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Hypertextuality, Intertextuality and Postmodern Pedagogy: Some Comments on George P. Landow's *Hypertext*

Abstract: This paper takes issue with George P. Landow's frequent suggestion that contemporary hypertexts are the fulfilment of poststructuralist theories of textuality and intertextuality. The paper reminds readers of the themes of communication, consumerism, and Capotalism in the earlier work of Kristeva, Barthes and the other Tel Quel theorists, and suggests that the contemporary claims concerning hypertextuality do not always bear these issues in mind.

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Keywords: Hypertextuality. George P. Landow. Roland Barthes. Julia Kristeva. Tel Quel. Post-structuralism. Intertextuality.

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Everyone working now in higher education will be aware of the changes and challenges being presented by Information Technology, and particularly specific systems such as hypertext. No vision of what the educational experience will look like in the future, for students and for teachers, can afford to ignore the impact computers will have on the whole range of activities carried out in primary and in higher educational institutions. Such a radical change to future, and indeed in some places present, practice requires theorizing. This is an attempt to contribute to one specific area of that current attempt to theorize hypertextuality and its utility for pedagogy.

Hypertext systems clearly represent not only a great challenge but also a great opportunity for educational practice, particularly but certainly not exclusively in the Humanities and Social Sciences. Text-based disciplines clearly have a lot to gain from systems which can generate links between core texts and numerous other texts.

Hypertextuality, as its major theorists have argued, can radically challenge received notions concerning textual autonomy, reader passivity, authorial originality, linear reading and a host of other pre-critical assumptions about what it means to write and to read. Ultimately, hypertextuality and other computer-based integrated systems may come to surplant "print culture" and its obsession with the isolated object of meaning, the book.

What particularly concerns me here is not so much how extensively and speedily we will move from print to network culture but, rather, how we theorize such a phenomenon and in what context. Certainly, my long term interest in the concept of intertextuality has led me to engage with, but at times question, what seem the most influential versions of hypertextual theory available at the present time (see, Allen 2000: 199-208).

Intertextuality, as a theory and practice, has inevitably been deeply associated with hypertextual theory, nowhere more so than in the work of George P. Landow. Landow's major work in the area, *Hypertext*, is subtitled: "The Convergence of Contemporary Critical Theory and Technology" (Landow 1992) In that work, and in numerous articles, Landow argues that hypertextuality is the material embodiment and realization of poststructuralist theories concerning textuality and meaning. He writes:

> hypertext has much in common with some major points of contemporary literary and semiological theory, particularly with Derrida's emphasis on de-centering and with Barthes's conception of the readerly versus the writerly text. Infact, hypertext creates an almost embarrassingly literal embodiment of both concepts, one that in turn raises questions about them and their interesting combination of prescience and historical relations (or embeddedness) (Landow 1992: 33-4).

Landow's expression of an "embarrassing" "literal embodiment" is something I wish to question here. It is quite clear, however, why poststructuralist accounts of textuality

and intertextuality should be seen as in many ways complimenting and even prefiguring the new hypertext systems celebrated by Landow and others. Barthes and Derrida, of course, produce sustained deconstructions of the very notions that hypertextuality seems to materially supercede: the autonomous text, the separation of text from context, the originality of the author, and so on. A hypertext has no obvious centre since any text within it can be linked to and punctured by another text. Hypertexts resist linear reading, since they offer a network of connections which spiral out from an initial entry point which itself is arbitrary rather than essential or originary. Above all, hypertexts seem to realize the notion of intertextuality so fundamental to the poststructuralist work of Barthes, Derrida, Kristeva and others. A hypertext is intertextual, as Landow repeatedly points out, in fundamental ways: it has no stable inside or outside; it has no point of ultimate closure, since links can be followed in numerous ways and can even be added with each reading; it turns readers into writers, since it is impossible to use hypertexts passively, demanding as they do active participation in pursuing, adding and combining textual connections.

Hypertexts, in other words, do seem to fulfill the poststructuralist vision of texts as networks generated from numerous signifying relations and so resistant to notions of single and stable meaning. To cite Barthes's famous description of this idea of the text:

> We know now that a text is not a line of words releasing a single 'theological' meaning (the 'message' of the Author-God) but a multi-dimensional space in which a variety of writings, none of them original, blend and clash. (Barthes 1977: 146)

Such a vision of intertextuality, as is well known, encourages a new, active reading procedure, which *tel quel* theorists like Barthes, Derrida and Kristeva, often cast in terms of *process* or *productivity*, emphasizing thereby, amongst other things, the unending but still creative nature of reading. Reading becomes unending in such

theories of intertextuality because what is being read is viewed as a text, something woven from numerous culturally signifying threads. There is clearly an understanding of reading here as a kind of ceaseless process of making links or following links as they take us from text to text, from one culturally signifying sign or code to another.

It is, above all other points, this process of linking which Landow sees as the characteristic feature of hypertext systems and the principle way in which it embodies or "literalizes" poststructuralist theory. Landow states: "Hypertext, which is a fundamentally intertextual system, has the capacity to emphasize intertextuality in a way that page-bound text in books cannot" (Landow 1992: 10). Whilst poststructuralist theorists like Barthes and Derrida created a theory of the text as an intertextual site of numerous, even infinite, textual links, hypertexts, according to Landow, actually deliever such texts and allow us to begin exploring them physically. There is a clear sense, in Landow's arguments, that only when the printed book has been replaced by the electronic and digitalized hypertext can the true significance of poststructuralist theory be confirmed. He writes: "contemporary theory proposes and hypertext disposes; or, to be less theologically aphoristic, hypertext embodies many of the ideas and attitudes proposed by Barthes, Derrida, Foucault, and others" (73). He goes on, in this context, to explain the difference in tone between poststructuralist theorists and the newly emerging theorists of hypertextuality: "Most poststructuralists write from within the twilight of a wished-for coming day; most writers of hypertext write of many of the same things from within the dawn" (87).

It might be objected to this account that something is being lost in our understanding of poststructuralist theory when we simply read it in terms of these more recent developments. This loss, I also want to suggest, can remind us of aspects

of our current situation which are crucial to, but often go unremarked by, theorists wishing to celebrate the new hypertextual medium.

The key to my objection to Landow's "convergence" between theory and contemporary technology concerns what we mean by "links" or, to use another term frequently adopted by Landow, "connectivity." These terms themselves relate to major questions concerning what we mean by information. Hypertextuality, after all, links pieces of information at a speed and to an extent never before available to the reader of texts. Writing about the educational impact of a particular hypertext system developed at Brown University, Landow states:

> Intermedia tries to make the student map out pathways for him or herself. Intermedia is designed, in other words, to free students rather than confine them. Indeed, by allowing the student to create his or her own route, it permits – or rather demands – choices.
> The sheeplike behaviour displayed by many freshmen is often due to their having little information and little idea of what to do with it. One cannot make connections between fact A and six other facts if one knows only fact A. This lack of factual knowledge leads to reductive thinking. Additional information, however, will not help students think critically unless they have techniques for relating facts to each other. College liberates because it provides students with facts and offers examples of the way in which they can make connections for themselves. Intellectual freedom derives from the ability to make choices. Anything that can help teachers communicate information to students as well as provide them with techniques to relate it to what they already know provides a model for education (Landow 1989: 176)

We have in this passage the core of Landow's argument concerning the benefits hypertextuality brings to education, and within it the basis of a model of education itself. The model might seem reasonably commonsensical, based as it is on the acquisition of information by students and their developing ability to utilize, organize, and choose from within, a body of informational facts. What hypertext brings to this educational pursuit of information is, of course, both speed and a greater acknowledgement of the connection between isolated pieces of information, or facts. The primary characteristic of the critical subject produced by the academic training

offered by higher education, according to Landow, is this ability to link information or data: "Critical thinking relies upon relating many things to one another. Since the essence of hypertext lies in its making connections, it provides an efficient means of accustoming students to making connections among materials they encounter" (Landow 1994: 126).

Whilst acknowledging the undoubted ability of hypertexts to foster such important qualities in our students, it must be said that the ability to make connections is certainly not the only characteristic of the critical subject, that wished-for end-product of the modern university. Nor, it must be said, is connectivity the sole or even prime feature of the theory of intertextuality upon which Landow and others so frequently depend.

Landow's use of Barthes's textual theory is extensive. He writes, near the beginning of his *Hypertext*:

> 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* (Landow 1994: 3)

Landow then takes up Barthes's distinction in *S/Z* between the *readerly* and the *writerly* text, commenting that such a distinction appears to illuminate precisely the difference between: "text based on print technology and electronic hypertext" (5). The distinction between *readerly* and *writerly* text in Barthes is a well-known one; it marks the difference between a reading approach which searches for stable meaning and interpretive closure and a reading which recognizes the infinite play of intertextuality generated by the text and thus the reader's own construction of structure and meaning within a textual field beyond closure. Hypertext, of course, would correspond to Barthes's *writerly* text. Landow, when utilizing Barthes's theory

and practice of textual analysis, however, frequently confuses these terms, so that he refers to hypertexts as fulfilling Barthes's account of the *readerly* text (see Landow 1992: 6). Landow writes of Barthes's emphasis on "the readerly text and its nonlinearity" (10) and on various other occasions he mistakes Barthes's two terms, thus relating hypertext to the very categories of linear reading, reader passivity, autonomous structure and meaning which he wants to argue they transcend.

It might seem somewhat churlish to point out such an obvious mistake in Landow's text and it is probably only fair to state that it is a mistake that is rectified later in the text (Landow 1992: 81). However, this small glitch in Landow's account of Barthes's poststructuralist theory does in many ways symbolize an important issue. Reading Landow's account of poststructuralist theory it becomes increasingly clear that one crucial aspect of that theory is being evaded or even negated. We can capture this aspect of poststructuralist theory by returning to Barthes's account of intertextuality. Discussing the manner in which intertextuality subverts traditional notions of authorship, Barthes writes:

> In the multiplicity of writing, everything is to be *disentangled*, nothing *deciphered*; the structure can be followed, 'run' (like the thread of a stocking) at every point and at every level, but there is nothing beneath: the space of writing is to be ranged over, not pierced; writing ceaselessly posits meaning ceaselessly to evaporate it, carrying out a systematic exemption of meaning. (Barthes 1977: 147)

One feature of Barthes's point here is certainly that multiple links, textual and cultural, make up the text. These links, of course, replace the author as the source of meaning and thus disturb the very notion of *source* or *origin* of meaning. This is the feature of intertextuality so materially realized by hypertext. However, the other major feature of such descriptions of intertextuality concerns what happens to meaning itself. Landow in his discussion of Barthes argues that hypertexts, based as they are on links between small segments of text, seem to fulfill Barthes's practice of

breaking texts up into lexias, small fragments of meaning, sometimes a word, sometimes a whole sentence (see Barthes 1974: 13-14 and Landow 1992: 52-3). However, these lexia are not pieces of information for Barthes; they are, rather, the points at which meaning "explodes and scatters" (Barthes 1988: 262). Lexias, for Barthes, are not points at which links are made and meanings discovered so much as points in which meaning is shown to disseminate itself. As Barthes puts it:

> Forgetting meaning is in a sense part of reading: what matters to us is to show certain *departures*, not arrivals, of meaning (actually, what is meaning but a departure!) What establishes the text is not an internal, closed, accountable structure, but the *opening* of the text into other texts, other codes, other signs; what makes the text is the intertextual (Barthes 1988: 264-5).

To conceive of intertextuality purely as a process of linking, of connectivity, is in fact to misunderstand a fundamental aspect of poststructuralist theory. Intertextuality, the openness of the text, concerns in fact the infinite *deferral* of meaning, the fact that meaning *departs*, *runs*, leaving nothing but what Derrida styles *the trace*. Barthes's lexias are less like points of connectivity between texts than textual landmines, points at which meaning explodes and we experience the sometimes sublime, sometimes prosaic irretrievability of meaning.

Intertextual theory, at least as it is presented in Barthes, emerges, after all, from the intellectual mileau of the *tel quel* school. *Tel quel* theorists such as Kristeva and Barthes, we need to remember, were very clear about what their poststructuralist theory was meant to challenge and ultimately disrupt, namely communication itself. Barthes makes this attack on positivistic notions of communication the centre of his valuation of Kristeva's work:

> what Julia Kristeva produces is a critique of *communication* (the first, I believe, since that of psychoanalysis). Communication, she shows, the darling of the positive sciences (such as linguistics), of the philosophies and the politics of 'dialogue,' of 'participation,' and of 'exchange' – communication is *mechandise*. (Barthes 1986: 170)

Kristeva, who first coined the term intertextuality, employs Bakhtinian notions such as double-voiced discourse to convey this challenge to the foundational notion of communication. Intertextuality, in her account, is less to do with connections than with the radically unstable and multiple nature of what she calls "poetic language." She writes:

> within the interior space of the text as well as within the space of texts, poetic language is a 'double' . . . the notions of definition, determination, the sign '=' and the very concept of the sign, which presupposes a verticle (hierarchical) division between signifier and signified, cannot be applied to poetic language – by definition an infinity of pairings and combinations (Kristeva 1980: 69).

Communication and indeed notions of information are radically challenged in such theories of intertextuality, since no sign can any longer resist "doubleness" or multiplicity. In such a theory meaning is always multiple and always infinitely deferred. Likewise communication becomes a field of meanings dispersed, scattered, some caught, some lost. Information, likewise, is radically challenged as a concept, since there is no longer any raw data which could be conveyed or linked. If the sign is "double," in Kristeva's sense, then it cannot be used as a piece of information, a fact or item of knowledge, since multiplicity disrupts it, at one and the same time relating the sign to numerous others and yet denying the possibility of positive relation or linkage. Intertextuality does not show the meaningful links between signs: it shows that meaning is itself the "in-between" of signs, that signs have meaning only in relation. In this important sense, then, the theory of intertextuality presented in the work of Barthes, Kristeva, Derrida and other notable poststructuralists is pitted precisely against the ideal of connectivity inscribed in the work of Landow. His work, like that of many other commentators on poststructuralist theory, has transformed a critique of communication and information into a new way of valorizing those concepts. Intertextuality, in Landow's account of hypertext, involves linking text to

text, sign to sign, code to code, as if a text a sign or a code were a stable and singular entity which could be connected to another. “Establishing connections between paired sets of data and among larger groupings of material” (Landow 1989: 179) might be a radical challenge to conventional notions concerning meaning, writing and reading, but it is not what Barthes, Derrida or Kristeva mean by intertextuality. Landow’s celebration of hypertextuality and his argument that it materially realizes contemporary critical theory turns intertextuality into a concept closer to the one we find in Michael Riffaterre and Gerard Genette, critics much closer to structuralism than to poststructuralism (see Allen 2000: 95-132). Ultimately, Landow’s ethos of information and communication reduces intertextuality to a version of those more traditional concepts of textual relations, *influence*, *allusion*, *echo* and *source*.

Registering this feature of Landow’s approach to poststructuralist theory can serve as a basis for a more important questioning of the presuppositions inscribed within his hypertextual theory. The value placed on notions of information and communication relate directly to current discussions concerning the state of education within the postmodern era. Landow argues seriously and at great length for the pedagogical value of hypertext systems. As we have already seen, he argues that hypertext’s ability to facilitate connectivity forms the basis of its present and potential future use within educational practice. Hypertexts, he argues, help students read in a more active, non-linear fashion, they help to encourage students to take a more contextual and indeed intertextual approach to course texts, they integrate different courses taken by students thus encouraging interdisciplinarity and a more coherent sense of the educational experience on the part of students, they challenge the traditional power roles between teachers and students by offering a far greater creative contribution to students, they are pedagogically democratic, in that they can be used at

a distance or on campus, they can be employed at varying speeds and are uniquely adaptable to students needs (Landow 1992: 120-61).

Once again, my concern is not to challenge the veracity of these claims. The point that needs to be considered is whether Landow's central trope of connectivity is really so suited to the fostering of critical thought within today's academy. Lyotard's seminal report on knowledge, *The Postmodern Condition*, makes it clear that what characterizes the postmodern world is an alliance between power and knowledge. "It is widely accepted," he writes, "that knowledge has become the principle force of production over the last few decades." This has far-reaching consequences, both for society in general and for educational institutions in particular. Lyotard writes:

> Knowledge in the form of an informational commodity indispensible to productive power is already, and will continue to be, a major – perhaps *the* major – stake in the worldwide competition for power. It is conceivable that the nation-states will one day fight for control of information, just as they battled in the past for control over territory, and afterwards for control of access to and exploitation of raw materials and cheap labour. (Lyotard 1984: 5)

Information is certainly not a neutral term, whether in educational or any other current discursive context. In the field of education, an information culture increasingly encroaches on the idea of the modern university and its objective, the production of critical subjects. These critical subjects no longer necessarily enter the cultural and social life of the nation once they have graduated from university. Increasingly they gain employment in multinationals whose relationship to the university system and to the nation state is undefined, unregulated and certainly not run on the model of the relationship between university and state which formed the foundation of the ideal of the modern university (see Readings 1996).

In this new, postmodern, global situation, knowledge itself changes, moving from the grand narratives of speculation and emancipation which underpin the

Enlightenment ideals behind the very concept of the critical subject to Lyotard's commodified information. The culture of Quality and Excellence which has swept over the primary and higher education sectors in the West, as it has swept over all aspects of professional life, is merely the most visible manifestation of a postmodern information culture in which knowledge is a commodity sold by institutions to students. As Ronald Barnett puts it:

> in this educational economy, what counts as knowledge changes. Knowledge is reduced to mere information . . . Being understood as mere information, knowledge becomes inert. As a result, deriving efficiency savings through national course design and deliverables becomes a logical option. There are certain things to be known: very well. Let us identity them, package them as well as we can, and so ensure that students in the total system have access to high quality products. This produces a further knowledge crisis in higher education, even if it is unnoticed. (Barnett 1997: 173)

Barnett talks about a fundamental change in the idea of knowledge in the new postmodern educational environment, a change from Mode 1 knowledge which is propositional to Mode 2 knowledge which is operational (170). The change bears out Lyotard's claims about the changes in the relation between educational institutions and transnational Capitalism. Whilst propositional knowledge refers to the traditional values of speculation, questioning, testing hypotheses and so on, operational knowledge is fundamentally a process of assimilating and manipulating information. Propositional knowledge is critical, operational knowledge is practical. The former questions information, the latter utilizes it without necessarily submitting it to any form of critical analysis. The latter form of knowledge is the variety which the new multinationals require in their employees. Lyotard styles this operational mode of knowledge in terms of the criterion of performativity. He writes:

> The question (overt or implied) now asked by the professionalist student, the State, or institutions of higher education is no longer 'Is it true?' but 'What use is it?' In the context of the mercantilization of knowledge, more often than not this question is equivalent to: 'Is it efficient?' . . . . What no longer makes

> the grade is competence as defined by other criteria true/false, just/unjust, etc - and, of course, low performativity in general.
>
> This creates the prospect for a vast market for competence in operational skills . . . . Seen in this light, what we are approaching is not the end of knowledge – quite the contrary. Data banks are the Encyclopedia of tomorrow. They transcend the capacity of each of their users. They are 'nature' for postmodern man . . . . As long as the game is not a game of perfect information, the advantage will be with the player who has knowledge and can obtain information. By definition, this is the case with a student in a learning situation. But in games of perfect information, the best performativity cannot consist in obtaining additional information in this way. It comes rather from arranging the data in a new way . . . . This arrangement is usually achieved by connecting together series of data that were previously held to be independent. This capacity to articulate what used to be separate can be called imagination. (Lyotard 1984: 51-2)

Landow's celebration of connectivity and hypertext's facilitation of it in students is fully suited to the new criterion of performativity in the postmodern university. It is not, however, despite Landow's claims, a model which can help redefine, in the context of non-totalized knowledge and the collapse of the grand narratives, the ideal of the critical subject. However we come to redefine the critical subject we will need to do so largely against the grain of performativity and the culture of information, since the activity which defines that subject will still, in whatever form, reside in a mode of transcendence, a meta-thinking which is propositional rather than operational. As Foucault suggests, this meta-thinking may have more to do with an attitude than with actual knowledge, since knowledge in its traditional sense implies a totalization now recognized to be unattainable. Yet it certainly will continue to involve a mode of questioning which is resistant to the use-value of the performative culture described by Lyotard and experienced daily by teachers and students. Asking questions about the relation between human rights and cultural diversity and difference, or about the value of pragmatism as a socially-oriented philosophy, entails something more than information and its connectivity. Evaluating a literary text, canonical or non-canonical, cannot be achieved through the calling up of contextual

information alone. Such subjects require judgement and the consideration of the impossibility of total or final judgement. They are intimately tied to a self-consciousness concerning power and place – who has the power to ask questions here? who has the power to assess answers? Who, if anyone, has the authority to close interpretation? – which necessarily shows up as a blank in the performative tests through which students and teachers have to pass.

The return to the poststructuralist theory of intertextuality made earlier in this discussion is worthwhile since it reminds us of one rigorous attempt to resist the culture of information. Intertextuality, as employed by Barthes, Kristeva and Derrida, concerns the deferral of meaning rather than informational connectivity; it concerns what, in the culture of performativity, must be received, off icially, as so much noise and waste. If hypertexts are to help generate critical subjects then they must be used against the grain of the culture which now dominates the postmodern university. That culture views knowledge in terms of use-value. Critical thought, on the contrary, and in a manner which necessarily reverses the rhetoric of Enlightenment pedagogy whilst attempting to salvage some of its objectives, must define itself by the search for that which is useless, or at least which reads as such in terms of performativity. In a culture of performativity, critical thought moves inevitably from the Enlightenment goal of synthesis and totalization to a post-Enlightenment search for gaps, contradictions, negations and aoprias.

Hypertext can play a potentially huge role in returning thought to non-performative terms. For example, the sheer connectivity celebrated by authors such as Landow remains, from the point of view of totalization, beyond our scope and thus our use. The point, surely, is not what connections and links we can make, but rather that they are infinite and do not ultimately shape up into some overall structure of

meaning or knowledge. Despite his claims, Landow's versions of hypertext do not materially embody the theories of Barthes, Derrida and Kristeva. If they did, then they would offer us opportunities not to make connnections but rather to see texts explode and disperse into more connections than we could possibly hope to trace. Far from comforting us with hugely increased speed and effectiveness, they would rather be chaotic, overwhelming, abysmal. Rather than cheering us with the promise of a greater store or horde of facts they would emphasis the contestatory nature of a word or a phrase. When people first begin to use such technology they often express the fear that it will take them over, swallow up their time, make them less effective at work or at home. "I'm frightened that I'll never get out of it. It's endless." Such reactions suggest that there is a convergence between poststructuralist theories of textuality and the new computing technologies. It is a convergence, however, which is based on deferral and dissemination rather than on the accumulation of connections.

In order to facilitate critical thought hypertexts need to sponser anxiety and doubt rather than certainty. They need to promote randomness rather than structure, process rather than performance, noise and waste rather than connectivity. I do not think, like Ilana Synder, that Landow falls into the trap of believing that the new technology by itself will produce educational or social transformations (see Synder 1998:133). However, I do view his account of hypertextuality as existing in something of a cultural and ideological vacuum and relying heavily on an account of critical theory which does not sufficiently interrogate the notion of critical thought itself. If hypertexts are to help foster critical thought then those involved in their design and implementation must include within their theories and practices a greater examination of the cultural and ideological position of educational institutions and the teachers and students who inhabit them. They must, that is to say, let educational and

critical theory lead the way, rather than allowing theories about the potential of the new technology set the agenda. Intertextuality, as I have tried to demonstrate here, has a significant part to play in this crucial debate.

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