links. One begins this novel in traditional manner, at the beginning: “I try to recall winter, <As if it were yesterday?> she says, but I do not signify one way or another.” To not signify is, of course, one of the contested points of this novel, or at least to signify in a multiple fashion. The material that is bracketed can be double clicked leading into new nodes or paths that the novel might take, but other words or phrases that can be jump-off points to new paths are not indicated. To be sure, one can read the novel “straight through” on 33 screen pages, but to do so is only to read part of the novel. Much of the interest of the piece, really a type of mystery story, concerns whether the main character, Peter, has actually seen his wife and son sprawled dead on the side of the road while he was driving to work. By clicking at various points in the text, the reader in effect creates a particular reading. While theoretically the number of readings are limited by Joyce’s program, the paths are multiple almost to the point of in exhaustion. Thus, as the informational page to the novel tells the reader, “The story exists at several levels and changes according to decisions you make. A text you may have seen previously may be followed by something new, according to a choice you make or already have made during any given reading.” Eventually, albeit along different paths, and hence different readings, the reader comes to “a” conclusion: “I do not call the hospital. I take a pill and call Lolly.” But here the conclusion is only cause to return to the text for a different path that might shed light, while always ultimately remaining in the dark on its own possibilities.

While one begins Joyce’s novel at a predesignated point of entry, other Hypertext novels and poems resist the notion of a starting point. They scramble themselves at each reading so that the possibility of ever mastering the text is unhinged, since there is no master text to be mastered! Closure is no longer a possibility just as it is avoided in the manner of a John Cage “I Ching” composition. Thus the multiplicity of the text, the play of the words that Jacques Derrida and others tease out of the text, would be the essential and defining property of Hypertext. Even more playful or outlandish in this postmodernist vein, perhaps, is cyberpunk author William Gibson’s *Agrippa: A Book of the Dead* (1992) which can only be read on the computer screen, once. The text self-destructs as it quickly scrolls by the reader. This first edition is disposable and non-recoverable. In the words of one of its “readers,” this work “exposes the inherent instability of the metaphysical concept of ‘the text itself.’”

Hypertext speaks in the same postmodern, literary rhetoric that Harlan intoned in his seminal essay and that Barry Shank summons forth in his analysis that appeared in *American Studies*. With unlimited data available, with more easily added by hooking into expanding data bases, with Hypertext programs at hand that allow for annotation of existing texts and for changing or adding nodes and links, the reader becomes not simply the author or co-author, but the navigator facing an endless ocean of context and connections.
Hypertext provides a good medium for asking questions about postmodern discourse. But those questions still try to stay within the comfortable domain of article, essay, book. Hypertext technology challenges that comfortable place.

It is true that some things never change: we are born, grow, face mortality, struggle with limitations and time, discover our selves and relations, and so on. Techno-fixes may enlarge the playing field but there are some constraints that stay fairly constant. That said, there's a lot more changing out there than we realize.

Imagine what this might mean for the contextual possibilities of writing history. Harlan's claim that contextualism is without basis (at least in the sense of one context having a foundational, essentialist priority over another context in terms of explaining any text or event) and that different genealogies can be summoned, according to the purposes of the writer is exemplified in the Hypertext program where hundreds (or at least a baker's dozen) of contextualizations might be called onto the screen often simultaneously and always relationally, thus without hierarchical anxiety assigned to one piece of data as opposed to another. The more nodes and links, the more the spiral expands, on and on and on. How, then, to rest comfortably in a sense that one has ever exhausted the contextual possibilities? The apparent answer, music to Harlan's ears, is that the contextualist is forced to follow the links until caught in a poisonous spider web of sticky connections. The traditionalist historian is left only with the resolve that all who enter into the gates of context must abandon hope of finding it, at least in any singular, authorized version.
So, too, the idea that the text is there to be used, twisted and turned to the author’s will and present concerns, an idea central to Michel Foucault, Richard Rorty and Harlan, becomes obvious in the Hypertext world. If Foucault once said that his desire in reading Nietzsche is to make his text “groan” under his interpretive whip, then in Hypertext, Nietzsche will no longer be heard groaning, as the innovative reader juggles his text around, reassembles it, and even annotates or rewrites it. There is no reason why the computationally sophisticated individual cannot revise data on Hypertext programs; indeed, in time, CD-ROM will be more than only readable but also revisable. This is quite different from an engaged reader annotating a page of text with marginal comments. In the new Hypertext world, the annotations will be as much a part of the networked text as the original material. And all, as noted before, computer-generated material can be reformatted so that distinctions between the scrawl of handwritten marginalia and the authority of a typeset page are no longer apparent. As informational system users become networked with others interested in the material, the number of individuals laying hands on the original, if such a concept can even be said to remain meaningful, is multiplied endlessly. The lines between text and context, author and reader, original and revision are no longer blurred; they are obliterated! Perhaps Richard Rorty’s recent response to Umberto Eco’s plea for limitations on interpretation, against the “over-interpretation” of a text, might have been phrased in the language of Hypertext just as easily as the imagery of art. As Rorty proclaimed: “I should think that a text just has whatever coherence it happened to acquire during the last roll of the hermeneutic wheel, just as a lump of clay only has whatever coherence it happened to pick up at the last turn of the potter’s wheel.” In Hypertext terminology, textual coherence is only a function of the paths followed, of the shufflings pursued, but in both cases the possibilities are imaginatively unlimited and not easily hierarchicalized.

The Hypertext world is, ipso facto, the Rortyan world of redescription, endless creativity. In one sense, it resembles his sainted private realm, where the creative individual works at home alone, redescribing, wandering, and playfully engaging databases. Through such rambling, new narrations and identities are created at each and every moment. And in this scurrying about the Hypertext world, the individual follows the Rortyan injunction to avoid inflicting pain on others, for, at least in theory, individual narrations and redescriptions remain private, a matter of conversation only between the individual and his or her computer. But the possibility of community, understood by Rorty as constituted by those who share cultural and linguistic affinities, also can be realized in the Hypertext universe. Computer links are established and information is exchanged on bulletin boards that are perhaps the apotheosis of Rorty’s notion of an extended conversation or of Jurgen Habermas’ ideal of participatory democracy through communicative reason.

The whirl of possibility is intoxicating, but what are the next morning’s effects of this heady brew? I would suggest that they might be sobering and, after
the hangover wears off, constitute the stuff that actually makes Hypertext amenable to more traditional and constrained acts of interpretation without banishing, as Harlan fears, the non-contextualist to the sidelines of the profession—or to the ultimate horror—a locked computer keyboard.

While in a state of excitement about Hypertext I asked my next-door neighbor, an engineer with vast knowledge of computing, about the program as concept and reality and about its future possibilities. With the kind of raised eyebrows that scientists sometimes love to show in the presence of those of us from the humanities, he said that Hypertext was largely a bust, a promise less than fulfilled, even with the next stage of CD-ROM, multi-media programs available. “Well, how could that possibly be?” I asked, worrying that his technical response would not be comprehensible to me. Thankfully, observing the engineer’s law of Ockham’s razor, he simply noted “who needs so much information?” My neighbor is not alone in his skepticism. Hypertext designers note that while webs allow for deep exploration, the time required to wander about in a program can become disproportionate to the amount and value of the knowledge accessed. In other words, as those familiar with Hypertext sometimes phrase it, one can get lost in “hyperspace,” after jumping around from link to link to link.
The immense amounts of material available through computer networks might make an energetic, modern Von Ranke’s mouth water at the thought of a universal history. Without structure, with infinite possibilities, the Hypertext world can only sadly mimic Von Ranke’s desktop strewn with note cards, waiting for the inspiration and energy to transform them into that long vaunted, yet ever elusive ideal, “the past as it really and fully was.”

Yet, despite these problems, Hypertext can be valuable to the historian, and to American Studies scholars, by doing a host of other things. And these other chores may actually help to support some of the imperatives that Hollinger holds in the American Historical Review essay without destroying Harlan’s ideals.

On the simplest level, the Hypertext program could easily, as in the fiction of Michael Joyce, set up the familiar “WHAT IF” questions, such as “What if Booth had not assassinated Lincoln?” or “What if the United States had not dropped atomic bombs on Japan?” Eastgate Systems, the leading company in Hypertext software, already has a program called “Election of 1912,” which allows for simulation of the election by students. Students work to organize the campaign of a particular candidate in different states, with access to immense amounts of relevant data. In the process of “re-imagining” the election, the participant learns and also recognizes the multiplicity of factors that influence the electoral process.

Simulations, and “what if” questions and scenarios can sometimes be banal, to be sure. But they can also be interesting. As Milan Kundera once put it, “the only truly serious questions are ones that even a child can formulate. They are the questions with no answers. . . . that set the limits of human possibilities, describe the boundaries of human existence.”

These questions and others, pursued through Hypertext, may effectively open up the reader and student to the contingency of history (a thought dear to postmodernists such as Rorty). And, most importantly perhaps, they also indicate that behind every “WHAT IF” there must be a “WHAT WAS” that is a benchmark, or, dare I use the word, even a necessary foundation. But these are pure speculations, plays on the American philosopher Josiah Royce’s logical argument for Truth on the basis of the conceptualization of error. Yet, although Hypertext might, if one pushes it a bit, flirt with ideals of truth, it most importantly allows us to consider a pluralistic universe teeming with options, if only we, in Jamesian terms, accept our responsibility for engaging the universe in a strenuous manner.

If postmodernism questions the contextualist for limiting choices or deprioritizing different approaches to historical knowledge, then the Hypertext program allows the contextualist to follow his or her calling with abandon. But abandon has ironic consequences. As mentioned earlier, with abundant data and endless string of contexts available, contextualizations pile up, one on top or beside one another until one is lost in contextual hyperspace. This might, as Harlan suggests in a slightly different context, undermine the very logic of the pursuit of context. Yet it might just as well drive home the necessity of
constructing a narrative structure or a path or skeleton that might help to anchor historical knowledge. This brings us back to the question of hierarchy and authority, which Hypertext programs are often seen as challenging. To be sure, Hypertext programs are not without their own logic or hierarchy. After all, someone has to program it and there are limits to the number of links that one can follow. Most programs also are endowed with a "return to previous screen" so that the wanderer can retrace, piece by piece, his or her path back to some point of origin. But this is a slow process. More necessary would be a return path that might, borrowing from John Dewey, be called WACKO, standing for Warranted Assertibility Control Key Option. It is to be written into the program, and tamper proof for all but the most accomplished of computer programmers. It allows the user of the program to return to some baseline or launching pad prior to flight of contextualization or shuffling of data. Of course, this baseline (dare one posit historical truth, or at least a consensual paradigm of some sort) would be open to question and debate, but it would serve as a place where the historian could rest comfortably upon the weight of historical knowledge and interpretation, as presently constituted.

Rather than deadening the value of contextualization, Hypertext might actually force all to admit that within the maelstrom of limitless possibilities of context there are some that do, indeed, for a host of discernable and supportable reasons, appear to be superior to others. And that is not necessarily such a bad thing. At the same time, by offering different links between event and context, the Hypertext program retains the creativity that Harlan and Rorty prize. It is a creativity unconstrained because of the infinite possibilities open to the reader, but restrainable by the non-tamperable WACKO key or time line that is always on the screen or quickly summoned. Thus as one begins to suffer vertigo in the hyperspace of endless contextualization possibilities, one can—and must—immediately return to a more proximate set of contexts or wrap around the comforting structure of the skeleton of warranted assertibility.

A couple of final, highly conjectural points about Hypertext and historical analysis. It is possible to imagine the concept of authorial intention becoming better respected, or at least asserted with some seriousness, once our civilization begins writing in a Hypertextual mode. To be sure, the issue of intention is often dismissed with a shrug as beside the point, damned by the fallacy of intention, impossible to establish, or simply uninteresting. Writing in a Hypertext mode might allow the process of creation, from note cards, to drafts, to random thoughts, to insights not pursued at a certain point,—all of them could be linked to the complex process of creating the text. Paths followed and forsaken, no data or even text consulted would be unavailable to the biographer or analyst who could have access to the author’s computer memory. This would not have to freeze the imperative that Harlan and Foucault celebrate, to do what they must to the text or author in the name of present needs and the imaginative imperatives. But if the author composed his or her work in the Hypertext mode, it might give
to the work an authoritative voice (a variorum edition, at the moment or process of creation) that might control some of the more spirited or uninhibited readings that are offered in the name of a better understanding of the text. It might limit the hubris of over-interpretation that Umberto Eco and others find so perplexing. Or, conversely, it might simply spell out in the clearest fashion the utter incomparability, the ineffability of the creative process, a process so quicksilver that even Hypertext cannot follow the paths, establish the links with clarity and comprehension.

Finally, and this point should not be pushed too much, the experience of Hypertext, as my engineer friend noted, might prove, like the gusty pronouncements of the open text of Jacques Derrida or the endless contingencies of Barbara Herrnstein-Smith, or the spiraling redescisions of Rorty, to be a bit tiring in the end. With the exception of a few theorists, most academics and normal people, I suspect, when presented with the imperative not only to be creative but also to steer a blind path through a mass of data will actually long for the old days of the unified, authoritative voice, of narrative history with a beginning, middle, and end as Aristotle first theorized. I do not want to engage in nostalgia or regression here, for Hypertext will not allow us, nor should it, to return to some unproblematic textual Eden. We have already eaten the Apple (Macintosh, of course), but the question remains open if the sin is to be punished or rewarded. The Hypertext world may be a heaven as much as a hell. And it may, in any case, make us more wary of the cost of absolute freedom and more willing to respect conventions that at least allow us to assimilate knowledge at a pace that would not overwhelm an Einstein.

Notes

Earlier versions of this paper were presented at The Oregon Humanities Center, the U.S.I.A. sponsored “American Writers Series” in Rome, Center for American Studies in Rome, and the University of Arezzo. This essay has profited by the comments of members of the audiences at these sites, and especially by the support and arguments of the antagonists behind this topic, David Harlan and David Hollinger. I also want to thank John Stuhr, Cristina Giorcelli, Sam Taff, Daniele Fiorentino, Steven Marx, Carol Flax, and my graduate students at the University of Rome.


3. See the articles, with a jaunty introduction by William Graebner, in American Studies 36 (Spring, 1995), 53-114. Cornell also notes, “So far, efforts by historians to use CD-ROM technology has not yet grappled with the epistemological consequences of the new technology.” Cornell, “Splitting the Difference: Textualism, Contextualism, and Post-Modern History,” 70, 79.n.57. The endnotes in Cornell and in the other essays in American Studies fully cover the historical and philosophical literature on postmodernism and history, so readers should refer to them for more information.


The “book” is available in versions for Macintosh and Windows. For more information on Hypertext programs offered by this company, write Eastgate Systems, Inc., 134 Main St., Watertown, MA 02172.


12. Joyce’s novel is available in Hypertext format, for IBM or Macintosh computer operating systems from Eastgate Systems.

13. On the various readings that the novel opens up in its Hypertext format, see J. Yellowlees Douglas, “‘How Do I Stop This Thing?’, Closure and Indeterminacy in Interactive Narratives,” in Landow, *HyperText/Theory*, 159-185.

14. On Agrippa, see Espen J. Aarseth, “Nonlinearity and Literary Theory,” in Landow, *HyperText/Theory*, 62-63. It is my understanding that computer experts have managed to reprogram the program so that it does not self-destruct. A triumph of the materiality of the text?

15. “The only valid tribute to thought such as Nietzsche’s is precisely to use it, to deform it, to make it groan and protest. And if the commentators say that I am being unfaithful to Nietzsche that is of absolutely no interest.” Foucault quoted in Alan Sheridan, *Michel Foucault: The Will to Truth* (London, 1980), 116-117.


