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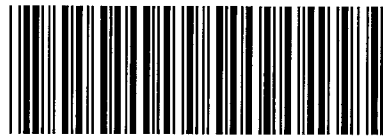
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## After hypertext: Other ideas

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### Abstract

Early work in and about hypertext suggested dramatic potentials for the medium, primarily in the way it challenged notions of authorial control, linearity, and the status quo in general. This history of hypertext tended to portray contradicting archetypes or pure forms that concrete developments never fulfilled. We argue that hypertext has long been a cultural analogy rather than a simple enactment or fulfillment of desires. To assist in creating a more open, constructive vision of hypertext, we gather three differing but connected tropes for hypertext from this history: hypertext as kinship, hypertext as battlefield, and hypertext as rhizome. Although these tropes are only three among many possibilities, we provisionally play them off one another to deconstruct and reconstruct hypertext theory and practice, and to demonstrate potentials for moving beyond archetypes in theorizing and practicing hypertext. © 2003 Elsevier Inc. All rights reserved.

*Keywords:* Critical theory; Cultures; Hypertext; Multiplicity; Rhizome; Tropes; World Wide Web

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### 1. Introduction

But in the consciousness of our failures, we risk lapsing into the boundless difference and a giving up on the confusing task of making partial, real connections. Some differences are playful; some are poles of world historical systems of domination. “Epistemology” is about knowing the difference. (Haraway, 1991, pp. 160–161)

Thinking both backward at our histories of hypertext and forward to its potential futures, we must learn to live with contradiction. This tension can be characterized by the ways that hypertext creates various potentialities, affirmed in differing technological architectures like the World Wide Web, online help systems, or the displays of consumer electronics. The

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potentials often result in conflicting realities—we see this as a good thing. Contradictions reveal structural tensions, often productive forces. Our revised theories cannot rest comfortably on a single definition of text, or a solitary notion of what it means to compose or to use texts. The most difficult task is to live in that space where hypertext dwells—sometimes invisible and sometimes ignored. This article is about understanding the relationships among hypertext potentialities. Drawing as Donna Haraway does on tropes to rethink our definitions of technology, culture, and experience, we too speak of and theorize hypertext as a trope—one that offers us multiple material and ideological frames.

Hypertext has always been a multiple and conflicted term, shifting and reconfiguring at the nexus of local tendential forces. Hypertext coalesces, it seems, around a wish of what we want text to be—contingent, anchored, slipping, caught in a net, Disappearing. In this time and in this place (themselves slipping away), we use hypertext as a deconstructive hinge, as an opening into which we find (and lose) ourselves. For although we want to avoid claiming a foundation or core truth for hypertext, we also want to make a space that can help us think about the future of hypertext as well as its past.

## 2. Early hypertext discussions/visions/desires

Despite the fact that hypertext provides the conceptual underpinnings for the Web (among other current technologies), *hypertext* remains a relatively peripheral term in our culture. During the late 1980s to the mid-1990s, hypertext seemed too good to be true: The simple node/link technology provided a powerful way for understanding and enacting textual structures that had long been hinted at. Hypertext offered the technological means to challenge the hierarchical nature of relationships between reader/writer and theory/practice (Bolter, 1991, 1993; Joyce, 1988; Kaplan & Moulthrop, 1991; Landow, 1992; Nelson, 1987a, 1987b). Revolutionary phrases abound in those relatively early works: “Hypertext blurs the boundaries between reader and writer” (Landow, 1992, p. 5); “the profound challenge of nonlinear texts to the basic concepts of literary theory” (Aarseth, 1994, p. 79); “the roles of author and reader begin to shift as the being of the text changes” (Kolb, 1994, p. 323). The challenge hypertext poses is instantiated by several commonly defined aspects of hypertext: nodes and links; nonlinearity; multiplicity; and configurations of images, words, sounds, and other media. Nodes hold different configurations of media and are linked to other nodes also holding different configurations of media. This linking structure opened up new possibilities, allowing the emergence of non-linear, multiple-perspective hypertexts. Often created in online environments like Apple’s HYPERCARD or Eastgate’s STORYSPACE, hypertext captivated a range of thinkers.

For literary theorists, hypertext provided the true weapon for assassinating the author: Readers wrested control of the text away, kicked the author in the head a few times for good measure, and skipped off into the dawn of a new day. For poets and creative writers, hypertext provided the foundation for erecting a space for free exploration and innovation, unburdened by the repressive limits of the line. For technical writers, hypertext provided a method for dealing with individual users in varying situations—rather than force users to tediously thumb through manuals, hypertextual online help would bring the right information (and *only* the right information) directly to the user, when the user needed it, and not a moment sooner or later. And,

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for a few bold writing instructors, hypertext provided the means to challenge the preferred genre of the first-year composition course: the traditional, linear, “logical” print-based essay. From its most conservative to its more iconoclastic enactments, hypertext set about shifting our perceptions of writing and reading.

Whether we describe it as breaking lines or jamming code, hypertext in these early years held a frightening potential—free the words from the page, the text from the line, the writer and reader from their separateness. Without having to travel all thousand plateaus, Félix Deleuze and Giles Guattari (1987) attempted to teach us that embracing desire and unshackling it from discourses about lack is not easily ignored, especially in the academy. To view writing as flow and as releasing our desires, and to see the book as a type of closed system that holds writing captive, Deleuze and Guattari demanded a rearticulated writing space, a place for writing not to transcend but to roam outward and to be expansive. They troped for us the idea of the rhizome, suggesting that the counterpart root structure—exemplified in the codex book—delimited our abilities to imagine, live, and create worlds predicated on connection and desire rather than on limits and lacks. Hypertext scholars, wanting to test the boundaries of narrative and free story from linearity, were not merely advocating a new view of storytelling but rather were challenging us to write the world differently. Michael Joyce (1988) called on us not to merely think differently, but to take over and inhabit the text, even if we could never know it completely. Jay David Bolter (1991) linked epistemologies to technologies in ways that bounded us while they released us. Texts were not contained, and their boundaries engulfed us all in discussions about the non-innocent nature of our always already political and ideological work as writers, readers, and researchers. But Stuart Moulthrop and Nancy Kaplan (1994) cautioned us that texts hold power over readers, ensnaring them in possibilities.

In the end, hypertext was itself—as Bolter and Richard Grusin (1999) would point out—remediated by other technologies. The Web, in particular, appears to have exhausted the possibilities of hypertext for the masses, a move that simultaneously made hypertext a household technology while evacuating it of the revolutionary potentials it once held. The Web, in some sense, took hypertext’s postmodernist tendencies and accelerated them, turning the reader into a voracious, consuming mouseclick: Because one *can* go anywhere, one *must* go everywhere. If the linear, printed text offered a margin in which a lever could be placed, the Web often seems to offer no anchoring points in which to place a lever of resistance.

### 3. Click here for the future: After hypertext

A decade ago, you could probably fit everyone on the planet who knew anything at all about hypertext onto a single bus. Five years ago, you could probably accommodate everyone who had ever heard the buzzword inside the Hollywood Bowl. (Yellowlees Douglas, 1998, p. 144)

Hypertext emerged and then was submerged into a range of technologies, most profoundly perhaps, the Web. With its Internet “backbone,” the Web is the now-embodied version of hypertext. The Web may be more grotesque in its instantiation than the general concept of hypertext (given the way the Web masks certain authoring and reading practices) but the Web is the hypertext most present in our daily lives. In terms of contingencies placed upon hypertext as it was envisioned by its early theorists, the Web marked a decided, or even accidental, shift in

how hypertext would be defined. Most incarnations of the Web are decidedly noninteractive except at a shallow level (*Click here to go to the next page*). Our visions of hypertext are now further complicated: What do we mean when we say “hypertext?” What is a “hypertext” in today’s technological landscape?

Calling for certain considerations in hypertext technology and contexts, Johndan Johnson-Eilola (1997) argued that:

First, [hypertext technologies and contexts] must allow writers and readers to work within the space of the texts (rather than downloading them, preserving the purity of the master text). Second, it must encourage more than one person to write within that space (in order to avoid pitting the weight of a published author against a single reader). (p. 213)

This call for a dynamic relationship among text, writer, reader, and context holds significance even today as the Web’s underlying technologies track our Amazon.com purchases as easily as they allow us to publish our web-based syllabi. Thinking through desires to preserve the dynamic aspects of reading and writing practices and opening up opportunities to embody the political and social dimensions of literacy practices, hypertext as a means of writing the word, and thus writing the world, has all of us wondering what connections of openness and indeterminacy remain in the technologies of hypertext writing and reading.

We might suggest that rather than searching out a “purer form” or playing into the “god-tricks” that Haraway alerted us to, we need to be less concerned with searching for lost cities of hypertext like Ted Nelson’s Xanadu and search instead for hypertext and its impact on our everyday lives. Rather than dwelling in the absence of a purer form, we believe the future of hypertext is as much a matter of making and remaking hypertext as it is of rearticulating any narratives of history that make situations a matter of inevitability. That is, because hypertext has helped to create the Web and to support multimedia texts, we must challenge the idea that hypertext’s contribution is the fulfillment of the Web. If the Web is hypertext’s destiny, we reinscribe, yet again, the larger narrative of progress associated with technology: Hypertext was developed to shape the Internet—to make it useful.

Rearticulating hypertext means bringing it and its history into our discussions, mapping hypertext onto the charts of nonlinear writing and reading. Rearticulating hypertext requires us to recognize that the multiplicity of links and nodes did not begin with a technology program, but rather within a cultural network, as a politics about relationships. What happens if history is erased or conversely if history is made too convenient? Is every history equally viable? Do all histories have equally loud voices? If every text and every view is equally available at all times, critical distance collapses and we are left without a way of reflecting critically on our present; we cannot locate the rupture, and any efforts to discuss the relationships among different hypertexts leaves everyone waiting in an absurdist play for a fictional character who is never to arrive. We require a non-accommodating hypertext, one that allows us a place into which we can push back.

#### 4. Mapping hypertext as a making of history

During an Intellectual Property Caucus Committee meeting at the Conference on College Composition and Communication in Atlanta, Georgia, in 1999, Jay Bolter began a comment to

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a room full of people with: "Hypertext. . ." He paused, then asked half-jokingly, "does anyone remember hypertext?" But it leaves us wondering, as Bolter did, *what happened to hypertext?* To locate ourselves in the matrix of hypertext history, we offer some brief suggestions, then a rough map for where we might go next in our rearticulation of hypertext:

1. Although many of the early (and late) claims for hypertext were way overhyped, one thing seems clear. Hypertext offered something that people wanted: Power over the structure of text.
2. *Power* in text is an odd thing, though. It is illusory. It is a mutual construction, not something that is simply taken or given.
3. Michael Joyce (1998) made an early and often quoted distinction between (a) hypertext that invited exploration and (b) hypertext that invited active reader participation in the construction of new links and nodes. We've built such an enormous amount of the first type (exploratory) that we've almost completely forgotten about the second (constructive). Sure, we can all build new web sites, but the private ownership model (inherent to some extent in the file structure of most operating systems) keeps those sites separate.
4. The point isn't merely that we need new models of ownership (although we do). It's not that we need to start building more constructive, collaborative spaces (although we do). The point is that hypertext as a concept and a practice was only an *analogy* for what we were imagining and practicing. Hypertext is a boundary condition between linear print and something as yet unnamed: It's the illusion of freedom, not necessarily in an evil, repressive way, but in a *we-hoped-so-hard-it-was-true-that-we-started-to-believe-it-was-true* sort of way.
5. Hypertext, as a practice and concept, was too powerful and too widely applicable. In a sense, hypertext called into question the fixity of connection at any level and, in doing so, re-enacted a postmodernist shift that threatened to utterly fragment any forms of unity, even unity of contingent structures.

Here's another way of thinking about all of this:

- $n + 1$ . Hypertext was merely a metaphor, a set of suggestions for thinking about communication, for living in the world, of the necessity for (and unavoidability of) making and living with the consequences of connections among disparate forces.

Without degenerating into teleological arguments about "perfecting true textual practices," we want to suggest that hypertext was just a set of training wheels, a choreographer's chart, a libretto. We were supposed to be doing something *with* those suggestions, not merely going through the motions.

### 5. Hypertext as a trope

To work against a desire either to fix a single position for hypertext or to act as if one description of hypertext can articulate a reflective practice of hypertext, we offer three tropes—three selected carefully from the limitless possibilities upon which we could draw—to think through hypertext practices. If hypertext is about communication and relationships among

contexts, people, technologies, and other aspects of our daily lives, we need to position our work carefully as both open and dynamic. Noting the promiscuous tendencies of hypertext, our practices cannot be captured in any essential way through these three tropes or the many others that are possible. Articulations of hypertext must create spaces for new combinations of thought and action. One such way to continue toward openness in hypertext is to position its tropic nature(s) not as definitive representations of the way that hypertext *should be* but rather to push at the edges of our reflections and the yet-to-be-made connections of hypertext in its material, political, and social senses. We want to maintain “generous suspicion” about narratives of hypertext (Haraway, 1992, p. 327). Hypertext, then, is a heuristic for thinking through our relationships to technology, literacy, and one another. Our tropes—these partial articulations—require different acknowledgments of the risks of pushing our contemplation and enactments of hypertext.

### 5.1. Kinship

Haraway (1991) argued for a sense of kinship predicated on “affinity, not identity” (p. 155). Her cyborg vision was of associations made not from obligation but from a strong sense of political and social responsibility; this is just one way of thinking through hypertext. The associative aspects of hypertext freed writers, readers, and texts from relationships of obligation and helped establish relationships of mutuality. Readers and writers in hypertext do not have to be literally on the same page to make meaning and to forge connection. Instead, writers pursue multiple meanings through a term, a character, even a place. Readers also pursue meaning-making through the links offered in a hypertext. The relationships are not about having to move from line to line, not a matter of following the tradition trajectories of more conventional texts. The sense of relations too is not bound only in word but in the space of hypertext, much in the ways that Bolter (1991) famously suggested that writing is about places and positions. Hypertext arguably is a space of community exploited through the technological capabilities to build new connections.

We know that the dynamics enacted in the writing and reading of hypertext cannot be fixed to the belief that all of us can equally embrace kinship models of affinity or that any and all texts or even any and all writers and readers experience the relational aspects of hypertext in the same way. The metaphor holds appeal, however, to provide a different conceptualization of the relationships among writer, reader, and text—a conceptualization often spoken of, wished for, and perhaps even enacted. The daily practices of how we create, elide, or negotiate connections are brought to the fore in hypertext. The family lines are not as easily drawn in hypertext. The law of the father, as feminist theorists remind us, seeks control of both the body and mind forcing a separation of the two to enforce dominance and control (Butler, 1993; Cixous, 1975/1976; Cixous & Clément, 1986; Haraway, 1991, 1992, 1995, 1997; Kristeva, 1979/1981). Pierre Bourdieu (1972/1977) noted this enforcement of rules in traditional kinship structures, suggesting that such rules are also a theory about how we know and live in the world. He argued that “the theory of knowledge is a dimension of political theory because symbolic power to impose the principles of the construction of reality—in particular, social reality, is a major dimension of political power” (p. 165). We are faced with political and social relationships in hypertext that work to exploit the symbolic power of non-linearity, of non-necessity, of

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Kinship argues dominance of any. Instead, an affinity ships where negot structures based up along the line of t ships that might in connection among transgressions. Kin often-occluded fac ally, making is not those involved. Kin effects of creation.

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contingent relationships. The links offered are not based upon the assumption that all readers will come to understand the text in the same way or even similar ways. From hypertext fictions with multiple paths to help systems with elaborate menus, readers transgress and seek to fulfill their readerly desires. We acknowledge, however, that even in the most functional of hypertexts, reader negotiations draw upon the contributions of the writer. We understand that it is the reader who functions in a different space that isn't traditional, and in a territory that is always politically and socially bound.

Kinship argues that the relationships among writer, reader, and text are not based upon the dominance of any one of the players—not any one masculine historical tracing of the family. Instead, an affinity kinship model accounts for emerging practices predicated on local relationships where negotiation rather than domination is the preferred practice. Traditional family structures based upon biology as the only category—one that Haraway makes hybrid—argue along the line of the father. This phallogocentrism masks differences and hides relationships that might infect the roots of the tree itself. By contrast, affinity kinship implies a lived connection among a community, a connection that emerges from choices, accidents, even transgressions. Kinship allows us to think about context, situation, experiences, and other often-occluded factors, and see them as inseparable from the act of making a hypertext. Ideally, making is not fixed to an end goal; hypertext creation cannot be controlled by any of those involved. Kinship through affinity makes central the politics of making and the potential effects of creation.

### 5.2. *Battlefield*

Hypertext is a battlefield—a plane of contestation with no space for innocence. As we have suggested, early hypertext discussions were tinged with challenge: challenge to text, to reader, to writer. Borne out of—or at least often associated with—Vannevar Bush (1945) and his memex, hypertext is often theorized as a space poised for conflicts, just as Bush envisioned the memex as the means to deploy knowledge for the good of the people, for the sake of democracy. Such overtures to hypertext as a site of contestation remain part of the legacy of hypertext theory and practice. Although the battlefield implies masculinist hierarchies that we seek to complicate in our understandings of various configurations of hypertext, battlefields also mark the real spaces where boundaries are drawn and redrawn by political challenges to domination. Battlefields are the sites of responsibility where actions and consequences are not easily separable.

Hypertext theorists often position their work as speaking from boundaries, dispelling the notions of inside and outside for some middle ground and refiguring our understanding of ourselves as contradictory beings made by and always making language, culture, meaning, and technology. This making was not, and is not, without purpose: More often than not the purpose was, and continues to be, to challenge traditional constructions of literacy. And those challenges were met with equally passionate oppositions that argued for hypertexts' failings. The struggles embodied in the battles over hypertext were fraught with language such as violation, danger, harm, and barriers, among others.

Hypertext in print-based forms or in its other technological instantiations as narratives, help files, media pieces, or the Web may represent different conceptions of hypertext and instantiate



different theoretical perspectives. Each form is, however, a boundless plane of challenge, where moving from one node to any other creates new potentials for understanding as well as potential to challenge traditional notions of text; the limits and possibilities of the visual and the verbal; offers of author and reader choice; the creation of multiple lines of thought and experience; breaking down the boundaries among academic, corporate, personal, political, virtual, social, cultural, material, visceral, and more. As different instantiations of hypertext emerged and continue to emerge, we are not all equally comfortable with the transformation of the practices negotiated in those different hypertext spaces.

Most notably, Joyce (1998) posited that “[t]he web does strike me as a lonely pursuit, something which douses the crispness of difference and community in a salsa of shifting screen. . . [t]he web too often packages rather than represents the shape of our desires” (p. 166). The ideas of community associated with hypertext are repurposed on the Web, making it a corporate rather than communal space. Although Joyce pointed to many of the flaws of the Web, the hard-won fights over the ways such a space negotiates both the best and worst of our literate practices remains a contention. Jane Yellowlees Douglas (1998) also wrangled with the associations of hypertext and the Web, claiming that:

ironically, the exposure hypertext has received through the World Wide Web has obscured its more radical and far-reaching possibilities for providing writers with alternatives to linear and singular arguments, particularly for all the philosophers, scientists, educators, and sociologists who long ago rejected objectivism for relativism and who do battle with the monolithic constraints of the printed word on a regular basis. (p. 145)

Hypertext as battlefield acknowledges hypertextual constructions like the Web as emerging spaces to challenge, grapple with, and never regard as reducible the ways we define the more from the less hypertextual. Just as early constructions of hypertext challenged the more or less traditional, linear, and hierarchical, we face new challenges to the messy relationships exploited in the hypertext spaces of the Web. Can we argue for an innocence of early hypertextual forms—forms that also were related to economic, social, and political forces? The ways we argue—and remain mindful and even a bit frightened by—new forms of literacy, and even definitions of literacy itself, denote the need to have tropes that call us into those challenges rather than away from them. The battlefield of hypertext lays out more than one possible interpretation and begs for such challenges to all the ways we become comfortable with the normalization of technology. The challenge is not to close down the boundaries of what constitutes the proper place to be called hypertext but rather to remain on guard to the ways we construct enemies and allies. The battles over the making of texts and the privileging of print-based epistemologies are still being fought on the front of hypertextual modes.

### 5.3. *Rhizomatics*

With the purpose of challenging our assumptions about the ways we engage the world, enact desire, and respond to our cultural contexts, Deleuze and Guattari (1987) offered the rhizome as an ever-shifting organism that challenges the “root-book” (p. 5). Using rhizomatic tropes to redefine not just what constitutes a text but how a text functions, suggests, for us, thinking of hypertext not just as meaning-making or locating a new narrative style or means of creating

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or means of creating

story, but rather to think of hypertext as rhizomatic. Deleuze and Guattari argued for writing as "always a measure of something else. Writing has nothing to do with signifying. It has to do with surveying, mapping, even realms that are yet to come" (pp. 4-5). In this trope, hypertext is about a constant making and remaking. In the play of the rhizomatic, we are asked to hold all our sacred beliefs about readers and writers, text and meaning against the larger systems that reify traditional power dynamics. Without a rigid structure to reject, deny, or even hold on to, we read rhizomatic hypertext as a means to challenge binary logics that separate ways of living in language, that occlude other connections and multiplicities. Rhizomatic views of hypertext look for the features of the rhizome: connections, heterogeneity, multiplicity, asignifying rupture. This looking argues for a bringing together of otherwise separated systems to get at how power flows, and how it is imbued, not how it is masked. Language is one power system that signals relationships, but it cannot be separated from the other ways that power is instantiated in various systems (e.g., biological, political, economic).

Rhizomatics as a way of thinking about hypertext asks us to maintain the tensions and connections inherent in the network—in all networks. The links created in a hypertext are just as important as the ones we elide. We must remain open to the possibilities denied by formulas of binary logic. Rhizomatic tropes of hypertext acknowledge that no one is in control, that our literate practices, while not arbitrary, are also not predictable. Just as a student of Moulthrop and Kaplan (1994) futilely attempted to resist hypertext writing, he too was written in hypertext. The ways we engage our writing, reading, thinking, and living cannot be separated from our enactments of hypertext. Whether those hypertexts be formulated as print, electronic, or written onto other nondiscursive forms, hypertext as rhizomatic challenges us to think through multiplicity, to resist diagnosing nontraditional ways of thinking, and to open ourselves up to other logics. Our roles as teachers of literacy are disrupted through rhizomatic views of hypertext. We must remember

the euphoria or the vertigo that one experiences in writing and reading hypertext should not be mutually exclusive conditions; challenging long-held assumptions should be both frightening and exhilarating—and, most of all, constructive. (Johnson-Eilola, 1994, p. 216)

We are making and remaking hypertext not just as a shift in the technologies that are hypertextual but also in our lives as teachers, writers, readers, researchers, and arguably persons engaged in making culture.

These tropes signal the ways hypertext was, and continues to be, made and remade in our work: affiliation, association, contestation, challenge, non-necessary, multiple, political, infinitely searching for possibility. We cannot suggest a convenient way of articulating hypertext as history or even as technology. Without abandoning all responsibility for these tropes and our naming of them, we want to forefront, instead, that these tropes are sites fraught with their own problematics. At no point should we see ourselves as fitting into one of these places, writing the story of hypertext as if it has a beginning or an ending, as if there really is a way to discover what happened to hypertext—just as we cannot uncover how hypertext *is*. Rather these tropes provide a means of negotiating the complexity of hypertext without reducing its past or future to a technological or cultural determination. The best hypertext still has to offer us is its complexity and openness.

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