

Critical Theory and Bibliography in Cross-disciplinary Environments

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Introduction

In the beginning of her 1951 manifesto, *Qu'est-ce que la documentation?*, the French documentalist (1) and Bibliothèque nationale librarian, Suzanne Briet cites an unnamed source in defining the word "document" in terms of being proof or evidence in support of a fact:

"Un document est une preuve à l'appui d'un fait." (7)

I begin this paper on the relation of critical theory and bibliography with a statement on documentary evidence because, as was argued in a recent MLA Roundtable on the question of evidence, the advent of critical theory into the literary arena has radically effected the status and nature of bibliographic evidence (2). Since bibliography has traditionally played the role of providing evidence for literary arguments, raising the question of the effect of critical theory upon literary studies means foregrounding the effect of critical theory upon bibliography. Conversely, however (and this will be the context for the second part of this paper), since critical theory is, above all, a historically and socially located criticism, we must also pose the problem of the effects of bibliography upon the textual projects of critical theory, for the values and the very form of bibliography in literary studies and production are shifting under the impact of new information technologies. From the viewpoint of critical theory, the problem of textual evidence, and thus, the problem of bibliography, becomes: what materials, concepts, techniques, and methods are brought to bear within what type of social system of production to produce what type of truth? Conversely, this question of critical theory, today, as in much of modernity, must also be articulated in terms of a more specific questioning of techne, namely within, as Heidegger stated, the relation of the question of thinking and the technical (*Die Frage nach der Technik*)--here, the specific techne and technology of information retrieval.

I will begin by stating that what is referred to as "critical theory" in this paper is not exclusively the works originating or following from the Frankfurt School, but simply, theory which is critical. But what does this mean? As Barrett Watten has noted in his analysis of explanation in different discourses and arts, acts of explanation can be described according to the scale produced between that which is to be explained and the explanation (3). What I mean by "critical theory" is an explanation which

doesn't aim at merely defining an object, act, or concept, but is an explanation which attempts to change the scale and measure of the object, act, or concept, by the activity of explanation. Thus, critical theory is an interventionalist type of theory, and one which attempts a reconceptualization at the present and at some future time. Because it is interventionalist and because it attempts to mark a conceptual difference, critical theory aims not solely toward a critical negativity or even destruction, but aims more primarily at a generative critique developed out of difference. In Deleuze and Guattari's language, this conceptual displacement plots "a line of flight" for the object into a possible future--a critical future which is other than the one which was previously understood to be necessary and true. The two major questions this paper raises, therefore, are: 1) what lines of flight have literary evidence, specifically bibliography, been sent upon by the effects of critical theory and critical theory's tendency toward cross-disciplinarity? And 2) what are the critical effects of information technology upon recent bibliography at the point where information retrieval technology and textual concepts meet, namely, in vocabulary?

I. The Poststructural Critique of evidence and bibliography

The poststructural critique of signification which became evident in American literature departments in the 1970s and 1980s challenged the very notion of comprehensive proof or evidence which was an underlying assumption for bibliographical construction (4). Within the poststructural critique the status of a comprehensive proof, which was relatively independent of hermeneutic considerations, became problematic. Considerations of institution, discourses, power, time, and interests displaced the categories of "completeness" and historical or scholarly objectivity in the construction of arguments and their evidence.

The result of this critique has been not only to challenge the standard of comprehensive proof in bibliography, but to challenge absolute divisions between primary and secondary materials, as well as to challenge the naturalness and authority of disciplinary divisions. Through the critical notion of "écriture générale," the autonomy of texts was challenged, inscribing texts as moments, however important, within more general "textual" or discursive series and problematics. Though deconstruction, for example, has been attacked as being ahistorical, the concept and practice of *écriture générale* displayed the deeply historical nature of deconstruction, though its critical relation to traditional historiography problematized how this "historical nature" might be allowed to articulate itself within traditional historiographical frames.

The poststructural critique of signification ruptured traditional understandings of both criticism and bibliography, suggesting that their actions upon the meaning and functions of the text were not simply secondary, but primary. This blurring of boundaries between "the text" and its critical margins demanded that bibliography

and criticism had to account for themselves within the same general types of theoretical frames in which they had previously situated "the text." With such a challenge, both secondary and primary materials were drawn into discourses in which the traditional secondary and primary relations of "theory" and "application" were also ruptured. From even the most philosophical aspect, "theory" was no longer understood as a "criticism" outside of praxis, but, as for Deleuze, as a "toolbox" of concepts which might act upon certain language functions and other types of actions (5).

Pluridisciplinarity, Interdisciplinarity, and Critical Theory

The poststructural rereading of theory, from that of being a comprehensive intellectual view of a textual object (supported by an equally comprehensive bibliographical proof), to being a critical moment in a more general displacement of the object or text's meaning and scale, has resulted in an expanded conversation between academic discourses, between academic and non-academic discourses, and it has also problematized the notion that a text is an object in need of intellectual translation. Rather than promoting an explanation which supposes to expose and preserve a text's "true" value (as a value of history, genre, or some other institutional metadiscourse), theory opened toward being an explanation which attempted to expand the scale of the text through an engagement with a larger world of discourses, often driven by political or ethical demands (6). Within the confines of the university, this expanded function for theory immediately opened the door to critical projects across disciplinary boundaries.

It may be useful, however, to distinguish two types of cross-disciplinary projects: "pluridisciplinarity" and "interdisciplinarity." Though such a distinction is purely functional, arguably these two terms can lead to different relations toward objects of study and could be viewed in different lights in relation to some poststructuralist projects.

Pluridisciplinary readings could be said to be working with a plurality of disciplines. Such a plurality may result from reading elements of one field upon elements of another field. In cultural studies readings of scientific fields, for example, various aspects of science can be analyzed which are traditionally excluded from the "doing of science," but are indigenous areas of study within humanities disciplines. Several conditions arise in this type of method which need attention. One problem occurs in understanding a discipline that one is maybe not a professional within or maybe not even trained in. It is obvious that the status of not being a professional in a field gives a certain freedom from the prejudices and assumptions which training brings with it, but it is also obvious that such a freedom brings with it responsibilities which are sometimes difficult to judge. Critical pluridisciplinary work brings with it responsibilities for being sensitive to methods of procedure, to writing, publication, bibliography, and discourse within the "other" field, as well as being acutely aware

of its criteria for judgment and truth. The major difficulty in pluridisciplinary readings is not that of being simply critical in relation to a field or a practice, but critically generative so that a critical relationship is established between the fields.

Interdisciplinary readings, as I would like to contrast them with pluridisciplinary readings, are reading which exploit common conceptual, historical, or rhetorical roots between disciplines. Within poststructuralism, for example, the problematic of representation or mimesis lead in certain writings to a mutual questioning of the disciplinary, rhetorical, and categorical boundaries for both literature and philosophy. Interdisciplinary readings read across the disciplines not from one discipline to another, but begin from a position between; they are readings of shared historical or conceptual tropes whereby the boundaries and foundations of both disciplines are brought into question by a critical procedure. As such, interdisciplinary work is difficult to characterize as either departmentally specific or critically limited to a certain directionality of disciplinary reading. Further, since rhetorical tropes in a discipline tend to be culturally and historically generated, and their place within a discourse is often a matter of the discipline expanding by reaching beyond itself into the larger social world, interdisciplinary critiques sometimes expand beyond the bounds of disciplinarity within the university. Likewise, the beginnings and endings of a critical project may be difficult to mark as sites of truth because the critical engagement ultimately encounters the boundaries of "scientific" or "scholarly" analysis embedded in its own critical project. A "clear" or "precise" conclusion becomes tangled within its own methodological assumptions, so that a final critical point is difficult to achieve. Instead, each critical project folds back upon itself, opening the conditions for its own rewriting within the unfoldings of modernity. Interdisciplinary projects, by virtue of being interdisciplinary, and thus, always critically encountering that which lies between disciplines, must ultimately encounter the modernist devices for constructing scientificity and disciplinarity in their own practice. An encounter with these devices is both the ultimate drive and, simultaneously, the limitation which give interdisciplinary projects their singularity, their strategic temporality, and their specific historical value.

As either pluri- or interdisciplinary, cross-disciplinary practices to various degrees may lead to challenging and questioning disciplinary boundaries. For example, as I have just suggested, at their most "radical" interdisciplinary projects may disrupt the epistemological and social assumptions that have defined the modern university as a "scientific" research institute since Humboldt's founding of the University of Berlin (7). Poststructural critiques lead to interdisciplinary impulses and projects by challenging the structural foundations of disciplines and the appropriation of objects within disciplines according to representational claims of truth. This critique of the university opened the institution itself to critical readings which understood it in terms of power, cultural semiotics, and, generally, political alliances, and it resulted in, to various degrees of critical success, new studies and, sometimes, new methodologies.

One of the greatest problematics of method that has recently appeared in literary studies is, as this paper has suggested, that of bibliographical proof. Though bibliographical proof traditionally concerned the type and weight of proof necessary and sufficient for supporting the argument of a paper (or in library studies, for demonstrating an oeuvre or collection of a work), within cross-disciplinary environments the term "bibliographical proof" goes much deeper. There, the basis for deciding the adequacy of bibliographic proof extends as never before to questions of style and method, vocabulary and the acceptability of certain types of statements as disciplines cross over each other or studies emerge. The problem of bibliographical proof raises its head not just in the "bibliography" of a text proper, but throughout the argument of a text. In such environments there always exist possibilities for over generalization and charges of critical "unfaithfulness," "misrepresentation," and a lack of rigor in reading texts, and in a particularly poststructuralist context, there is the danger of readings which selectively open only those textual knots which can be reappropriated within larger thematic structures.

Though it is the hope that cross-disciplinary bibliographical practices will, as critical projects, in part lead to the disruption and subsequent appearance of unseen formal boundaries for disciplines, studies such as Greg Myers', "The Social Construction of Two Biologists' Articles," demonstrate that the social constructs for professional discourses are highly restrictive and are aimed at filtering out "alien" styles, forms, and vocabularies. Though such strong social controls may be posited as oppositional to cross-disciplinary critical projects, the situation is not this simple.

As social constructs, academic discourses can, to some extent, be mediated, and in fact, as Myers points out they are premised upon the very fact of social mediation, though the time-line and the range of mediation are long and conservative. From a rhetorical perspective, this demands that cross-disciplinary studies be acutely aware of the otherness of the "other." This means that such readings must keep in mind a sense of the foundations of disciplines--both historically and institutionally--and it means that sites of critical intervention should be precise as to their points of investigation. The purpose is not to "criticize," but to enter into a critical discourse with a traditional reading vis-à-vis the text.

Readings that fail to enter into a critical discourse with traditional readings, but instead opt to identify the latter reading of the text with "the text itself" neglect not only the complex social textuality of texts, but reduce the nature of critical methodologies to being that of a set of literary techniques. Though such a procedure has the institutional advantage of being easily understood and adopted, it reasserts the privilege and predatory nature of traditional "criticism" over criticism's redefinition within poststructural theory. It also flattens what are often very uneven textual terrains. Herman Rapaport, for example, has referred to the institutionalization of deconstruction in terms of "the reverse and displace technique" (104) and has contrasted this with Derrida's own statements that "deconstruction is neither analysis nor a critique" (109)--that is, deconstruction is neither a derivative exegesis of a text nor is it critically parasitic upon a text.

It would appear that one of the things that is at stake here are different senses of cross-disciplinary respect and rupture, which rest, at least in part, upon different values given to the notion of bibliographical evidence. For evidence may be evidence for an argument's appropriation of the 'other,' or it may be evidence for the existence of an other which is still to be named in and through a reading. In the fusion and original multiplicity of meanings inherent in any textual readings, aporias are not easily done away with, and one can argue that, at least from a deconstructive perspective, critical theory seeks the unfolding of multiple textual openings, rather than their simple closure. Hence, the difference which bibliography does not prove, but is evidence of, can name something which reading "is" not yet--but instead, is that something which unfolds in the space of readings. Evidence could never then be complete, because its function would be to name, in conjunction with the investigation "proper," that which is still, always, being sought in an event of reading. The nature of the "other" in theory determines the meaning and function of bibliographical proof. In turn, the nature of bibliographical "proof" determines the

emergence of the other within acts of theoretical readings. This circularity of effects between the "concept" and the "proof"--between theory and bibliography--argues that what determines the nature of otherness in critical readings is the manner in which both theory and bibliography are posed toward their "object" of study. Such postures will determine the temporal structure, the agency, the knowledge value, and in general, the nature of information which will be allowed to emerge from readings (8).

II. Vocabulary, technology, and critical theory.

If the relation of critical theory and bibliography is brought forward in methodology according to the problematic of evidence, this relation is brought forward in the technology of information access according to the problematic of vocabulary. In this section we will raise the problem of bibliographical access as a critical question of vocabulary on several fronts and according to different technological horizons. For as Poster suggests, database construction and access is a critical question in so far as it occurs along constructed lines and sites of access (9).

"Vocabulary" in information retrieval can refer to words or other signs, such as electronic pulsations or signals. Indeed, source and user vocabularies in electronic texts are of various semiotic types according to the level of information processing one examines (bytes, lower level code, user level code, etc.). But even within more or less "natural language" environments, "vocabulary" can be linguistic, tactile, visual, auditory, etc.. Most generally, vocabulary can be said to be signs or actions which are affective upon someone or something. In information retrieval, vocabulary is usually more or less selected and organized by the user, the source, and in most cases where the source is itself not an organizing tool, a mediating

agency (such as an index, catalog, or listing of subject headings). Thus, "vocabulary" within information retrieval is largely a term for semiotic organization and linkage.

Until the recent efficient use of keyword and natural language processing through digital technology, most vocabulary organizing and linkage, both at the level of vocabulary syntax (e.g., "see also" and other syndetic devices) and at the level of reference to materials, took place through what librarians and information managers refer to as controlled or "closed" vocabularies. One could argue, of course, that all vocabularies are, in practice, relatively controlled due to habits of use, but what this term refers to in Library and Information Science is a tightly controlled and limited vocabulary, where new terms must be derived from a standing vocabulary. Subject headings, such as the Library of Congress Subject Headings, are an example of a closed vocabulary. Closed vocabularies lead to pre-coordinated searching--that is, the access vocabulary appears before the user searches. The closure of the vocabulary allows for a tight conceptual correspondence between the user's wants and the document's informational or material properties (provided, of course, that the user knows or can find the "correct" term for those properties). New additions to this standing vocabulary must almost always be generated at the level of subheadings. New additions at the level of headings are rare because excessive additions would undermine the universal coverage which the vocabulary claims to have over the materials it covers. Classification systems are another example of a closed vocabulary, though now at the level of the order of books in a collection. The significance of Melvil Dewey's decimal classification system was that it allowed for "hospitality" (the addition of new terms) without disrupting the overall classification scheme. This, in turn, for the first time allowed a standardized system of classification throughout relatively different types of libraries--a technology which one could claim, with good reason, made possible the historical development of the public (and, subsequently, any other type of) library system. (That is, a system of libraries which could use each other's standardized resources and could be searched uniformly.)

Currently, a variety of search engines found as front ends to Internet resources, in general, and to the World Wide Web, in particular--functioning on both pre- and post-coordination principles of information retrieval--provide various vistas for critically thinking the relationship between vocabulary and bibliography. Different search engines produce different bibliographical results, and the notion of achieving a complete bibliography through the Internet is very problematic, on at least two fronts. First, since a variety of search engines will yield different results, the question is not so much to construct a complete bibliography, but rather, for the user to construct a bibliography that is optimally functional for the topic he or she is working on at a certain discursive level and according to a certain approach to the material. Second, by definition, the Internet, as a relatively open system is, at least in theory, continuously producing new, relatively unannounced, bibliographical additions. Though this was true in paper-based economies of textual production as well, not only is the scale vastly increased through the Internet's range and its user production features, but various dialogical qualities--through e-mail, voice

transmissions, and eventually through the tactile communication of virtual reality--lead to relatively rapid changes in vocabulary and the meaning of terms. Thus, the notion of assembling a bibliography on term "x" becomes challenged by the possibility that "x" may change in meaning during the process of assembling a bibliography. Interactive environments are a challenge to traditional information retrieval systems which depend, at least on the final level, upon a controlled matching between user and materials of not only terms, but concepts. As we move from the relatively controlled languages which are a consequence of centralized publishing and bibliographical organization to those of Internet resources we encounter an increasing openness and relativity in articulating both the materials for bibliography and the vocabulary for any given bibliography. Within such an environment, a plurality of search strategies and engines, as well as a flexibility in arriving at what is to be considered "bibliography," are necessary. Further, it is obvious that this flexibility must be taken to another, more complex stage within a multimedia environment of written words, sounds, images, and eventually tactile senses.

Traditionally, bibliography is thought to reside as shelves of books, as collections of journals, as lists of documents on a page, or even as the very notions of a collection, oeuvre, or library. The notion of a complete bibliography is made possible by this tradition of a controlled and limited bibliographic production and ordering. In the past, the degree to which access to a given topic was possible was ultimately limited and controlled by institutions of production, such as publishing houses, distributors, bookstores, and libraries. Hypertext documents within open systems, such as Web documents, however, are at least theoretically different because textually they are deterritorialized by being "linkable," and because they emerge within open systems in a relatively uncontrolled manner. These differences lead to calling into question what the notion of a "complete" bibliography could mean in an age of electronic texts in open environments.

It may be difficult to imagine--given how we are used to thinking of bibliographies substantially--but I would propose that bibliography in this new environment resides at the level of links between documents. As Michael Buckland has proposed, collection development in the digital age exists at the level of constructed linkages between documents (10). The bibliographic context for the meaning of individual documents explicitly exists, as never before, in the lines which run between them and connect them (11). In traditional classification, these lines exist in the architecture of the collection, index, or book and control the movements of the user much more determinately. On the Web, on the other hand, these lines move somewhat rhizomatically, wandering place to place, depending not only on the page design, but the user search movements and the search engines which are utilized. The more excessive or "loaded" in meaning a vocabulary is, the more likely it will appear rhizomatically on the Web rather than be easily defined within a group of documents or searches. Thus, somewhat like Freud's early notion of a libidinally charged idea or term, the more "charged" a term is in the social space of the Internet, the greater its chances for displacement (12).

Further, if traditional texts demonstrate themselves through the foundations of their bibliographic sources, in hypertext documents, these sources are, quite literally, virtually infinite. As I have argued elsewhere (along similar lines as J. Hillis Miller), applying the notion of *écriture générale* to the problem of the book and to hypertext, individual texts are always already a multiplicity of other texts, generated according to historical and synchronic lineages, as well as situated within a multiplicity of temporally and spatially changing hermeneutics (13). Electronic hypertext documents make this ever present "bibliographic ontology" explicit by electronically linking textual "internal" elements to "external" sources.

Theoretically, at least, such linkage is inexhaustible. Linkages extend a text to another text which can lead to another text which can lead to another. Further, if electronic hypertext documents exist in a relatively open environment, such as the Internet, their linkages must be defined not only in terms of multiplicity, but in terms of the infinite, because documents are linked up to not simply by existing documents, but by new documents which, as new and unannounced, can be said to develop on the cusp of time. Pierre Lévy calls attention to this event by noting that cyberspace is essentially nomadic and unrepresentable in its totality. This sublimity of cyberspace lies in its architecture, which allows for a model of production, and thus of access and bibliography, which is highly dialogical and which lies contrary to traditional centralized notions of information production. As Lévy has stated in regard to the collective production of information, particularly in cyberspace: "L'intelligence collective n'est pas montrable à la télé" ("Entretien avec Pierre Lévy"). That is to say, television, as a central broadcast medium, can neither represent, nor broadcast as, the collective intelligence. Collective intelligence needs a different medium to occur than what we know today as television.

We could further graft these observations regarding the nature of community and cyberspace onto prior discussions by Nancy and Agamben on the nature of community in general (14), by stating that cyberspace makes evident the unrepresentable nature of community in general. Starting with the notion of *écriture générale* as a general notion for all signifying relations, including that of community, cyberspace today presents the explicit and real occurrence of a "textual" community. Today, cyberspace is not simply a community mediated by language, but is itself a community that literally appears through the spacings of language. In cyberspace the economy of *écriture générale* has moved from being a theoretical description of community to being the only way in which community can exist in the vast expanse of the global.

III. Conclusion: The Future.

By entitling this conclusion, "The Future," I mean to pose the question of the future of critical theory and bibliography in relation to each other, as well as to reiterate two points: first, that as an interventionist theory, critical theory is concerned with

what will become a "future," and second, that bibliography in an age of relatively open and dialogical networks occurs within an unfolding future, making the creative production of reading quite explicit and even public. But further, if critical theory's notion of the future lies with the modern's demand for the "critical" and the "new," such modernity is made present in a very unmodern manner with the sense of "future" involved with open networks. For, both following and displacing these modernist impulses, the "new" appears in the virtual not simply as a temporal statement, but as a spatial one, and further, as a spatiality which can be enfolded in other links or spaces, thus erasing, or at least retemporalizing the "newness" of any statement.

Dialogically, statements are not simply said, one statement following another, but defined and redefined within conversations, so that linear development and "progress" are difficult to see from within these processes. The linear temporal structures of the modernist calls for both opposition and for "the new" are highly problematized once the public space has been globally expanded and includes highly dialogical activities and activities that mix various types of gestures or "media." This is to say that the authenticity which has been traditionally awarded to the "individual voice" must be reconceptualized in the multi-personal, multi-sensory crowd which is quite literally the "Net" or the "Web." The question of "who speaks?" becomes problematized in these electronic spaces for community, on the one hand, by the deterritorialization of subjectivity in the virtual environment and, on the other hand, by the sheer weight of so many speakers. Falling into relatively "chaotic" global environments, the stakes for the question "who speaks?" increase from being that of the classical Enlightenment question of individual rights, to being, moreover, the appearance of communities and languages in their emergence as temporally stable structures, though often embedded--or lost--within larger chaotic, emerging movements. On the Internet, the properties of writing so strongly suggested by the term *écriture générale* explicitly give rise to a written community. On the Net, the turbulent emergence of language itself becomes apparent, leaving behind, for better or worse, the author, in a way never before seen.

This is all to say that academic bibliographic formations are ultimately communities of persons and language. Given the extensive interactive and "multi-affective" apparatus that will increasingly come to construct "the text," the exact nature of bibliography in the age of the electronic text is difficult to predict. The current development of electronic communications, however, indicates that the notion of "bibliography" will no longer be as stable as it has been of recent, and it will speak of not only collections and critical projects, but of affects which are immanent to the nature of whatever text. Perhaps soon we will no longer think of bibliography primarily in terms of support or proof, but in terms of the expressive and expansive relations a text has in the world around us. Citing Patrick Basin, adding only that his notion of "text" be understood in the widest sense:

These new possibilities favor an extensive reading, the comparison of diverse texts and viewpoints, multidisciplinary transversality, the "conversation" between readers. They are beginning to have a considerable impact as much on the

individual mechanism of appropriation of texts as on the sociology of reading. They bring forth a new mental landscape that gives those who live there the impression of being much more immersed, collectively, in the space of a never-ending book rather than confronted, alone, with the two-dimensionality of the printed page. (161)

The temporal sense which results from this spatial distribution--of an ever changing present which is never quite present, but changing and mutating and often hidden--is unknown in modernity's sense of the avant-garde or in its sense of "progress" in general, nor is it known in the ironic plays of pastiche and juxtaposition in some versions of postmodernism. But, it seems the conditions of a planet. This may seem an odd statement to end an essay on academic bibliography with, but what after all has bibliography really been, but a textual attempt to speak of a complex historical and social ecology which makes possible--which gives itself as an unrepayable debt to--the highly fragile moment of a text's appearance? Given the expanded notion of "text" which is suggested by the notion of *écriture générale* and which is explicitly present in the virtuality of cyberspace, and given the literally infinite nature of that space as a continually unfolding and enfolding phenomenon of affects, it may not be too much to utilize such an expansive and sublime trope as "the planet" as a figure for what, even today, may lie behind the term, "bibliography." How literature disciplinarity will engage this, how it will stabilize such expanse and vocabularic excess into notions of proof, validity, or authority, through what techniques it will construct its authorized public space in, and from out of, a highly complex, even infinite, debt--how it will codify "bibliography" in its "scientific" and therefore, modernist sense of "future"--is difficult to predict. The original multiplicity of texts in terms of both their sources and their meanings have for some time posed this problem in regard to "proof" in the text, but never so literally nor with such great volume and weight nor as so deeply explicit within the very body of the text as it will soon do.

Endnotes

1 . Documentation was a European movement in what we now refer to as Library and Information Science which stressed the systematic nature of documents and the interconnection of human, textual, and mechanical systems in the process of information retrieval, flow, and knowledge production. As such, it differed from both the Anglo-American library orientation before the Second World War which stressed a historiographical approach toward reading and information access and the Anglo-American information retrieval approach which dominated the field after the Second World War. Despite the predominance of the Anglo-American model today, the legacy of documentation still exists, though minimally, in such organizations as the International Federation for Information and Documentation (FID).

2. "The Status of Evidence: A Roundtable."

3. Total Syntax, chapter 7 (191-223).

4. Heather Dubrow's comments in the MLA "Roundtable" (29) cited above regarding the use of footnotes in her early training to provide comprehensive proof versus their current use within a critical project are partly a result of the poststructural critique. In regard to bibliography, however, we can already see a reaction to the historical approach in literature (of which Dubrow's early training in comprehensive footnote technique is, arguably, a part of) in Wellek and Warren's *Theory of Literature*. There, in the sixth chapter entitled, "The Ordering and Establishing of Evidence," Wellek and Warren argue for a functional, rather than complete bibliography for students of literature. Though certainly there is a shift from an indicative to a performative function for proof in the recent history of literature bibliography, perhaps it is a philosophical question whether the shift from "complete" bibliography toward a "functional" bibliography truly indicates a change in the criteria that bibliography constitutes "proof" for a text. The end of my paper poses, as a still to be answered question, how the discipline of literature studies will engage a sense of bibliographical debt which is more explicitly infinite than it has been. In other words, how will literary studies discipline a sense of time and space evident in electronic bibliography which is so infinite as to appear as a debt which the text owes rather than as a "proof" for its validity or authenticity?

5. Deleuze's notion of a toolbox is articulated in his discussion with Foucault entitled, "Intellectuals and Power" (*Language, Counter-memory, Practice*, 208).

6. Derrida, for example, attempts to articulate this response of deconstruction to a demand or call for justice, within his essay, "Force of Law: the Mystical Foundation of Authority." The notion that deconstruction is an ethical response to a call or demand made upon it by political, social, historical, and institutional forces, as well as by language itself, is brought out in much of Derrida's later work.

7. See Samuel Weber, "The Limits of Professionalism" and "The Vaulted Eye: Remarks on Knowledge and Professionalism"; Jacques Derrida, "The Principle of Reason: the University in the Eyes of Its Pupils"; and J. Hillis Miller, "The University of Dissensus."

8. J. Hillis Miller, in his paper, "The University of Dissensus," engages some of these questions in terms of the modern university and a destination for it outside of Humboldt's cultural-political *Bildung*. Miller is careful to write of different senses of "otherness" in what is called "theory" which may indicate different types of turns in regard to Humboldt's founding model.

9. Mark Poster, *The Mode of Information: Poststructuralism and Social Context*, chapter 3.

10. Michael Buckland, "What Will Collection Developers Do?"

11. Carla Hesse expresses this wonderfully in her essay, "Books in Time": "In fact, [in the "forms of knowledge of the electronic library"] knowledge is no longer conceived and construed in the language of forms at all ('bodies of knowledge,' or a 'corpus,' bounded and stored), but rather as modes of thought, apprehension, and expression, as techniques and practices. Metaphors of motion abound.... Knowledge is no longer that which is contained in space, but that which passes through it, like a series of vectors, each having direction and duration yet without precise location" (31). I will only add that what Hesse describes as "metaphor" is quite literal within the virtuality of electronic space.

12. Though the topology of cyberspace leads to an infinite expanse of language, popular writings on cyberspace sometimes confuse this "freedom" with the "freedom" of the individual writer or researcher in cyberspace. For the researcher, as I have suggested, this infinite expanse creates problems for information retrieval. Information retrieval works best with defined domains of language, for it is ultimately based on the matching of information needs between user and document. Cyberspace, however, charts itself more rhizomatically, expanding out of non-centralized and displaced sites of production. The result is, at least from the aspect of traditional information retrieval, a somewhat unwieldy expansion of vocabulary. An environment where multiple vocabularies are the explicit ontological condition poses challenges to traditional information retrieval strategies and search engines, multiplying the challenges that already existed in relatively closed retrieval environments. User query based relevancy searches in search engines such as the contemporary Internet search engine Excite, for example, in part compensate for changes in the meaning of vocabulary by sorting materials according to various algorithms which gradually define a concept through repeated user-queries. However, when new concepts develop from older vocabulary in other fields or develop through metaphorical relationships between fields or because of ambiguity or contestation over terms across various social spaces, both keyword indexes and subject lists encounter difficulty in contextualizing the "new" term properly.

13. See my essay, "Paul Otlet's Book and the Writing of Social Space," and also the conclusion of J. Hillis Miller's, "The Ethics of Hypertext."

14 See Jean-Luc Nancy, *The Inoperative Community* and Giorgio Agamben, *The Coming Community*.

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