

Literature, Digital Humanities, and the Age of the Encyclopedia

Gunther Martens
Ghent University

Follow this and additional works at: <https://docs.lib.purdue.edu/clcweb>

 Part of the [American Studies Commons](#), [Comparative Literature Commons](#), [Education Commons](#), [European Languages and Societies Commons](#), [Feminist, Gender, and Sexuality Studies Commons](#), [Other Arts and Humanities Commons](#), [Other Film and Media Studies Commons](#), [Reading and Language Commons](#), [Rhetoric and Composition Commons](#), [Social and Behavioral Sciences Commons](#), [Television Commons](#), and the [Theatre and Performance Studies Commons](#)

Dedicated to the dissemination of scholarly and professional information, [Purdue University Press](#) selects, develops, and distributes quality resources in several key subject areas for which its parent university is famous, including business, technology, health, veterinary medicine, and other selected disciplines in the humanities and sciences.

CLCWeb: Comparative Literature and Culture, the peer-reviewed, full-text, and open-access learned journal in the humanities and social sciences, publishes new scholarship following tenets of the discipline of comparative literature and the field of cultural studies designated as "comparative cultural studies." Publications in the journal are indexed in the Annual Bibliography of English Language and Literature (Chadwyck-Healey), the Arts and Humanities Citation Index (Thomson Reuters ISI), the Humanities Index (Wilson), Humanities International Complete (EBSCO), the International Bibliography of the Modern Language Association of America, and Scopus (Elsevier). The journal is affiliated with the Purdue University Press monograph series of Books in Comparative Cultural Studies. Contact: [<clcweb@purdue.edu>](mailto:clcweb@purdue.edu)

Recommended Citation

Martens, Gunther. "Literature, Digital Humanities, and the Age of the Encyclopedia." *CLCWeb: Comparative Literature and Culture* 15.3 (2013): [<https://doi.org/10.7771/1481-4374.2241>](https://doi.org/10.7771/1481-4374.2241)

This text has been double-blind peer reviewed by 2+1 experts in the field.

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

This is an Open Access journal. This means that it uses a funding model that does not charge readers or their institutions for access. Readers may freely read, download, copy, distribute, print, search, or link to the full texts of articles. This journal is covered under the [CC BY-NC-ND license](#).

CLCWeb: Comparative Literature and Culture, the peer-reviewed, full-text, and open-access learned journal in the humanities and social sciences, publishes new scholarship following tenets of the discipline of comparative literature and the field of cultural studies designated as "comparative cultural studies." In addition to the publication of articles, the journal publishes review articles of scholarly books and publishes research material in its *Library Series*. Publications in the journal are indexed in the Annual Bibliography of English Language and Literature (Chadwyck-Healey), the Arts and Humanities Citation Index (Thomson Reuters ISI), the Humanities Index (Wilson), Humanities International Complete (EBSCO), the International Bibliography of the Modern Language Association of America, and Scopus (Elsevier). The journal is affiliated with the Purdue University Press monograph series of Books in Comparative Cultural Studies. Contact: <clcweb@purdue.edu>

Volume 15 Issue 3 (September 2013) Article 4
Gunther Martens,
"Literature, Digital Humanities, and the Age of the Encyclopedia"
<<http://docs.lib.purdue.edu/clcweb/vol15/iss3/4>>

Contents of **CLCWeb: Comparative Literature and Culture 15.3 (2013)**
Thematic Issue **Literacy and Society, Culture, Media, and Education.**
Ed. Kris Rutten and Geert Vandermeersche
<<http://docs.lib.purdue.edu/clcweb/vol15/iss3/>>

Abstract: In his article "Literature, Digital Humanities, and the Age of the Encyclopedia" Gunther Martens takes his cue from Robert Musil's novel *The Man without Qualities* in order to discuss the way in which literature relates to new developments in technology. Martens argues that it is useful to situate some of the fears accompanying literature's renewed exposure to media and technology against the background of similar discussions earlier: the historical perspective allows to identify and link three specific discourses underpinning the debate on the future of reading and the book, namely: education, rhetoric, and the concept of the encyclopedia. The encyclopedia and encyclopedic literature comprise and announce such strategies as metadata, collaborative authorship, and transliteracy. Further, Martens elaborates on new conceptions of connectivity, conversity, and interoperability as hallmarks of transliteracy within digital humanities. He argues that the new methods and tools developed by digital humanities have a history in the study of rhetoric and in the cultural history of the encyclopedia as a tool for organizing and visualizing knowledge.

Gunther MARTENS

Literature, Digital Humanities, and the Age of the Encyclopedia

In the study at hand I discuss literature's exposure to media and technology and the emerging field of digital humanities in relation to literacy. In his book *How to Talk about Books you Haven't Read*, Pierre Bayard reinterprets a putative case of *illiteracy* as portrayed in Robert Musil's novel *Der Mann ohne Eigenschaften* (*The Man without Qualities*) as the forerunner of an alternative type of *literacy*. In addition to making a case for Musil's novel being the first "digital humanities" novel, I argue that much is to be gained from taking an even broader historical perspective. This contextualization allows to situate current debates concerning literature, education, and technology against the background of similar discussions on the position of encyclopedia as a tool of rhetoric.

Musil's encyclopedic novel *The Man without Qualities* features a striking scene in which general Stumm visits a library in order to fathom the secret of civil education. The general is at first overwhelmed by the sheer quantity of books. Thus far, the general has been the laughing stock of Musil scholarship and the wider readership alike: he has been interpreted predominantly as illiterate or at least as unacquainted with the world of books and with proper readerly habits: "those rows of books are not particularly worse than a garrison on parade" [*The Man* 500]). However, his function in the novel has come under scrutiny in recent years and interesting explorations in textual genetics have revealed that the general possibly could have turned into the hidden protagonist of the unfinished novel (see Fanta). In the library, the general asks for "a kind of timetable that would enable [him] to make connections among all kinds of ideas in every direction" (*The Man* 502). The librarian takes him to the catalogue room, where the general finds "library tables piled high with catalogs and bibliographies, the concentrate of all knowledge, don't you know, and not one sensible book to read, only books about books" (502). The general inquires how the librarian can keep track of all those books, upon which the librarian gives him the following remarkable piece of advice: "if you want to know how I know about every book here, I can tell you! Because I never read any of them" (503). Just like the general, the librarian has been considered to be the narrator's butt of irony. Nevertheless, the librarian has a doctorate and is a "special lecturer in library science" to boot and a specialist in the "arrangement and preservation of books, cataloging of titles, correcting misprints and misinformation on title pages, and the like" (503).

I propose to reevaluate the librarian and his relation to books and in doing so, I garner unexpected support from Pierre Bayard's *How to Talk about Books you Haven't Read*, in which the first chapter is devoted to Musil. According to Bayard, the librarian "avoids reading not for any want of culture, but, on the contrary, in order to better know his books. ... Rather than any particular book, it is indeed these connections and correlations that should be the focus of the cultivated individual, much as a railroad switchman should focus on the relations between trains — that is, their crossings and transfers — rather than the contents of any specific convoy. And Musil's image of the brain powerfully underscores this theory that relations among ideas are far more important than the ideas themselves" (10). In Bayard's framework, the librarian's advice to read only the meta-text is taken into the direction of the psychoanalytical claim that one cannot actually read books: one can only read oneself, as reading is only a "cover memory." Although empirical research has been carried out to substantiate this claim (e.g., Holland), this is not the direction in which I take this Bayard's argumentation; rather, I posit that one should pay attention to the actual phrasing of the citation: its recourse to imagery of the brain and of railroad connections reveals books as relational entities.

If looked at more closely, both the general's and the librarian's are concerned with flexible, dynamic cross-links and systems — rather than with static content and substance. This concern is very much in line with the narrator's stance towards reality and with his sense of possibilities. In fact, it has been noted upon that the general's feeble attempts to visualize and chart the ideological oppositions of his age closely resemble Musil's own doodles and manuscripts. In *The Man without Qualities* Musil actually endorses the "dismembering into impersonal, general components" of both cultural materials and human beings (168): "He could appreciate this statistical demystification of his person and feel inspired by the quantitative and descriptive procedures applied to him by the apparatus as if it were a love poem invented by Satan" (169). To some extent, this optimism has its roots in a very specific theory of education: Musil's training as an engineer and experimental psychologist resulted in his positive stance towards psychotechnics (empirical psychological testing) and towards the project of engineering a "new man." This optimism towards behaviorism continues to trickle down in any type of reform project (from Basedow to Bauhaus) that opts for chunking and tagging bits of information (even artistic ones) in a group-based, collaborative didactic setting. It challenges the assumption that

competence is transmitted through an original entelechy embedded in a self-reliant individual. Musil had come to question the upbeat version of this program by the time of writing his novel, but his narrator continues to pitch the program against the values of anthropocentric humanism and its abstinence towards technology and innovation.

The very fact that Musil's novel remained a fragment makes reading this novel dependent on technology: the notebooks and unfinished manuscripts were digitized at an early stage in the history of computer-aided literary studies in 1992. In the recent *Robert Musil: Klagenfurter Ausgabe* edition of Musil's oeuvre, compiled and edited by Walter Fanta, Carl Corino, and Klaus Amann, *Der Mann ohne Eigenschaften* is the most complete version of the novel now as hypertext exclusively within the digital realm (<<http://wwwg.uni-klu.ac.at/musiledition/>>). Of course, the affinity of Musil's novel with the structure of a net has been remarked upon before (see, e.g., Veel). It is clear that the library scene is actually drenched in a type of modernist irony that allows for ultimate indecision as to what this scene is meant to say. We may derive from this narrative kernel the insight that knowledge management, taxonomies, and categorization are not ephemeral, but part and parcel of reading and that reading itself is a kind of technology which involves unavoidably some degree of heteronomy. As the scene illustrates, metadata are vital for access to the library which casts the reader no longer as a suave, autonomous individual, but as someone involved dynamically in the negotiation of external protocols and selections. Envisioned is a radical new way of reading that no longer takes for granted that the natural environment for reading is the individual's mind: "One can read the poets ... — does this bestow knowledge on us? If it does, do we then possess it? And even if we should, this spirit is so firmly bound up with the accidental form in which it happens to manifest itself! It passes right through the person who wants to absorb it, leaving only a small tremor behind. What can we do with all this spirit? It is constantly being spewed out in truly astronomical quantities on masses of paper, stone, and canvas, and just as ceaselessly consumed at a tremendous cost in nervous energy. But what becomes of it then? (*The Man* 161). Ultimately, this leads up to the question whether the environment for reading needs to be something wrapped between two covers.

In "The Work of Illiteracy in the Rhetorical Curriculum" Peter Mortensen argues in a similar vein, namely that it is necessary to challenge conventional understandings of illiteracy and that this question is directly relevant to discussions concerning literature pedagogy and the curriculum. These discussions are likely to be fuelled by the advent of digital humanities. To some extent, the way in which Musil's librarian approaches books and texts announces the notion of distant reading currently being developed in the realm of digital humanities. Franco Moretti's concept of "distant reading" maintains that distance is a condition of knowledge and Steven Tötösy de Zepetnek's position with regard to digital humanities, intermediality, and comparative cultural studies serve as useful theoretical and applied approaches (see *Digital Humanities*; for a bibliography of digital humanities, see Tötösy de Zepetnek. "Bibliography" <<http://docs.lib.purdue.edu/clcweblibrary/bibliographydigitalhumanities>>). The said approaches echo the structuralist tenets of knowledge production which assume that any type of creativity is predicated on a system of rules, protocols, and codes (see, e.g., Schmidt, *Worlds*). This interest may not be much of a surprise given the concurrent rise of poststructuralism and cybernetic and systems theory (see, e.g., Apter; Damrosch; Schmidt, "Literary Studies" <<http://dx.doi.org/10.7771/1481-4374.1569>>; Tötösy de Zepetnek, "From Comparative" <<http://dx.doi.org/10.7771/1481-4374.1041>>). By accessing a flow of information via its underlying bit stream (as in forensic philology, see, e.g., Capelli <<http://docs.lib.purdue.edu/clcweb/vol15/iss3/11>>) or through any other abstraction layer rather than via the surface structure of texts, speech situations. Digital humanities may give a different twist to some of the aspirations of structuralism, namely the effort to separate content from form. In Moretti's understanding, however, distant reading is less partisan than it would seem at first sight. Distant reading paves the way for close reading, and vice versa. In his wake, various concepts have been advanced that bridge the gap between close and distant reading, e.g., Glenn Roe's scalable reading or recent advances in the application of point-driven or rhetorical reading to the study of autopoietic figurative networks (see, e.g., Biebuyck and Martens).

If Musil sets the scene for the suggestion that connectivity and interoperability are not simply technical terms, but also aspects of a new type of literacy, digital humanities might be the tool to explore those aspects. Alan Liu's transliteracies may serve as a conceptual starting point here: Transliteracy is derived from transliteration, which means to convert a text to a different language or writing system, in keeping with the constraints of a specific character set. In computer philology, it is used in a broader sense to encompass a wide series of transformations (including algorithmic transformations). Liu's concept of transliteracies can be said to originate in the cross-genre and intermedial experimentation and other transgressive tendencies announced by postmodernism and

postmodern theory alike. The data-driven agenda advocated by digital humanities, however, harks back to the idea of the Encyclopedia as a way of cross-linking information: "Data banks are the Encyclopedia of tomorrow. They transcend the capacity of each of their users. They are 'nature' for postmodern man ... in games of perfect information, the best performativity cannot consist in obtaining additional information. It comes rather from arranging the data in a new way. This new arrangement is usually achieved by connecting together series of data that were previously held to be independent" (Lyotard 95). Diderot's *Encyclopédie* provided a taxonomy of knowledge that is transversal and accumulative rather than hierarchical and top-down. It is to be noted that digital humanities enables to engage more fully — and by means of team-work — with the project of the *Encyclopédie*, including the spirit of mash-up, compilation and "harvesting" in which it was written (see Allen, Cooney, Douard, Horton, Morrissey, Olsen, Roe, Voyer). Of course, digital humanities goes beyond the historical aspirations of the *Encyclopédie*, both in terms of object and of methodology. But it is useful to stress the continuity between the *Encyclopédie* and the modern database like Lyotard does. The diffuse and agile agenda set by digital humanities recently met with the critique that literature and culture are not data at all and that the distant approach might dissolve the specificity of literature into oblivion and irrelevance. Stephen Marche — "Literature Is Not Data: Against Digital Humanities" <<http://lareviewofbooks.org/article.php?id=1040>> — refers to the Lyotard quote mentioned above, but cuts it in half in order to let it end on the (presumably ominous) conception of a technology turned into "nature." This misses the point that literature has been data and technology before, both in the rhetorical age of the encyclopedia (i.e., roughly prior to the eighteenth century, when literature was still predominantly a vehicle of knowledge) and in Musil's modernist understanding. The threat of the impending death of literature used by Marche is an interesting *topos* in this regard. The most powerful accounts of the death of literature capitalize on the mastery of the modes of the elegiac and that of pathos, akin to that of literature (see Marx). The alleged disappearance of literature is more likely to resemble the transformation of rhetoric, which has faded from institutional agendas in order to become all the more ubiquitous: "the most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it" (Lowood 142). Rhetoric broadly designates a conception that language production is a system constrained by rules and tropes, as well as a calculated attempt to appeal to taxonomies of affects via multiple literacies (with the learned, visual poetry of the Baroque as a striking example). Modern authors who advocated the idea of original, genius-like authorship were abhorred by this conception of writing and were careful to hide their dependence on it. Any attempt to reinstate to modern literature a sense of such constraints or multiliteracy (as in Oulipo, cf. Ramsay) has been labelled experimental. In sum, there is an interesting historical precursor to the debate to what extent literature and technology are compatible and the question can of course be traced back way beyond Musil's embrace of the two cultures. The analysis of this historical backdrop brings both rhetoric and the *Encyclopédie* into play as possible bridges between distant and close reading.

In recent debates on the effect of technology on our capacity to concentrate, the novel figures prominently. Nicholas Carr's 2012 *The Shallows: What the Internet Is Doing to Our Brains* gained notoriety for applying to literature findings in neuroscience research on primates with the extension to humans that when we multitask we train our brain to focus on matters irrelevant (see Merzenich, Kaas, Wall, Nelson, Sur, Felleman; see also Merzenich <<http://merzenich.positscience.com/2008/08/going-googly/>>). Thus, throughout his book, Carr mounts the novel — and especially the long, literary novel — as a prime example of a genre where reading requires long stretches of exclusive attention. However, in many ways Carr's argument — from a historical point of view — the example of the novel fails to convince: in the eighteenth century, for example, the novel itself was something new and perceived as threatening and it was described as dangerous with poisonous and infectious effects which would alter the brain, especially the female brain (see, e.g., Bickenbach 27). Even Kant was wary of novels and argued that the only sensible thing was to keep children and women away from it (733). Reading novels for longer stretches of time was associated with instant gratification, with stress and strain, with indulgence and addiction, an overall quantitative excess (Bickenbach 30). In fact, it was treated with the same prejudices now attributed to new media or the emergence of any new medium for that matter. The discourse on reading novels was also sexualized, connoting notions of promiscuity and license attributed now to new types of mass media (see Millner).

To some extent, the debate on reading signals a historical change in attitudes towards rhetoric (see, e.g., Lehtonen <<http://docs.lib.purdue.edu/clcweb/vol15/iss3/3>>; Rutten and Soetaert <<http://dx.doi.org/10.7771/1481-4374.1797>>). For the longest part of history, reading had equaled

declamation, delivering, and reading out aloud with some sense of public address attached to it (see Bickenbach 21-52). The fears besetting avid novel reading reflected the fact that new target groups gained access to reading: the perception of avidness inheres in the fact that reading, from that point onwards, escaped social control. This development needs to be related to long-term evolutions in cultural history and what needs to be singled out in the particular case of the eighteenth-century debate on reading is that its historical shift also consisted in the fact that readers were no longer required and/or assumed to (be able to) display the same skills as the writer (see Martus 66). In this context, Lessing did away with the common rebuttal that literary critics are simply failed writers (see Lessing). The coexistence of the roles of reader and writer equipped with a similar degree of involvement and proficiency was widespread in the rhetorical age: it faded into the background due to the rise of the paradigm of the original author and it did so at the expense of the model of imitation as pedagogical value (which had dominated Renaissance pedagogies).

The effect of transliteracies (see Liu) is that most of the parameters dating back to the rhetorical age are restored to the activity of reading: any reader gets to be a participant, a producer (more visibly), and reading acquires an increased sense of performativity and social embedding, a sense which goes beyond the continued presence of spoken word performance, liveness, and any other sense of interaction throughout the history of the book. At the same time, writing and reading becomes susceptible to more direct social control and questions of neutrality and access surface and here Bernard Werber's suggestion that unlimited access is a kind of censorship *ex negativo* applies.

In his book on the history of the privatization of reading, Matthias Bickenbach reminds us that prior to the autonomization of literature (i.e., prior to the establishment of copyright), books were part of a generalized rather than a restricted economy. As a case in point, he refers to the advertisement of Wieland's 1764 novel *Don Sylvio*: the novel does not appear in "learned materials" or similar intellectual or artistic production, but together with porcelain, real estate, a chalice, and wallpaper in the category under "things for sale" (189). In some respects, books have returned to this heteronomized state. From the point of autonomy aesthetics, this amounts to a depraved state of disarray. Especially for young readers, however, books may currently indeed range under a wide number of other interests and literacies on equal footing. That such a heteronomized existence of the word under the conditions of diversity and distraction might actually facilitate a fundamentally different type of emancipatory potential was singled out by Walter Benjamin. Under the impression of both commercial logic and radical experimentation by the historical avant-gardes, he wrote that "Script — having found, in the book, a refuge in which it can lead an autonomous existence — is pitilessly dragged out into the street by advertisements and subjected to the brutal heteronomies of economic chaos. This is the hard schooling of its new form ... And before a contemporary finds his way clear to opening a book, his eyes have been exposed to such a blizzard of changing, colorful, conflicting letters that the chances of his penetrating the archaic stillness of the book are slight. Locust swarms of print ... will grow thicker with each succeeding year (172). Benjamin's idea suggests the heteronomized existence of the written word as a potential key to its empowering both the author and his/her readers. While primarily based on surrealism and its engagement with (self-)advertising, Benjamin's study of baroque literature looms large in the background as it refers to a period in which literature was still largely heteronomized, a carrier of institutional purposes and referential knowledge.

Especially the notion of collecting — a matter Benjamin practiced and discussed — continue to present themselves as intuitive points of reference. To the extent that digital humanities acts as the search engine optimization (SEO) for the humanities, the mindset of the rhetorical age and its bent for collecting, visualization, taxonomies, and encyclopedic documentation are useful references. It provides a historical backdrop to the wider notion of curation of material objects, including the reliance on a wider array of curators and stakeholders. Marshall McLuhan's 1943 Cambridge University Ph.D. dissertation *The Classical Trivium: The Place of Thomas Nashe in the Learning of His Time* — published only as recently as in 2006 — reinforces this hidden connection between recent media studies and rhetoric. Digital humanities is concerned with the ways in which information circulates materially and with heuristics that may allow for collective, potentially even unattended, automatized procedures leading up to new research questions. Some might argue that both these interests are more closely related to numeracy than to literacy. However, digital humanities endeavors to visualize literacy in ways that bear a striking similarity to the broader notion of literacy that was valid throughout the rhetorical age. When dealing with materials predating the shift towards the "aesthetic of autonomy," a variety of multimodal literacies (especially visual literacy) is automatically called upon. More often than not, diagrammatic (image-text relations) and diacritical signs (notations of tonality, intensity, sentiment) relate to the fact that literature still carries other functions either as a material object that needs to signal its function (e.g., via lengthy titles or the architecture of the title page) or as a vehicle

of knowledge with encyclopedic functions. What we may witness behind the rise of collective authorship, the conversion of books into audiobooks and infographs is a return to the topical organization of knowledge by drawing maps, charts, and schemata: "The aim was a fundamental change of priorities, the transformation of hierarchy of disciplines into a 'circle' of learning, an 'encyclopedia' embracing human culture in all of its richness and concreteness and organized for persuasive transmission to society as a whole. This was the rationale of the Ramist method, which accordingly emphasized mnemonics and pedagogical technique at the expense of discovery and the advancement of learning" (Kelley 141; see also Yates). Peter Ramus's sixteenth-century ideas on learning through imitation are relevant, still (see, e.g., Sharratt). The model itself fell out of grace with the arrival of modern science and was scorned by the proponents of original authorship and German *Bildung*. Yet, the current changes in attitude towards copyright and curation are more than vaguely reminiscent of the "rhetorical age" which defined creativity as a way of finding rather than of inventing. I posit that this historical perspective on rhetoric is relevant for new media theories and even cognitive poetics/cognitive rhetoric (see, e.g., Stockwell).

Transliteracy works toward empowering the reader in a changing media environment (see, e.g., Bourgonjon) and the following example illustrates this: while teaching the rather reclusive diction of seventeenth-century baroque poetry, I tried to explain to students its stylistic specifics. In one of the famous catalogue poems of German baroque poetry, Christian Hofmann von Hofmannswaldau wrote an anacreontic series of similes which foray into all kinds of special knowledge and diction (see <<http://gutenberg.spiegel.de/buch/575/9>>). Owing to its particularly rich use of figures and tropes and its mannerism, this type of poetry is not accessible to readers today because the clever, witty formulation becomes an end in itself. However, the period itself is important and useful in order to study hyperbole and violence in modern-day neo-baroque genres. While I assumed that I had to explain the word "bezoar," students, however, reacted that they knew the word from the Harry Potter novels where it is featured frequently as a common anti-dote against poisoning. Even if some word or concept is uncommon in a particular register, its meaning is documented in informal online user lexicons and such lexicons do not simply restrict themselves to the subservient role of documenting, but serve as attractive entry-points into fictional worlds. Insofar as they allow for reader participation both inside and outside the text, their transliteracy functions like that of the notion transfictionality (migration of fictional entities across different texts and media) and even enhances the sense of immersion into the story world itself. The phenomenon of the online user lexica is a stepping-stone towards the collaborative editorial platforms and the emerging fan fiction communities, which have become the object of research only recently (see, e.g., Van Steenhuyse <<http://dx.doi.org/10.7771/1481-4374.1691>>).

Digital humanities covers a wide range of approaches and interests across multiple disciplines. If the term is to designate digital avenues of scholarly communication and education — rather than research questions and tools — then the digital humanities is somewhat of a misnomer. Digital forms of scholarly communication have been around prior to the success of the label "digital humanities," as the example of a learned journal such as *CLCWeb: Comparative Literature and Culture* <<http://docs.lib.purdue.edu/clcweb>> suggests. Currently, however, the debate seems to center on the introduction of quantitative methods in a field that continues to be characterized by its vested interest in qualitative (historical or hermeneutic) approaches. The concern that corpus approaches might be at odds with the putative "core" objectives of the humanities or other narrative problem-solving methods can be rebuffed by taking a look at the historical legacy in rhetoric shared by qualitative and quantitative approaches. In fact, many of the targets of interest of stylometry and related digital humanities tools are more thoroughly grounded in the rhetorical age of the encyclopedia and its aesthetics of (often minimal) permutation and variation (rather than that of originality).

Here, I not only aim to argue that the fears besetting the arrival of new media have a long history, but show that it is useful to reframe the question of multiple literacies historically, as it has been addressed by rhetoric and in literature itself: Musil's library scene — as a concern with the problem of information overload — reads like an anticipation of the quest for distant reading and large numbers. The novel indicates that the difference between numeracy and literacy tends to be perceived as similar to two closed electrical circuits: "whenever he opened his mouth to make such pronouncements, it was as though an electric contact had been opened, and he flowed in a different circuit. The same thing happens to most people, in fact, when they express themselves in public" (Musil, *The Man* 101). This quotation suggests a rift, but Musil's closing reference to the public orator indicates that rhetoric may function as a possible bridge between those literacies.

What goes by the name of the "encyclopedic age" refers to a hybrid set of heterogeneous compilation techniques which flourished well into the seventeenth century and also included

spatialized installation-like collections of objects and texts such as the *Wunderkammer*. Much has already been written about the relevance of these rhetorical techniques of memorization and especially the earliest examples of "thinking machines" (see, e.g., Dotzler). The hallmark of the encyclopedia is some sort of basic organizational principle (alphabetical, topical, etc.) that guides the accumulation of information. This organization hints at a didactic purpose which also extended to literary works acting as the vehicle of (often remote) knowledge. Trading knowledge in a digested form was held in contempt by later generations owing to its didactic purposes, but both functions — literature as a vehicle of knowledge and reading involving a mix of literacies — have continued to persist and were frequently rediscovered as experimental dimensions of texts, for example in concrete or visual poetry, in the infographic novel, and in modernist encyclopedic novels such as by Musil. This is why I took my cue from (a reinterpretation of) the library scene in Musil's novel: it shows how, even in modern literature, there is an awareness of how indices, codices, and other material extensions of the tradition of topics and rhetoric are part of the writing process. At the level of narration, this awareness translates into distinct metanarrative strategies. In reference to "big data," Musil adds the caveat that the witty general, as well as any mention of large numbers in the novel, continues to resonate with a less innocent historical instantiation of grand-scale operations, the prototypical ruthless general of World War I, who — as Musil put it — took pride in operating only by taking in stride at least a thousand casualties.

In an article combining corpus stylistics with historical narratology, Ralph Müller and Tobias Lambrecht trace the shifts in frequency of one specific stylistic aspect of such self-aware, talkative narration, namely the explicit subjunctive comparison "as if." Their corpus-based study is in fact a case in point because it indicates that marked phenomena which are rhetorical in nature — such as simile, overt narrator profiles, and speech acts — are conspicuous and thus more easily to be patterned over longer stretches of time and in large bodies of texts. Topic modeling is another, more thematic form of text mining, a way of identifying and visualizing patterns in a corpus. The most promising enterprises are those which aim for the combination of distant reading tools without giving up the strengths of the hermeneutic habitus interested in the singularity and the transformative power of the individual case. This involves the development of platforms for shared discovery or collaborative annotation that allow for mutual feedback. Textual genetics and editing are heading into similar directions of collaborative platforms (see, e.g., Deppman, Ferrer, Groden; Van Hulle).

In conclusion, only time and further developments in digital humanities will be able to tell whether the interest in transliteracies will result in flexible and enduring types of literacy or in something that detractors of digital humanities might be tempted to call obliteracy: It remains to be seen whether digital humanities is in need of an anthem literary text. For example, Robin Sloan's novel *Mr. Penumbra's 24-Hour Bookstore* reflects the current state of affairs in data mining and natural language processing much more closely and it also makes an interesting case for the idea that multiple literacies have been involved in book-based literature throughout its long history. Musil was able to combine the two angles and might be helpful to convince scholars accustomed to the study of aesthetically premiered objects of the need to turn attention to the amount of standardization and structured ontologies and controlled vocabularies required to interconnect multilingual literary metadata. The digital humanities approach to quantitative corpus-based research currently stands out because of its undiminished openness to qualitative research and to close-reading (Jockers 89). Some might argue that this is a combination of two mindsets which are in fact diametrically opposed to each other, and that one is better than the other. In this respect, the continuity between the encyclopedia and its recent reinvigoration through developments in unsupervised parsing and machine learning is a helpful analogy. It shows that while new technologies find their way into our disciplines, digital humanities is in fact acting upon tried and trusted alliances between various literacies both in theory and in application.

Works Cited

- Allen, Timothy, Charles Cooney, Stéphane Douard, Russell Horton, Robert Morrissey, Mark Olsen, Glenn Roe, and Robert Voyer. "Plundering Philosophers: Identifying Sources of the *Encyclopédie*." *Journal of the Association for History and Computing* 13.1 (2010): <<http://hdl.handle.net/2027/spo.3310410.0013.107>>.
- Apter, Emily. *The Translation Zone: A New Comparative Literature*. Princeton: Princeton UP, 2006.
- Bayard, Pierre. *How to Talk About Books You Haven't Read*. Trans. Jeffrey Mehlman. New York: Bloomsbury, 2007.
- Benjamin, Walter. "Attested Auditor of Books." *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media*. By Walter Benjamin. Transl. Michael Jennings and Brigid Doherty. Harvard: Harvard UP, 2008. 171-89.
- Bickenbach, Matthias. *Von den Möglichkeiten einer "inneren" Geschichte des Lesens*. Tübingen: Niemeyer, 1999.

- Biebuyck, Benjamin, and Gunther Martens. "Literary Metaphor between Cognition and Narration: 'The Sandman' Revisited." *Beyond Cognitive Metaphor Theory: Perspectives on Literary Metaphor*. Ed. Monika Fludernik. London: Routledge, 2011. 58-76.
- Bourgonjon, Jeroen. "Video Games as Equipment for Living." *Digital Humanities and the Study of Intermediality in Comparative Cultural Studies*. Ed. Steven Tötösy de Zepetnek. West Lafayette: Purdue Scholarly Publishing Services, 2013. 88-99.
- Capelli, Roberta. "Practical and Theoretical Implications of Digitizing the Middle Ages." *CLCWeb: Comparative Literature and Culture* 15.3 (2013): <<http://docs.lib.purdue.edu/clcweb/vol15/iss3/11>>.
- Carr, Nicholas. *The Shallows: What the Internet Is Doing to Our Brains*. New York: Norton, 2010.
- Damrosch, David. *What Is World Literature?* Princeton: Princeton UP, 2003.
- Deppman, Jed, Daniel Ferrer, and Michael Groden, eds. *Genetic Criticism*. Philadelphia: U of Pennsylvania P, 2004.
- Dotzler, Bernhard J. *Papiermaschinen. Versuch über Communication & Control in Literatur und Technik*. Berlin: Akademie, 1996.
- Fanta, Walter. "Editorisches, Hermaphroditisches. Wozu den Mann ohne Eigenschaften neu edieren?" *Musil anders. Neue Erkundungen eines Autors zwischen den Diskursen*. Ed. Gunther Martens, Clemens Ruthner, and Jaak De Vos. Bern: Peter Lang, 2005. 137-70.
- Hofmann von Hofmannswaldau, Christian. "Lob-rede an das liebwertheste frauen-zimmer." 1697. *Neukirchs Anthologie*. Ed. Thomas Fritsch. gutenberg.spiegel.de (2013): <<http://gutenberg.spiegel.de/buch/575/9>>.
- Holland, Norman. *5 Readers Reading*. New Haven: Yale UP, 1975.
- Jockers, Matthew L. *Macroanalysis: Digital Methods and Literary History*. Champaign, IL: University of Illinois Press, 2013.
- Kant, Immanuel. "Über Pädagogik." 1803. *Schriften zur Anthropologie, Geschichtsphilosophie, Politik und Pädagogik*. Ed. Wilhelm Weischedel. Frankfurt: Suhrkamp, 1981. 697-761.
- Kelley, Donald R. *The Beginning of Ideology: Consciousness and Society in the French Reformation*. Cambridge: Cambridge UP, 1981.
- Lehtonen, Mikko. "Reading, Literacy, and Education." *CLCWeb: Comparative Literature and Culture* 15.3 (2013): <<http://docs.lib.purdue.edu/clcweb/vol15/iss3/3>>.
- Lessing, Gotthold Ephraim. "Der Rezensent braucht nicht besser machen zu können, was er tadelt." *Schriften zur Poetik. Dramaturgie. Literaturkritik*. By Gotthold Ephraim Lessing. Ed. Kurt Wölfel. Frankfurt: Insel, 1967. Vol. 2, 662-64.
- Liu, Alan. "Friending the Past: The Sense of History and Social Computing." *New Literary History* 42.1 (2011): 1-30.
- Lowood, Henry. "The Hard Work of Software History." *RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage* 2.2 (2001): 141-60.
- Lytard, Jean-François. "The Postmodern Condition." *The Lyotard Reader and Guide*. Ed. Keith Crome and James Williams. New York: Columbia UP, 2006. 83-103.
- Marche, Stephen. "Literature Is Not Data: Against Digital Humanities." *Los Angeles Review of Books* (28 October 2012): <<http://lareviewofbooks.org/article.php?id=1040>>.
- Martus, Steffen. *Werkpolitik. Zur Literaturgeschichte kritischer Kommunikation vom 17. bis ins 20. Jahrhundert. Mit Studien zu Klopstock, Tieck, Goethe und George*. Berlin: de Gruyter, 2007.
- Marx, William. *L'Adieu à la littérature. Histoire d'une dévalorisation (XVIIIe-XXe siècle)*. Paris: Minuit, 2012.
- McLuhan, Marshall. *The Classical Trivium: The Place of Thomas Nashe in the Learning of His Time*. Ed. Terrence W. Gordon. Berkeley: Gingko P, 2006.
- Merzenich, Michael M., J.H. Kaas, J.T. Wall, R.J. Nelson, M. Sur, and D.J. Felleman. "Topographic Reorganization of Somatosensory Cortical Areas 3b and 1 in Adult Monkeys Following Restricted Differentiation." *Neuroscience* 8 (1983): 33-55.
- Merzenich, Michael. "Going Googly." *merzenich.positscience.com* (2008): <<http://merzenich.positscience.com/2008/08/going-googly/>>.
- Millner, Michael. *Fever Reading: Affect and Reading Badly in the Early American Public Sphere*. Durham: U of New Hampshire P, 2012.
- Moretti, Franco. *Distant Reading*. London: Verso, 2013.
- Mortensen, Peter. "The Work of Illiteracy in the Rhetorical Curriculum." *Journal of Curriculum Studies* 44.6 (2012): 761-86.
- Müller, Ralph, and Tobias Lambrecht. "'As if': Mapping the Empathic Eloquent Narrator through Literary History." *Language and Literature* 22.3 (2013): 175-90.
- Musil, Robert. *Der Mann ohne Eigenschaften*. Reinbek bei Hamburg: Rowohlt, 1995.
- Musil, Robert. *Robert Musil: Klagenfurter Ausgabe. Kommentierte Edition sämtlicher Werke, Briefe und nachgelassener Schriften, mit Transkriptionen und Faksimiles aller Handschriften*. Ed. Walter Fanta, Karl Corino, and Klaus Amann. Klagenfurt: U of Klagenfurt, 2009 <<http://www.wg.uni-klu.ac.at/musiledition/>>.
- Musil, Robert. *The Man Without Qualities*. Trans. Sophie Wilkins and Burton Pike. London: Picador, 1995.
- Ramsay, Stephen. *Reading Machines: Toward an Algorithmic Criticism*. Champaign: U of Illinois P, 2011.
- Rutten, Kris, and Ronald Soetaert. "Intermediality, Rhetoric, and Pedagogy." *CLCWeb: Comparative Literature and Culture* 13.3 (2011): <<http://dx.doi.org/10.7771/1481-4374.1797>>.
- Scharratt, Peter. "Peter Ramus, Walter Ong, and the Tradition of Humanistic Learning." *Oral Tradition* 2.1 (1987): 172-87.
- Schmidt, Siegfried J. "Literary Studies from Hermeneutics to Media Culture Studies." *CLCWeb: Comparative Literature and Culture* 12.1 (2010): <<http://dx.doi.org/10.7771/1481-4374.1569>>.
- Schmidt, Siegfried J. *Worlds of Communication: Interdisciplinary Transitions*. Bern: Peter Lang, 2011.
- Sloan, Robin. *Mr. Penumbra's 24-Hour Bookstore: A Novel*. New York: Macmillan, 2012.
- Stockwell, Peter. "The Positioned Reader." *Language and Literature* 22.3 (2013): 263-77.

- Tötösy de Zepetnek, Steven. "Bibliography for Work in Digital Humanities and (Inter)mediality Studies." *CLCWeb: Comparative Literature and Culture (Library)*: <<http://docs.lib.purdue.edu/clcweblibrary/bibliographydigitalhumanities>>.
- Tötösy de Zepetnek, Steven. "From Comparative Literature Today toward Comparative Cultural Studies." *CLCWeb: Comparative Literature and Culture* 1.3 (1999): <<http://dx.doi.org/10.7771/1481-4374.1041>>.
- Tötösy de Zepetnek, Steven, ed. *Digital Humanities and the Study of Intermediality in Comparative Cultural Studies*. West Lafayette: Purdue Scholarly Publishing Services, 2013.
- Van Hulle, Dirk. "The Wake's Progress: Toward a Genetic Edition." *Text* 13 (2000): 221-32.
- Van Steenhuyse, Veerle. "The Writing and Reading of Fan Fiction and Transformation Theory." *CLCWeb: Comparative Literature and Culture* 13.4 (2011): <<http://dx.doi.org/10.7771/1481-4374.1691>>.
- Veel, Kristin. *Narrative Negotiations: Information Structures in Literary Fiction*. Göttingen: Vandenhoeck & Ruprecht, 2009.
- Werber, Bernard. *Le Livre secret des fourmis. Encyclopédie du savoir relatif et absolu*. Paris: Albin Michel, 1993.
- Yates, Frances. *The Art of Memory*. London: Routledge, 1966.

Author's profile: Gunther Martens teaches German literature at Ghent University. His interests in research include narratology, rhetoric, and the cultural history of the encyclopedia. In addition to numerous articles and collected volumes in Dutch, German, and English, his single-authored book publications include *Die literarische Polemik. Theorie und Geschichte* (2013) and *Beobachtungen der Moderne in Hermann Brochs Die Schlafwandler und Robert Musils Der Mann ohne Eigenschaften. Rhetorische und narratologische Aspekte von Interdiskursivität* (2005). E-mail: <gunther.martens@ugent.be>