

Hypertext and Critical Theory

George Landow

George Landow, excerpt from "Hypertext and Critical Theory," from *Hypertext: The Convergence of Contemporary Critical Theory and Technology* (Baltimore and London: Johns Hopkins University Press, 1991), pp. 2-12. Copyright © 1991 George Landow.

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The problem of causality. It is not always easy to determine what has caused a specific change in a science. What made such a discovery possible? Why did this new concept appear? Where did this or that theory come from? Questions like these are often highly embarrassing because there are no definite methodological principles on which to base such an analysis. The embarrassment is much greater in the case of those general changes that alter a science as a whole. It is greater still in the case of several corresponding changes. But it probably reaches its highest point in the case of the empirical sciences: for the role of instruments, techniques, institutions, events, ideologies, and interests is very much in evidence; but one does not know how an articulation so complex and so diverse in composition actually operates.

Michel Foucault
The Order of Things

Hypertextual Derrida, Poststructuralist Nelson?

When designers of computer software examine the pages of *Glas* or *Of Grammatology*, they encounter a digitalized, hypertextual Derrida; and when literary theorists examine *Literary Machines*, they encounter a deconstructionist or poststructuralist Nelson. These shocks of recognition can occur because over the past several decades literary theory and computer hypertext, apparently unconnected areas of inquiry, have increasingly converged. Statements by theorists concerned with

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literature, like those by theorists concerned with computing, show a remarkable convergence. Working often, but not always, in ignorance of each other, writers in these areas offer evidence that provides us a way into the contemporary *episteme* in the midst of major changes. A paradigm shift, I suggest, has begun to take place in the writings of Jacques Derrida and Theodor Nelson, of Roland Barthes and Andries van Dam. I expect that one name in each pair will be unknown to most of my readers. Those working in computing will know well the ideas of Nelson and van Dam; those working in literary and cultural theory will know equally well the ideas of Derrida and Barthes.¹ All four, like many others who write on hypertext or literary theory, argue that we must abandon conceptual systems founded upon ideas of center, margin, hierarchy, and linearity and replace them with ones of multilinearity, nodes, links, and networks. Almost all parties to this paradigm shift, which marks a revolution in human thought, see electronic writing as a direct response to the strengths and weaknesses of the printed book. This response has profound implications for literature, education, and politics.

The many parallels between computer hypertext and critical theory have many points of interest, the most important of which, perhaps, lies in the fact that critical theory promises to theorize hypertext and hypertext promises to embody and thereby test aspects of theory, particularly those concerning textuality, narrative, and the roles or functions of reader and writer. Using hypertext, critical theorists will have, or now already have, a new laboratory, in addition to the conventional library of printed texts, in which to test their ideas. Most important, perhaps, an experience of reading hypertext or reading with hypertext greatly clarifies many of the most significant ideas of critical theory. As J. David Bolter points out in the course of explaining that hypertextuality embodies poststructuralist conceptions of the open text, "what is unnatural in print becomes natural in the electronic medium and will soon no longer need saying at all, because it can be shown."²

The Definition of Hypertext and its History as a Concept

In *S/Z*, Roland Barthes describes an ideal textuality that precisely matches that which has come to be called computer hypertext – text composed of blocks of words (or images) linked electronically by multiple paths, chains, or trails in an open-ended, perpetually unfinished textuality described by the terms *link*, *node*, *network*, *web*, and *path*. "In this ideal text," says Barthes, "the networks [*réseaux*] are many and interact, without any one of them being able to surpass the rest; this text is a galaxy of signifiers, not a structure of signifieds; it has no beginning; it is reversible; we gain access to it by several entrances, none of which can be authoritatively declared to be the main one; the codes it mobilizes extend *as far as the eye can reach*, they are indeterminable . . . ; the systems of meaning can take over this absolutely plural text, but their number is never closed, based as it is on the infinity of language" (emphasis in original).³

Like Barthes Michel Foucault conceives of text in terms of network and links. In

texts, other sentences: it is a node within a network . . . [a] network of references."⁴ Like almost all structuralists and poststructuralists, Barthes and Foucault describe text, the world of letters, and the power and status relations they involve in terms shared by the field of computer hypertext.

Hypertext, a term coined by Theodor H. Nelson in the 1960s, refers also to a form of electronic text, a radically new information technology, and a mode of publication. "By 'hypertext,'" Nelson explains, "I mean *nonsequential writing* – text that branches and allows choices to the reader, best read at an interactive screen. As popularly conceived, this is a series of text chunks connected by links which offer the reader different pathways."⁵ Hypertext, as the term will be used in the following pages, denotes text composed of blocks of text – what Barthes terms a *lexia* – and the electronic links that join them. *Hypermedia* simply extends the notion of the text in hypertext by including visual information, sound, animation, and other forms of data. Since hypertext, which links a passage of verbal discourse to images, maps, diagrams, and sound as easily as to another verbal passage, expands the notion of text beyond the solely verbal, I do not distinguish between hypertext and hypermedia. *Hypertext* denotes an information medium that links verbal and nonverbal information. In the following pages, I shall use the terms *hypermedia* and *hypertext* interchangeably. Electronic links connect *lexias* "external" to a work – say, commentary on it by another author or parallel or contrasting texts – as well as within it and thereby create text that is experienced as nonlinear, or, more properly, as multilinear or multisequential. Although conventional reading habits apply within each *lexia*, once one leaves the shadowy bounds of any text unit, new rules and new experience apply.

The standard scholarly article in the humanities or physical sciences perfectly embodies the underlying notions of hypertext as multisequentially read text. For example, in reading an article on, say, James Joyce's *Ulysses*, one reads through what is conventionally known as the main text, encounters a number or symbol that indicates the presence of a foot- or endnote, and leaves the main text to read that note, which can contain a citation of passages in *Ulysses* that supposedly support the argument in question or information about the scholarly author's indebtedness to other authors, disagreement with them, and so on. The note can also summon up information about sources, influences, and parallels in other literary texts. In each case, the reader can follow the link to another text indicated by the note and thus move entirely outside the scholarly article itself. Having completed reading the note or having decided that it does not warrant a careful reading at the moment, one returns to the main text and continues reading until one encounters another note, at which point one again leaves the main text.

This kind of reading constitutes the basic experience and starting point of hypertext. Suppose now that one could simply touch the page where the symbol of a note, reference, or annotation appeared, and thus instantly bring into view the material contained in a note or even the entire other text – here all of *Ulysses* – to which that note refers. Scholarly articles situate themselves within a field of relations, most of which the print medium keeps out of sight and relatively difficult to follow, because in print technology the referenced (or linked) materials lie spatially distant from the references to them. Electronic hypertext, in contrast, makes

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individual references easy to follow and the entire field of interconnections obvious and easy to navigate. Changing the ease with which one can orient oneself within such a context and pursue individual references radically changes both the experience of reading and ultimately the nature of that which is read. For example, if one possessed a hypertext system in which our putative Joyce article was linked to all the other materials it cited, it would exist as part of a much larger system, in which the totality might count more than the individual document; the article would now be woven more tightly into its context than would a printed counterpart.

As this scenario suggests, hypertext blurs the boundaries between reader and writer and therefore instantiates another quality of Barthes's ideal text. From the vantage point of the current changes in information technology, Barthes's distinction between readerly and writerly texts appears to be essentially a distinction between text based on print technology and electronic hypertext, for hypertext fulfills

the goal of literary work (of literature as work) [which] is to make the reader no longer a consumer, but a producer of the text. Our literature is characterized by the pitiless divorce which the literary institution maintains between the producer of the text and its user, between its owner and its customer, between its author and its reader. This reader is thereby plunged into a kind of idleness – he is intransitive; he is, in short, *serious*: instead of functioning himself, instead of gaining access to the magic of the signifier, to the pleasure of writing, he is left with no more than the poor freedom either to accept or reject the text: reading is nothing more than a *referendum*. Opposite the writerly text, then, is its countervalue, its negative, reactive value: what can be read, but not written: the *readerly*. We call any readerly text a classic text. (S/Z, 4)

Compare the way the designers of Intermedia, one of the most advanced hypertext systems thus far developed, describe the active reader that hypertext requires and creates:

Both an author's tool and a reader's medium, a hypertext document system allows authors or groups of authors to *link* information together, create *paths* through a corpus of related material, *annotate* existing texts, and create notes that point readers to either bibliographic data or the body of the referenced text. . . . Readers can browse through linked, cross-referenced, annotated texts in an orderly but nonsequential manner.⁶

To get an idea of how hypertext produces Barthes's readerly text, let us examine how you, the reader of this book, would read it in a hypertext version. In the first place, instead of encountering it in a paper copy, you would begin to read it on a computer screen. Contemporary screens, which have neither the portability nor the tactility of printed books, make the act of reading somewhat more difficult. For people like me who do a large portion of their reading reclining on a bed or couch, screens also appear less convenient. At the same time, reading on Intermedia, the

size and even style of font to make reading easier. Although you could not make such changes permanently in the text as seen by others, you could make them whenever you wished.

More important, since you would read this hypertext book on a large two-page graphics monitor, you would have the opportunity to place several texts next to one another. Thus, upon reaching the first note in the main text, which follows the passage just quoted from *S/Z*, you would activate the hypertext equivalent of a reference mark (button, link marker), and this action would bring the endnote into view. A hypertext version of a note differs from that in a printed book in several ways. First, it links directly to the reference symbol and does not reside in some sequentially numbered list at the rear of the main text. Second, once opened and either superimposed upon the main text or placed along side it, it appears as an independent, if connected, document in its own right and not as some sort of subsidiary, supporting, possibly parasitic text.

The note in question contains the following information: "Roland Barthes, *S/Z*, trans. Richard Miller (New York: Hill and Wang, 1974), 5-6." A hypertext lexia equivalent to this note could include this same information, or, more likely, take the form of the quoted passage, a longer section or chapter, or the entire text of Barthes's work. Furthermore, that passage could in turn link to other statements by Barthes of similar import, comments by students of Barthes, and passages by Derrida and Foucault that also concern this notion of the networked text. As a reader, you would have to decide whether to return to my argument, pursue some of the connections I have suggested by links, or, using other capacities of the system, search for connections I had not suggested. The multiplicity of hypertext, which appears in multiple links to individual blocks of text, calls for an active reader.

In addition, a full hypertext system, unlike a book and unlike some of the first approximations of hypertext currently available (HyperCard, Guide), offers the reader and writer the same environment. Therefore, by opening the text-processing program, or editor, as it is known, you can take notes, or you can write against my interpretations, against my text. Although you cannot change my text, you can write a response and then link it to my document. You thus have read the readerly text in two ways not possible with a book: You have chosen your reading path – and since you, like all readers, will choose individualized paths, the hypertext version of this book might take a very different form in your reading, perhaps suggesting the values of alternate routes and probably devoting less room in the main text to quoted passages. You might also have begun to take notes or produce responses to the text as you read, some of which might take the form of texts that either support or contradict interpretations proposed in my texts.

Other Convergences: Intertextuality, Multivocality, and De-centeredness

Like Barthes, Foucault, and Mikhail Bakhtin, Jacques Derrida continually uses the terms *link* (*liaison*), *web* (*toile*), *network* (*réseau*), and *interwoven* (*s'y tissent*), which

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cry out for hypertextuality;⁷ but in contrast to Barthes, who emphasizes the readerly text and its nonlinearity, Derrida emphasizes textual openness, intertextuality, and the irrelevance of distinctions between inside and outside a particular text. These emphases appear with particular clarity when he claims that "like any text, the text of 'Plato' couldn't not be involved, at least in a virtual, dynamic, lateral manner, with all the worlds that composed the system of the Greek language" (129). Derrida in fact here describes extant hypertext systems in which the active reader in the process of exploring a text, probing it, can call into play dictionaries with morphological analyzers that connect individual words to cognates, derivations, and opposites. Here again something that Derrida and other critical theorists describe as part of a seemingly extravagant claim about language turns out precisely to describe the new economy of reading and writing with electronic virtual, rather than physical, forms.

Derrida properly acknowledges (in advance, one might say) that a new, freer, richer form of text, one truer to our potential experience, perhaps to our actual if unrecognized experience, depends upon discrete reading units. As he explains, in what Gregory Ulmer terms "the fundamental generalization of his writing,"⁸ there also exists "the possibility of disengagement and citational graft which belongs to the structure of every mark, spoken and written, and which constitutes every mark in writing before and outside of every horizon of semio-linguistic communication. . . . Every sign, linguistic or nonlinguistic, spoken or written . . . can be *cited*, put between quotation marks." The implication of such citability and separability appears in the fact, crucial to hypertext, that, as Derrida adds, "in so doing it can break with every given context, engendering an infinity of new contexts in a manner which is absolutely illimitable."⁹

Like Barthes, Derrida conceives of text as constituted by discrete reading units. Derrida's conception of text relates to his "methodology of decomposition" that might transgress the limits of philosophy. "The organ of this new philosopheme," as Gregory Ulmer points out, "is the mouth, the mouth that bites, chews, tastes. . . . The first step of decomposition is the bite" (57). Derrida, who describes text in terms of something close to Barthes's lexias, explains in *Glas* that "the object of the present work, its style too, is the 'morceau,'" which Ulmer translates as "bit, piece, morsel, fragment; musical composition; snack, mouthful." This *morceau*, adds Derrida, "is always detached, as its name indicates and so you do not forget it, with the teeth," and these teeth, Ulmer explains, refer to "quotation marks, brackets, parentheses: when language is cited (put between quotation marks), the effect is that of releasing the grasp or hold of a controlling context" (58).

Derrida's groping for a way to foreground his recognition of the way text operates in a print medium – he is, after all, the fierce advocate of writing as against orality – shows the position, possibly the dilemma, of the thinker working with print who sees its shortcomings but for all his brilliance cannot think his way outside this *mentalité*. Derrida, the experience of hypertext shows, gropes toward a new kind of text: he describes it, he praises it, but he can present it only in terms

production, though, as we shall see, few Marxists or Marxians ever directly confront the most important mode of literary production – that dependent upon the *techne* of writing and print.

From this Derridean emphasis upon discontinuity comes the conception of hypertext as a vast assemblage, what I have elsewhere termed the *metatext* and what Nelson calls the “docuverse.” Derrida in fact employs the word *assemblage* for cinema, which he perceives as a rival, an alternative, to print. Ulmer points out that “the gram or trace provides the ‘linguistics’ for collage/montage” (267), and he quotes Derrida’s use of *assemblage* in *Speech and Phenomena*: “The word ‘assemblage’ seems more apt for suggesting that the kind of bringing-together proposed here has the structure of an interlacing, a weaving, or a web, which would allow the different threads and different lines of sense or force to separate again, as well as being ready to bind others together.”¹⁰ To carry Derrida’s instinctive theorizing of hypertext further, one may also point to his recognition that such a montagelike textuality marks or foregrounds the writing process and therefore rejects a deceptive transparency.

Hypertext and intertextuality

Hypertext, which is a fundamentally intertextual system, has the capacity to emphasize intertextuality in a way that page-bound text in books cannot. As we have already observed, scholarly articles and books offer an obvious example of *explicit* hypertextuality in nonelectronic form. Conversely, any work of literature – which for the sake of argument and economy I shall here confine in a most arbitrary way to mean “high” literature of the sort we read and teach in universities – offers an instance of *implicit* hypertext in nonelectronic form. Again, take Joyce’s *Ulysses* as an example. If one looks, say, at the Nausicaa section, in which Bloom watches Gerty McDowell on the beach, one notes that Joyce’s text here “alludes” or “refers” (the terms we usually employ) to many other texts or phenomena that one can treat as texts, including the Nausicaa section of the *Odyssey*, the advertisements and articles in the women’s magazines that suffuse and inform Gerty’s thoughts, facts about contemporary Dublin and the Catholic Church, and material that relates to other passages within the novel. Again, a hypertext presentation of the novel links this section not only to the kinds of materials mentioned but also to other works in Joyce’s career, critical commentary, and textual variants. Hypertext here permits one to make explicit, though not necessarily intrusive, the linked materials that an educated reader perceives surrounding it.

Thais Morgan suggests that intertextuality, “as a structural analysis of texts in relation to the larger system of signifying practices or uses of signs in culture,” shifts attention from the triad constituted by author/work/tradition to another constituted by text/discourse/culture. In so doing, “intertextuality replaces the evolutionary model of literary history with a structural or synchronic model of literature as a sign system. The most salient effect of this strategic change is to free the literary text from psychological, sociological, and historical determinisms, opening it up to an apparently infinite play of relationship.”¹¹ Morgan well

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describes a major implication of hypertext (and hypermedia) intertextuality: such opening up, such freeing one to create and perceive interconnections, obviously occurs. Nonetheless, although hypertext intertextuality would seem to devalue any historic or other reductionism, it in no way prevents those interested in reading in terms of author and tradition from doing so. Experiments thus far with Intermedia, HyperCard, and other hypertext systems suggest that hypertext does not necessarily turn one’s attention away from such approaches. What is perhaps most interesting about hypertext, though, is not that it may fulfill certain claims of structuralist and poststructuralist criticism but that it provides a rich means of testing them.

Hypertext and multivocality

In attempting to imagine the experience of reading and writing with (or within) this new form of text, one would do well to pay heed to what Mikhail Bakhtin has written about the dialogic, polyphonic, multivocal novel, which he claims “is constructed not as the whole of a single consciousness, absorbing other consciousness as objects into itself, but as a whole formed by the interaction of several consciousnesses, none of which entirely becomes an object for the other.”¹² Bakhtin’s description of the polyphonic literary form presents the Dostoevskian novel as a hypertextual fiction in which the individual voices take the form of *lexias*.

If Derrida illuminates hypertextuality from the vantage point of the “bite” or “bit,” Bakhtin illuminates it from the vantage point of its own life and force – its incarnation or instantiation of a voice, a point of view, a Rortyan conversation.¹³ Thus, according to Bakhtin, “in the novel itself, nonparticipating ‘third persons’ are not represented in any way. There is no place for them, compositionally or in the larger meaning of the work” (*Problems*, 18). In terms of hypertextuality this points to an important quality of this information medium: hypertext does not permit a tyrannical, univocal voice. Rather the voice is always that distilled from the combined experience of the momentary focus, the *lexia* one presently reads, and the continually forming narrative of one’s reading path.

Hypertext and de-centering

As readers move through a web or network of texts, they continually shift the center – and hence the focus or organizing principle – of their investigation and experience. Hypertext, in other words, provides an infinitely re-centerable system whose provisional point of focus depends upon the reader, who becomes a truly active reader in yet another sense. One of the fundamental characteristics of hypertext is that it is composed of bodies of linked texts that have no primary axis of organization. In other words, the metatext or document set – the entity that describes what in print technology is the book, work, or single text – has no center. Although this absence of a center can create problems for the reader and the writer, it also means that anyone who uses hypertext makes his or her

re-centerable system, in part because hypertext transforms any document that has more than one link into a transient center, a directory document that one can employ to orient oneself and to decide where to go next.

Western culture imagined such quasi-magical entrances to a networked reality long before the development of computing technology. Biblical typology, which played such a major role in English culture during the seventeenth and nineteenth centuries, conceived sacred history in terms of types and shadows of Christ and his dispensation.¹⁴ Thus, Moses, who existed in his own right, also existed as Christ, who fulfilled and completed the prophet's meaning. As countless seventeenth-century and Victorian sermons, tracts, and commentaries demonstrate, any particular person, event, or phenomenon acted as a magical window into the complex semiotic of the divine scheme for human salvation. Like the biblical type, which allows significant events and phenomena to participate simultaneously in many realities or levels of reality, the individual *lexia* inevitably provides a way into the network of connections. Given that evangelical Protestantism in America preserves and extends these traditions of biblical exegesis, one is not surprised to discover that some of the first applications of hypertext involved the Bible and its exegetical tradition.¹⁵

Not only do *lexia* work much in the manner of types, they also become Borgesian Alephs, points in space that contain all other points, because from the vantage point each provides one can see everything else – if not exactly simultaneously, then a short way distant, one or two jumps away, particularly in systems that have full text searching. Unlike Jorge Luis Borges's Aleph, one does not have to view it from a single site, neither does one have to sprawl in a cellar resting one's head on a canvas sack.¹⁶ The hypertext document becomes a traveling Aleph.

Such capacity has an obvious relation to the ideas of Derrida, who emphasizes the need to shift vantage points by de-centering discussion. As Derrida points out in "Structure, Sign, and Play in the Discourse of the Human Sciences," the process or procedure he calls de-centering has played an essential role in intellectual change. He says, for example, that "ethnology could have been born as a science only at the moment when a de-centering had come about: at the moment when European culture – and, in consequence, the history of metaphysics and of its concepts – had been *dislocated*, driven from its locus, and forced to stop considering itself as the culture of reference."¹⁷ Derrida makes no claim that an intellectual or ideological center is in any way bad, for, as he explains in response to a query from Serge Doubrovsky, "I didn't say that there was no center, that we could get along without the center. I believe that the center is a function, not a being – a reality, but a function. And this function is absolutely indispensable" (271).

All hypertext systems permit the individual reader to choose his or her own center of investigation and experience. What this principle means in practice is that the reader is not locked into any kind of particular organization or hierarchy. Experiences with Intermedia reveal that for those who choose to organize a session on the system in terms of authors – moving, say, from Keats to Tennyson – the system represents an old-fashioned, traditional, and in many ways still useful author-centered approach. On the other hand, nothing constrains the reader to

re-centerable system, in part because hypertext transforms any document that has more than one link into a transient center, a directory document that one can employ to orient oneself and to decide where to go next.

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work in this manner, and readers who wish to investigate the validity of period generalizations can organize their sessions in terms of such periods by using the Victorian and Romantic overviews as starting or midpoints while yet others can begin with ideological or critical notions, such as feminism or the Victorian novel. In practice most readers employ the materials developed at Brown University as a text-centered system, since they tend to focus upon individual works, with the result that even if they begin sessions by entering the system to look for information about an individual author, they tend to spend most time with lexias devoted to specific texts, moving between poem and poem (Swinburne's "Laus Veneris" and Keats's "La Belle Dame Sans Merci" or works centering on Ulysses by Joyce, Tennyson, and Soyinka) and between poem and informational texts ("Laus Veneris" and files on chivalry, medieval revival, courtly love, Wagner, and so on).

Notes

- 1 Here, right at the beginning, let me assure my readers that although I urge that Barthes and Derrida relate in interesting and important ways to computer hypertext, I do not take them – or semiotics and poststructuralism, or, for that matter, structuralism – to be essentially the same.
- 2 J. David Bolter, *Writing Space* (Hillsdale, NJ: Lawrence Erlbaum, 1990), p. 143.
- 3 Roland Barthes, *S/Z* (Paris: Éditions du Seuil, 1970), pp. 11–12; *S/Z*, trans. Richard Miller (New York: Hill and Wang, 1974), pp. 5–6. Subsequent references are to the English translation.
- 4 Michel Foucault, *The Archeology of Knowledge*, trans. A. M. Sheridan Smith (New York: Harper Colophon, 1976), p. 23.
- 5 Theodor H. Nelson, *Literary Machines* (Swarthmore, PA: self-published, 1981), p. 0/2. (Pagination begins with each section or chapter, thus 0/2 = prefatory matter, page 2).
- 6 Nicole Yankelovich, Norman Meyrowitz, and Andries van Dam, "Reading and Writing the Electronic Book," *IEEE Computer* 18 (October 1985), p. 18.
- 7 See, for example, Jacques Derrida, *La Dissémination* (Paris: Éditions de Seuil, 1972), pp. 71, 108, 172, 111; *Dissemination*, trans. Barbara Johnson (Chicago: University of Chicago Press, 1981), 96, 63, 98, 149. Subsequent references are to the English translation.
- 8 Gregory L. Ulmer, *Applied Grammarology: Post(e)-Pedagogy from Jacques Derrida to Joseph Beuys* (Baltimore: Johns Hopkins University Press, 1985), p. 58.
- 9 Jacques Derrida, "Signature Event Context," *Glyph I: Johns Hopkins Textual Studies* (Baltimore: Johns Hopkins University Press, 1977), p. 185. Quoted by Ulmer, *Applied Grammarology*, pp. 58–9.
- 10 Jacques Derrida, *Speech and Phenomena*, trans. David B. Allison (Evanston IL: Northwestern University Press, 1973), p. 131.
- 11 Thais E. Morgan, "Is There an Intertext in This Text?: Literary and Interdisciplinary Approaches to Intertextuality," *American Journal of Semiotics* 3 (1985), pp. 1–2.
- 12 Mikhail Bakhtin, *Problems of Dostoevsky's Poetics*, ed. and trans. Caryl Emerson (Minneapolis: University of Minnesota Press, 1984), p. 18.

as consisting in the ability to sustain a conversation, is to see human beings as generators of new descriptions rather than beings one hopes to be able to describe accurately. To see the aim of philosophy as truth – namely, the truth about the terms which provide ultimate commensuration for all human inquiries and activities – is to see human beings as objects rather than subjects, as existing *en-soi* rather than as both *pour-soi* and *en-soi*, as both described objects and describing subjects” (*Philosophy and the Mirror of Nature* (Princeton: Princeton University Press, 1979), p. 378). To a large extent, Rorty can be thought of as the philosopher of hypertextuality.

- 14 George P. Landow, *Victorian Types, Victorian Shadows: Biblical Typology and Victorian Literature, Art, and Thought* (Boston: Routledge & Kegan Paul, 1980).
- 15 Examples include *GodSpeed Instant Bible Search Program*, from Kingdom Age Software in San Diego, California, and the Dallas Seminary CD-Word Project, which builds upon Guide, a hypertext system developed by OWL (Office Workstations Limited) International. See Steven J. DeRose, “Biblical Studies and Hypertext,” in Paul Delany and George P. Landow, eds., *Hypermedia and Literary Studies* (Cambridge: MIT Press, 1991), pp. 185–204.
- 16 Jorge Luis Borges, “The Aleph,” in *The Aleph and Other Stories, 1933–1969*, trans. Norman Thomas di Giovanni (New York: Bantam, 1971), p. 13: “In that single gigantic instant I saw millions of acts both delightful and awful; not one of them amazed me more than the fact that all of them occupied the same point in space, without overlapping or transparency. What my eyes beheld was simultaneous, but what I shall now write down will be successive, because language is successive. . . . The Aleph’s diameter was probably little more than an inch, but all space was there, actual and undiminished. Each thing (a mirror’s face, let us say) was infinite things, since I saw it from every angle of the universe.”
- 17 Jacques Derrida, “Structure, Sign, and Play in the Discourse of the Human Sciences,” in *The Structuralist Controversy: The Language of Criticism and the Sciences of Man* (Baltimore: Johns Hopkins University Press, 1972), p. 251.