Distant Reading, Computational Stylistics, and Corpus Linguistics

The Critical Theory of Digital Humanities for Literature Subject Librarians

David D. Oberhelman

FOR LITERATURE librarians who frequently assist or even collaborate with faculty, researchers, IT professionals, and students on digital humanities (DH) projects, understanding some of the tacit or explicit literary theoretical assumptions involved in the practice of DH can help them better serve their constituencies and also equip them to serve as a bridge between the DH community and the more traditional practitioners of literary criticism who may not fully embrace, or may even oppose, the scientific leanings of their DH colleagues. I will therefore provide a brief overview of the theory

^{*} Literary scholars' opposition to the use of science and technology is not new, as Helle Porsdam has observed by looking at the current debates over DH in the academy in terms of the academic debate in Great Britain in the 1950s and 1960s between the chemist and novelist C. P. Snow and the literary critic F. R. Leavis over the "two cultures" of science and the humanities (Helle Porsdam, "Too Much 'Digital,' Too Little 'Humanities'? An Attempt to Explain Why Humanities Scholars Are Reluctant Converts to Digital Humanities," Arcadia project report, 2011, DSpace@Cambridge, www.dspace.cam.ac.uk/handle/1810/244642).

behind the technique of DH in the case of literature—the use of "distant reading" as opposed to "close reading" of literary texts as well as the use of computational linguistics, stylistics, and corpora studies—to help literature subject librarians grasp some of the implications of DH for the literary critical tradition and learn how DH practitioners approach literary texts in ways that are fundamentally different from those employed by many other critics.† Armed with this knowledge, subject librarians may be able to play a role in integrating DH into the traditional study of literature.

Attempts to define DH in the modern academy tend to focus on DH as more of a series of practices and methods that utilize computer technology to examine objects studied by humanities such as literary texts.[‡] As Kathleen Fitzpatrick, Director of Scholarly Communication for the Modern Language Association, has defined DH, it is "a nexus of fields within which scholars use computing technologies to investigate the kinds of questions that are traditional to the humanities, or, as is more true of my own work, ask traditional kinds of humanities-oriented questions about computing technologies." The *Digital Humanities Manifesto 2.0* issued by several UCLA researchers maintains that DH is "an array of convergent practices" in which print is no longer the privileged medium of knowledge and "digital tools, techniques, and media have altered the production and dissemination of knowledge in the arts, humanities, and social sciences." DH emerged out of what had been loosely called humanities computing starting in the 1940s and 1950s and extending through the early TEI

[†] There have not been many studies of how literature librarians can benefit from learning the basics of literary theory (apart from overall studies of the value of understanding the information needs of literary scholars), but Stephanie M. Mathson has argued that understanding and applying literary theory such as Wolfgang Iser's reader-response theory to librarian/patron service encounters can be beneficial (Stephanie M. Mathson, "Engaging Readers, Engaging Texts: An Exploration of How Librarians Can Use Reader Response Theory to Better Serve Our Patrons," *Library Philosophy and Practice* [August 2011]: 589, http://digitalcommons.unl.edu/libphilprac/589).

[‡] For this study I will confine my exploration of DH projects to those dealing with literary topics that are textual in nature. There are many that examine the geography of regions associated with authors, historical content, economic data in literary texts, and many other aspects, but here I am concerned with projects that chiefly focus on the language and textual analysis of literary works.

encoding initiatives of the Internet age³ and as such is usually described in terms of its practical applications. Central to most definitions of DH is the basic tenet that DH is a dynamic process or methodology of using digital tools to study the humanities more than a systematic theory of how to study the humanities or, in the case of literature, how to study literary texts. Yet to understand the role of DH in literature departments, it is necessary to explore the relationship between DH and the critical theories that inform how literary scholars approach texts. Although DH may appear to be more practice than theory, it is closely related to new theoretical trends with which literature librarians should become familiar so they can better work with their patrons.

Literary Theory in the Twentieth Century: A Brief Overview

Literary critical theory, which investigates the aesthetic, philosophical, political, and cultural assumptions underlying various techniques of reading and interpreting literary texts, has been an important aspect of study in English, foreign language, and comparative literature programs in American universities. Indeed, scholars and students of literature, including literature librarians who work with them, have since the midtwentieth century had to contend with a multitude of theoretical schools of thought or the so-called "isms" (feminism, Marxism, structuralism/poststructuralism, etc.), and debates over theories of reading have been featured prominently in courses, conference papers, and publications.

[§] The loose and somewhat informal process by which DH received its name is indicative of its practice-based and experimental foundations; it was a term suggested by John Unsworth in coming up with a title for the 2004 Blackwell *Companion to Digital Humanities* because the editors and publisher wanted to avoid *humanities computing* or *digitized humanities* (Matthew G. Kirschenbaum, "What Is Digital Humanities and What's It Doing in English Departments?" *ADE Bulletin*, no. 150 [2010]: 55–61).

^{**} For concise, helpful overviews of history and concepts underlying the different schools of literary theory, see Terry Eagleton, *Literary Theory: An Introduction* (Minneapolis: University of Minnesota Press, 1983) and Paul H. Fry, *Theory of Literature*, Open Yale Course Series (New Haven, CT: Yale University Press, 2012).

Many academics regard DH as an alternative to the theoretical, qualitative approaches to literature, one which brings the humanities more in line with the quantitative methods of other fields such as the social sciences and STEM disciplines. As Patricia Cohen has commented in a 2010 New York Times arts column, digital humanists often argue that data and big data sets should replace the competing political or philosophical systems as the key to approaching the humanities. 4 Literary theory, some DH proponents contend, is too narrow and inward-focused in its perspective on texts and therefore misses the big picture that DH methods can sketch by means of technology. Despite the insistence of DH practitioners that they are more concerned with practice than with theorizing about it, there are some fundamental theoretical presuppositions that inform the methods employed in the DH field, particularly in its literary application presuppositions that in some way represent a theoretical paradigm shift of sorts for many critics that may explain why there is some hesitation about DH among humanities scholars (other than its obvious use of computers and scientific principles).

Central to the theory behind DH is the somewhat controversial theory the Italian-born critic Franco Moretti has termed "distant reading." In his theoretical texts and DH projects at the Stanford Literary Lab he co-founded with Matthew Jockers, Moretti articulates and models a framework for studying literature that breaks from over fifty years of theoretical tradition of close scrutiny of single texts or a delimited canon of literary works. I will offer a short summary of the theories based on close reading first, and then examine some of Moretti's theoretical pronouncements to illustrate how the "big data" approach DH takes to literature stems from a movement away from the privileging of close analysis of a single or limited group of texts.

From Close Reading to Distant Reading

Literary studies in the early decades of the twentieth century often focused on literary history, situating authors and texts in movements and establishing the canon of British, American, and other literatures. By the middle of the century, though, a group of Anglo-American literary critics such as I. A. Richards, William Empson, John Crow Ransom, and Cleanth Brooks theorized that the literary text should be studied as an object of art with laws governing its aesthetic integrity. This formalist school, which looked at how literary meaning is conveyed by or is created by the form of the text (such as the poem), became known as the New Criticism, and it ushered in a theory of close reading that would, despite changes and the advent of French philosophical and linguistic theory in the latter decades of the century, become the basic theoretical model that several generations of critics and students in American literature classes learned. Perhaps the best example of their theoretical notions appears in Brooks's 1947 collection The Well Wrought Urn,5 a volume containing essays that give detailed close readings of poems by John Donne, John Keats (whose "Ode on a Grecian Urn" gives the book its title), Shakespeare, and others. The New Critical technique of close reading, which outlines the carefully balanced tensions in meaning held together by symmetry in the poetic form, reflects the theoretical premise that the critic should give a detailed, almost microscopic analysis of the literary text to find its meaning. Subsequent generations of American literary critics, many of whom were trained in close reading, argued that the New Critics divorced literary works from their historical or cultural contexts and thereby ignored important layers of meaning, but the basic belief that texts should be closely examined in terms of their own structure or logic persisted.

The appearance of French schools of literary criticism such as the structuralism of Roland Barthes, a school derived from the linguistic study of signs or semiotics of Ferdinand de Saussure and the anthropological study of myth as a system by Claude Lévi-Strauss, marked a point at which literary critics began to look at larger assemblages of texts, but close reading continued to be the dominant form of critical engagement with texts. In the 1970s and 1980s, deconstruction, the poststructuralist theory of reading texts based on the philosophical work of Jacques Derrida, had critics read for gaps, aporias (irresolvable contradictions), or traces of other concepts within their seemingly well-wrought tension of opposites that unhinge the integrity of the textual construct. For deconstructionist critics there is no

"outside the text," meaning all ideas and concepts are bound to the faulty vehicle of (written) language that conveys them. He Although Derridan theory does not look just at one book—his notion of the text covers many writings beyond the covers of one book—its central premise is that the reader must turn a critical gaze to one instance of text at a time and read it closely. Although deconstruction represented a great departure from the New Critics' view that literary works are perfect, balanced objects of art, it, as Jonathan Culler and others have noted, takes some of the New Critics' approaches to reading to their ultimate conclusion, and both theories are predicated upon an intense, microscopic attention to, or perhaps dissection of, a particular text or texts. In that sense, it is not surprising that American literary critics in particular picked up many of the deconstructive processes of close reading much like they had embraced the New Criticism decades earlier.

Other schools of literary theory emerged in that period that regarded close reading of texts to be too constraining, divorcing them from the culture and the political institutions that created them. Marxist theory, feminist theory, cultural materialism, and other more engaged schools also appeared, some using psychoanalysis, political philosophy, or the discourse analysis of philosopher Michel Foucault, but in the American university setting, the close reading of texts in the literary canon, even if that canon was changed, reinvented, or expanded, was still dominant. Indeed, many of these schools, or "isms" as they are often somewhat dismissively labeled, still rely upon a close encounter with specific texts, often read in terms of different, interdisciplinary perspectives.

The dominance of close reading has been challenged in the twenty-first century, however, by the work of the DH circles that study vast assemblages of texts rather than home in on a single text. Franco Moretti, a Marxist scholar of the European novel born and trained in Italy prior to a distinguished academic career at Columbia and then Stanford University, has become the critical theorist most associated with the rise of DH

^{††} Derrida's famous aphorism in the original French is *il n'y a pas d'hors-texte*—literally, there is no outside-text, no meaning that transcends the imperfect text that expresses it (Jacques Derrida, *De la grammatologie* [Paris: Les Éditions de Minuit, 1967], 227).

and is the figure who best articulates the radical change in the approach to literary texts that the practice of DH entails. His concept of "distant reading" stands in marked opposition to the tradition of close reading, and his championing of a quantitative approach to texts that, in essence, does not involve having an individual critic read them at all gives a theoretical foundation to the disparate projects and data analyses that fall under the general moniker of DH.

Moretti's six books and numerous articles on different national traditions of the novel, the history of publishing, and related fields all reflect his conviction that literary scholars should not study individual great novels or even a narrow canon of novels, which is inevitably selective and omits the vast majority of the artistic output of any given literary time period, but rather should utilize computers to study large numbers of novels to gain a broader understanding of the genre and produce a better literary history. His seminal essay "Conjectures on a World Literature," reprinted in Moretti's award-winning 2013 collection Distant Reading, outlines the broad strokes of his critical theory of reading.7 In it, Moretti questions whether scholars of literature should continue the vain task of trying to become well-read, for they will never be able to read but a miniscule, highly selective portion of the literary output of a given culture. Close reading may even be, by extension, an exercise in futility for Moretti, for picking one text to analyze or even deconstruct means hundreds of thousands have been left unread, so general conclusions about the concerns or thematic patterns in a literary age cannot legitimately be drawn. He changes the critical lens by rejecting the microscopic close reading of a single text and, instead, regards very large constellations of many literary works, which he describes a "planetary system," requiring a macroscopic approach.8 The sheer number of texts planets with their satellites and other bodies—defies the ability of any one critic to read them all, so Moretti calls for a new approach using alternate means to process and analyze the vast quantity of now-forgotten or unread books produced in a period or national literature. Readers must look at the big picture to discern how this system operates, and thus distant reading gives a broader perspective on literary interpretation. As a result, Moretti hearkens back to the early theoretical aim to map out the historical contours of *Weltliteratur*, "world literature,"\" recalling the style of literary history of the pre–New Critical era, albeit using the scientific principles of the twenty-first century to survey and categorize numbers of books that would have been impossible for the earlier literary historians to read and synthesize.

Moretti's 2005 book Graphs, Maps, and Trees explains how his theory of distant reading can construct a large-scale literary history from models derived from quantitative history (the graphs), geography (maps), and evolutionary theory (trees).9 Here he shows his debt to the French Marxist Annales school of historiography, which focuses not on extraordinary events but on the longue durée, or long duration, of gradual historical change coming from the bottom up rather than from the great figures down. Here, as in other works on the novel in particular, Moretti uses computer data and digitized texts to construct graphical charts out of data from several thousand texts to trace massive patterns in book history, in the development of genres, titles, characters, and other features of novels in various national literature, all rendered in graphs, charts, and other graphical forms. He has extended this work into the DH projects he has worked on for the Stanford Literary Lab (http://litlab.stanford.edu) such as Network Theory, Plot Analysis, a comparison of dramatic patterns from over 300 Western plays, and "The Emotions of London," a project to create an emotional map of London derived from characters' emotional states in an array of novels from the 1700s to the 1800s. 10 Here the importation of social science methods of data manipulation into the literary critical domain becomes evident.

Moretti's vision of distant reading and his approach to literary study has been criticized for its faith in a scientific method, most notably by fellow Marxist scholar Christopher Prendergast.¹¹ The noted critical commentator Alan Liu has pointed out in a critique of Moretti and DH that even if we accept distant reading as a theoretical paradigm, digital humanists still need to formulate a "close reading 2.0" or "a method of micro-analysis in an era of big humanities" —some provision for approaching individual texts while still regarding them as parts of big planetary systems. Other theorists,

nevertheless, have embraced Moretti's big data concept of literary history and find his approach liberating, an invitation to move beyond the fear of not having read "everything" (or even enough) that so frequently haunts literary scholars, and consequently allows them to seek out new ways to approach the enormity of past and present literary output. The DH critic Stephen Ramsay, noting how critics today are faced with the old dilemma, so many books, so little time, posits what he dubs the "hermeneutics of screwing around" to characterize how the great proliferation of online texts in the Internet age allows readers to engage in interpretive activity by just dipping in, following hyperlink trails, and exploring the various pathways through the mazes of webpages.¹³ Moretti and his followers thus lay a foundation for DH practice that signals a departure from the literary critical theories based upon close reading and other theories that depend upon narrower canons of works rather than the enormous body of poems, plays, novels, and other literary output, most of which is now lost or forgotten.

Stylistics and Corpora

The other major theoretical foundation upon which DH rests is one that is largely derived not from literary studies per se, but from the importation of quantitative, especially computational linguistic models into the realm of literature. Language study and linguistics have long played a key role in literary criticism—and in late-twentieth-century theoretical circles, Saussure and other anthropological linguists were commonly read—but much of the data analysis that goes into the study of grammar, stylistics, and other aspects of linguistics has not been traditionally used for examining literary texts. Stylistics, the study of literary style (for author studies, period studies, and other applications), is one area in which some of the technical procedures of linguistics have been brought to bear upon creative texts and has gained greater importance with the rise of DH and its ability to let critics study the language of a text in a nonlinear fashion (as they must be in reading a printed book). In his 1986 book *Linguistic Criticism*, the noted British linguist Roger Fowler called for the application of linguistic stylistic

analysis, especially the quantitative analysis of elements of language, to literary texts, arguing that there is no inherent distinction between "ordinary" uses of language and literary usage.^{‡‡}

Linguistic studies of literary stylistics are frequently associated with analyses of a linguistic "corpus" or large, usually digital, collection of texts as data to be scrutinized. Douglas Biber and Randi Reppen (2012) outline how "corpus stylistics" makes use of computational methods and computer technology to subject literary texts, either works of one author or a larger constellation of texts in a corpus, to lexical, grammatical, and other linguistic investigation.¹⁴ DH projects frequently create corpora for study and thus ally themselves with the computational linguists, who can provide a vocabulary and a theoretical underpinning for their work on stylistics. DH studies utilizing corpus stylistics can concentrate upon single authors, looking at their texts as whole body, or in distant reading fashion tackle the stylistic categories of a big array of digital texts much like the immense corpora of natural language gathered by linguists. One representative DH project currently under development that brings together the various strands of linguistic theory is the Tolkien Corpus Project, in which Robin Reid, an English faculty member specializing in literary stylistics, and Christian Hempelmann, a computational linguist, are in the process of creating a corpus database of the works of J. R. R. Tolkien to subject to corpus stylistics analysis. §§ Such work will be able to extend the research on Tolkien's style by putting his texts into a new framework for analysis and thus using computational linguistics to explore his syntax, grammar, and other elements, parsing the vast number of words and sentences of Tolkien

^{‡‡} Roger Fowler, *Linguistic Criticism* (Oxford: Oxford University Press, 1986). For an early application of linguistic theory to prose literary texts, see also Geoffrey Leech and Mick Short, *Style in Fiction: A Linguistic Introduction to English Fictional Prose*, English Language Series (London: Longman, 1981).

^{§§} Robin Anne Reid and Christian Hempelmann, "The Tolkien Corpus Project," posted April 8, 2013, on the Tolkien Scholarship Project website, http://earendel.net/?q=node/4. Reid has also published some detailed analyses of Tolkien's style using the principles of linguistic stylistics and is extending her work by the development of a true corpus of many of Tolkien's writings to facilitate a larger, big-data study of his stylistics (Robin Anne Reid, "Mythology and History: A Stylistic Analysis of The Lord of the Rings," Style 43, no. 4 [Winter 2009]: 517–38).

into units that can be scrutinized. In their collection *Digital Literary Studies*, David L. Hoover, Jonathan Culpepper, and Kiernan O'Hallaran describe their corpus stylistics projects on Shakespeare, Henry James, Wilkie Collins, and other, larger groupings of novelists. They make the case that corpus stylistics is a linguistic theory that is, compared to other linguistic theories, easy to master and light on jargon; they even provide a glossary of terms at the end of the volume. These approaches demonstrate how computational linguistics and corpus stylistics can provide a theoretical support digital humanists can turn to in their mining of the textual data they have amassed.

Conclusion: Literature Librarians and Theory

Moretti's theories of distant reading and computational corpus linguistics both represent realignments in the critical approach to literary texts and a movement away from the concentrated attention to the interplay of language, its structures, and their breakdowns in a limited number of texts toward a much grander playing field in which big quantities of textual data are now the focus of study. These theories come into play in various forms for digital humanists collecting and analyzing their own databases, assemblages of texts, or other electronic objects. Literature subject librarians are generally trained in the social science and computer-based data analysis techniques of the LIS field with its own rules for gathering and interpreting information sets, but they also pay close attention to bibliographic detail in working with texts. In that sense, subject librarians, who frequently must shift between library jargon or theories of patrons' information-seeking behavior and the language of scholars or students as they conceptualize their own research methods, are adept at code switching—to use the terms Thomas Bartscherer and Roderick Coover employ to characterize interdisciplinary dialogue in the DH world¹⁶—so they may be able to promote code switching among their patrons who have their own divergent theoretical approaches to literature.

Thus understanding some of the literary critical theory behind DH and how it embodies a different relationship between critic and text can be very beneficial to subject specialists, for they can help serve as

intermediaries or even interpreters who stand between the DH scholars and practitioners and their world of planetary systems and big data and the other literary scholars trained in the "isms" and focused on the close reading of texts, seeking to find ways to bridge the divide between these scholars as they do with collection- and item-level bibliographic control. By knowing the respective theoretical universes from which their various constituencies come, subject librarians can help find ways to encourage the ongoing integration of DH in its many forms into the literature and language departments with which they work.

Notes

- Kathleen Fitzpatrick, "The Humanities, Done Digitally," in *Debates in the Digital Humanities*, edited by Matthew K. Gold (Minneapolis: University of Minnesota Press, 2012), 12.
- 2. Digital Humanities Manifesto 2.0, posted June 22, 2009, on Humanities Blast (blog) by Todd Presner, 2, www.humanitiesblast.com/manifesto/Manifesto_V2.pdf.
- Susan Hockey, "The History of Humanities Computing," in A Companion to Digital Humanities, edited by Susan Schreibman, Ray Siemens, and John Unsworth (Oxford: Blackwell, 2004), www.digitalhumanities.org/companion.
- 4. Patricia Cohen, "Digital Keys for Unlocking the Humanities' Riches," *New York Times*, November 10, 2010, C1.
- Cleanth Brooks, The Well Wrought Urn: Studies in the Structure of Poetry (New York: Harcourt, Brace and World, 1947).
- Jonathan Culler, On Deconstruction: Theory and Criticism after Structuralism (Ithaca, NY: Cornell University Press, 1982).
- 7. Franco Moretti, "Conjectures on a World Literature," in *Distant Reading* (London: Verso, 2013), 43-62.
- 8. Ibid., 45.
- 9. Franco Moretti, Graphs, Maps, and Trees (London: Verso, 2005).
- Franco Moretti, Network Theory, Plot Analysis, pamphlet 2 (Stanford, CA: Stanford Literary Lab, May 1, 2011), http://litlab.stanford.edu/LiteraryLabPamphlet2.pdf;
 "The Emotions of London," Stanford Literary Lab website, Projects page, accessed December 22, 2014, http://litlab.stanford.edu/?page_id=13.
- 11. Christopher Prendergast, "Evolution and Literary History: A Response to Franco Moretti," *New Left Review*, no. 34 (July–August 2005), http://newleftreview.org/ II/34/christopher-prendergast-evolution-and-literary-history.
- 12. Alan Liu, "The State of Digital Humanities: A Report and Critique," *Arts and Humanities in Higher Education* 11, no. 1–2 (February/April 2012): 26.
- 13. Stephen Ramsay, "The Hermeneutics of Screwing Around; or What You Do with a Million Books," in *Pastplay: Teaching and Learning History with Technology*, edited by Kevin Kee (Ann Arbor: University of Michigan Press, 2014), 111–120.

- Douglas Biber and Randi Reppen, "Corpus Linguistics," in Corpus Linguistics, edited by Douglas Biber and Randi Reppen (London: Sage, 2011), xix-vliii.
- David L. Hoover, Jonathan Culpepper, and Kieran O'Hallaran, *Digital Literary Studies: Corpus Approaches to Poetry, Prose, and Drama*, Routledge Advances in Corpus Linguistics (New York: Routledge, 2014).
- Thomas Bartscherer and Roderick Coover, "Introduction," in Switching Codes: Thinking through Digital Technology in the Humanities and the Arts, ed. Thomas Bartscherer and Roderick Coover (Chicago: University of Chicago Press, 2011), 1–11.

Bibliography

- Bartscherer, Thomas, and Roderick Coover. "Introduction." In *Switching Codes: Thinking through Digital Technology in the Humanities and the Arts*, edited by Thomas Bartscherer and Roderick Coover, 1–11. Chicago: University of Chicago Press, 2011.
- Biber, Douglas and Randi Reppen, eds. Corpus Linguistics. London: Sage, 2011.
- Brooks, Cleanth. *The Well Wrought Urn: Studies in the Structure of Poetry*. New York: Harcourt, Brace & World, 1947.
- Cohen, Patricia. "Digital Keys for Unlocking the Humanities' Riches." *New York Times*, November 10, 2010, C1.
- Culler, J. D. On Deconstruction: Theory and Criticism after Structuralism. Ithaca, NY: Cornell University Press, (1982).
- Derrida, Jacques. De la grammatologie. Paris: Les Éditions de Minuit, 1967.
- Digital Humanities Manifesto 2.0. Humanities Blast (blog), posted June 22, 2009 by Todd Presner. www.humanitiesblast.com/manifesto/Manifesto_V2.pdf.
- Eagleton, Terry. *Literary Theory: An Introduction*. Minneapolis: University of Minnesota Press, 1983.
- Fitzpatrick, Kathleen. "The Humanities, Done Digitally." In *Debates in the Digital Humanities*, edited by Matthew K. Gold, 12–15. Minneapolis: University of Minnesota Press, 2012.
- Fowler, Roger. Linguistic Criticism. Oxford: Oxford University Press, 1986.
- Fry, Paul H. *Theory of Literature*, Open Yale Course Series. New Haven, CT: Yale University Press, 2012.
- Hockey, Susan. "The History of Humanities Computing." In *A Companion to Digital Humanities*, edited by Susan Schreibman, Ray Siemens, and John Unsworth. Oxford: Blackwell, 2004. www.digitalhumanities.org/companion.
- Hoover, David L., Jonathan Culpepper, and Kieran O'Hallaran. *Digital Literary Studies: Corpus Approaches to Poetry, Prose, and Drama*, Routledge Advances in Corpus Linguistics. New York: Routledge, 2014.
- Kirschenbaum, Matthew G. "What Is Digital Humanities and What's It Doing in English Departments?" *ADE Bulletin*, no. 150 (2010): 55–61.
- Leech, Geoffrey, and Mick Short. Style in Fiction: A Linguistic Introduction to English Fictional Prose, English Language Series. London: Longman, 1981.
- Liu, Alan. "The State of Digital Humanities: A Report and Critique." *Arts and Humanities in Higher Education* 11, no. 1–2 (February/April 2012): 8–41.

- Mathson, Stephanie M. "Engaging Readers, Engaging Texts: An Exploration of How Librarians Can Use Reader Response Theory to Better Serve Our Patrons." *Library Philosophy and Practice* (August 2011): 589. http://digitalcommons.unl.edu/libphilprac/589.
- Moretti, Franco. Distant Reading. London: Verso, 2013.
- Graphs, Maps, and Trees: Abstract Models for a Literary History. London: Verso, 2005.
- Network Theory, Plot Analysis, pamphlet 2. Stanford, CA: Stanford Literary Lab, May 1, 2011. http://litlab.stanford.edu/LiteraryLabPamphlet2.pdf.
- Porsdam, Helle. "Too Much 'Digital,' Too Little 'Humanities'? An Attempt to Explain Why Humanities Scholars Are Reluctant Converts to Digital Humanities." Arcadia project report, 2011. DSpace@Cambridge. www.dspace.cam.ac.uk/handle/1810/244642.
- Prendergast, Christopher. "Evolution and Literary History: A Response to Franco Moretti." *New Left Review*, no. 34 (July–August 2005). http://newleftreview.org/II/34/christopher-prendergast-evolution-and-literary-history.
- Ramsay, Stephen. "The Hermeneutics of Screwing Around; or What You Do with a Million Books." In *Pastplay: Teaching and Learning History with Technology*, edited by Kevin Kee, 111–20. Ann Arbor: University of Michigan Press, 2014.
- Reid, Robin Anne. "Mythology and History: A Stylistic Analysis of *The Lord of the Rings*." Style 43, no. 4 (Winter 2009): 517–38.
- Reid, Robin Anne, and Christian Hempelmann. "The Tolkien Corpus Project." Posted April 8, 2013, on the Tolkien Scholarship Project website. http://earendel.net/?q=node/4.
- Stanford Literary Lab. "The Emotions of London." Stanford Literary Lab website, Projects page. Accessed December 22, 2014. http://litlab.stanford.edu/?page_id=13.