

likely to be supported and promoted; the abiding political awareness that was opened up in the 60s and 70s as to the ideological aspects of culture. Given all this, there are two "futures" that seem most likely. Both would take place under the condition of the collapse of national literature departments into general "literature" departments (and perhaps even into more amorphous "humanities" departments). In the first scenario, literary studies consists of little or no literary history and a great deal of thematic, universalizing studies which easily are dispensable and reproduced; in the second, which is certainly my preference, literary studies includes a careful analysis of literary discourse, its historical constitution and social functions, a widening of literary culture beyond the eurocentric norms, and a concomitant widening of our understanding of how the literary expression of multiple, minoritized cultures have been historically constituted and the social functions they perform.

For literary studies to survive, it must both rationalize its existence beyond the old and assumed value of literature as culture and resist the pull of fast-knowledge, quick-consumption education. The only way to do this is to stress both the practicality of a humanity education that addresses human issues that are truly universal: alongside those with which we are familiar we must include those of social justice as it involves issues of race, gender, ethnicity, and class; and the specific modalities in which literary texts exist as particular articulations of such issues.

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The Digital Literary: Electronic Phrases for the Post-Gutenberg Age

The Mad Literary Critic. Have you not heard of that mad literary critic who booted up his computer in the bright morning hours, logged on to the Internet, and sent repeated e-mail messages to an electronic chat room: "I seek Print! I seek Print!" — As many of those who did not believe in Print were engaging in electronic dialogue just then, he provoked much laughter. "Whither is Print?" he cried; "I will tell you. *We have killed it* — you and I. We are all the murderers of Print. But how did we do this? What were we doing when we unchained Literature from Print? Whither is Literature moving now? Is it not plunging continually? Backward, sideward, forward, in all directions? Is Literature still literary once it has entered the Digital Zone? Is it not becoming Other? Do we hear nothing as yet of the noise of the technological gravediggers who are burying Print? Print is dead. Print remains dead. And we have killed it."¹

In the Late Age of Print: The Emergence of the Post-Gutenberg. Though one could debate interminably the relative degrees of impact that "post-discourses" have made on the disciplinary networks associated with the field of literature, one "post"-formation which has already begun to alter radically the very materiality of the literary, as well as transform the apparatus of production, distribution, and reception of "literature" in the post-hermeneutic age, is the post-Gutenberg advent of the digital literary. Given the explosion of literary activity on the World Wide Web (WWW) in the form of virtual libraries, hypertextual e-texts, and literary e-zines, not to mention the steady proliferation of literary texts in CD-ROM format, we are clearly witnessing the digitization of literature—the emergence of the digital literary. No "post"-ism promises to alter the very materialities of literature and literary study more than the post-Gutenberg. Although reports of the death of the codex book have been greatly exaggerated, "it isn't likely to remain the dominant means of textual dissemination," according to John Tolva, even if the book does not altogether disappear. What happens to "literature" and the "literary" once the dominant technology of inscription for the selection, storage, and processing of textual data becomes digital? In the post-Gutenberg age, how will the becoming-digital of literature bring about a transformation in the modes of being, communication, subjectivity, signification, and power associated with the literary apparatus? Will the digital revolution prove to be as far-reaching in its consequences as the invention of the printing press?

After the death of meaning, where lies the future of literature and literary studies? I offer the following "post"-scripts not as a defence of the "future" of literary studies, but rather as a programmatic delineation of the new objects and practices of literary study currently emerging.

Analog/Digital. Despite the insistence of a few entrenched "deconstructionists" to the contrary, the ontotheological battle between speech and writing has already been relegated to the dust heap of philosophical irrelevancy by the emergence of new telecommunication and computer technologies. The hierarchized metaphysical opposition between speech and writing has given way to a non-hierarchized microelectronic differentiation between the analog and the digital. Since the analog world of continuous waveforms is absolutely incommensurable with the digital world of discontinuous bits, analog-to-digital converters (A/D), as well as digital-to-analog converters (D/A), are necessary to perform the complex operations of digitizing and un-digitizing audio and video signals. The "primal" scene of translation is no longer between speech and writing, or between consciousness and the unconscious, but rather between the analog and the digital. Every time we talk on the telephone, send e-mail, watch television, listen to a music CD, or read an e-text, we enter and re-enter the scene of analog/digital translation. Even in the midst of the hegemony of the digital, life will never simply be a product of the digital, but will always already occupy the interminable scene of translation between the analog and the digital. *Difference* enters this intractable scene through deferral (the inevitable delay in time between commencement and completion of translation) and differing (the inevitable alteration of form in the process of translation), as well as through the contingencies of "noise" — the Other of data — which continuously threaten and inscribe the very scene of translation.

The Withdrawal of the Thing? How does one hold data? What does data feel like? If bits altogether lack physical size and weight, are data immaterial? How do the materialities of literary texts change once they undergo the radical format change from print to e-text? The digital literary alters the materiality of the book so radically that it altogether loses its tactility and becomes entirely audio-visual. In the print medium, light must be projected *onto* the text in order for reading to take place; whereas in the digital medium, light is quite literally projected *through* the text: light produced by a CRT or LCD illuminates each word, each character of each word, each pixel of each character. We have only recently begun to understand how this radical difference in illumination alters the practice and experience of reading. Although the audio-visual riches of reading may increase with the digital literary, lost are the pleasures associated with touching and holding a book: the sensual materialities of its ink, paper, binding, weight, and so forth no longer constitute the materiality of the digital e-text. In the process of digitizing

the literary text, the "thingness" of the text becomes radically altered as the book's sensual tactility is effaced. The only measure of tactility left to the digital reader is the click or press of keyboard or mouse as one scrolls (or links) from passage to passage. But as the materiality of the digital literary recedes further and further from view, the digital is not dematerialized to such a degree that it merges with pure ideality, rather its "thingness" is simply altered. Many hypertext theorists in their enthusiasm for the immense possibilities of the digital literary have denigrated the CD-ROM format for being too "physical" and not digitally "pure" enough. Even if the CD-ROM format is destined to become obsolete sometime in the near future, such a discourse of "authenticity" altogether overlooks the materiality of the digital bit. Digital technology requires that bit-streams be stored and retrieved by some sort of physical device or "hardware," whether in the form of magnetic, optical, or hard disk drive, or some storage and retrieval device yet to be invented. Even on the Internet, data must be stored somewhere, on some server with its own devices for storage and retrieval, even if one doesn't always quite know where that "somewhere" is. The "thingness" of the digital literary resides in the retrievable but ungraspable zone of stored bits of data. The materialities of the digital bit's positive or negative electronic pulse is obviously quite different from print with its materialities of paper, ink, and binding, but the microphysics of an electronic pulse is, in its own way, just as "physical" as paper, ink, or binding, its "physicality" is just not as immediately apparent to everyday forms of perception because of its lack of tactility. With the advent of the digital, the materiality of the given has altered but not altogether disappeared. Will literary critics ever overcome their attachment to the tactility of the book?²

The Simultaneity of Digital Memory. As soon as the literary text becomes digital — i.e., as soon as it is translated into an e-text—its linearity withdraws and points of entry become multiplied as it becomes available in computer memory in its entirety for complex search and retrieval functions. This digital simultaneity³ of access means that previously unthinkable searches are now possible across the web of a particular text, across multiple texts within a particular archive, even across multiple archives appearing on the WWW. Although cultural memory has always, in some sense, been virtual, as entire archives become digital, the virtual simultaneity of digital access makes it possible to perform incredibly complex and specialized searches across enormous textual and geopolitical expanses, rendering national borderlines practically meaningless. Digital memory functions as a prosthesis to human

2 For a thought-provoking analysis of "the desire for an immediate experience of past worlds," see Gumbrecht.

3 Cf. Gumbrecht's discussion of "simultaneity."

memory, a prosthesis which radically alters human memory by translating its retentional, intentional, and protentional aspects into an *attentional simultaneity which has the capacity to stretch towards (ad/tendere) any data in any order at any time*. In other words, in its asynchronicity and dislocatability, digital memory almost seems to stretch toward the Absolute Information of Digital Geist.

From Subject to Subscriber. Hypertextuality has been widely heralded by literary critics for offering digital exemplification of the death of the Author, but few have questioned hypertextuality's rehabilitation of the subject as "user." Although most critics agree that hypertextual forms of literature drastically alter the author-function by putting more options in the hands of the reader, the ideological ramifications of the reader-subject as "user" has thus far escaped critique. I would contend that the utilitarian metaphysics of the reader as "user," presupposed by numerous discourses of hypertext and hypermedia, is best understood when it is situated in relation to the programmatic constraints placed on the reader-user in the mode of "subscriber" (*subscriberium*). The emergence of the digital has brought about a transformation in the technologies of subjectivity which govern human forms of self-reference, categories of perception, and forms of experience. Supervening the Aristotelian "*upokeimenon*" and Cartesian "*subiectum*" is a digital "*subscriberium*." With the emergence of the digital literary, the reader has been redefined as a subscriber. What is all too often ignored by hypertext theorists in their enthusiasm for the "egalitarian" open-endedness of hypertextuality is that the reader-user is always already a subscriber who is subjected to the pre-programmed constraints and selectivity of the program or programs constituting the network of pre-programmed marks and channels of linking. Choices and options, no matter how decentralized, exist only to the extent that programming makes them possible. Here the lexicon of computer hackers is quite instructive: since the coining of the term "luser" at MIT in 1975, hackers have tended to view the world in terms of a technocratic caste system divided into two classes: the programmers and the users. Programmers (or "hackers") write program code, whereas users (or "lusers") merely read the data produced by program code. Hackers' disrespect for (l)users (or "read-only users") stems from the latter's inability to understand "the full ramifications of the [program] system"⁴ they use. As the Internet spreads to every corner of the world and is embraced as a sort of "digital democracy," literary critics of the future need to be more attentive to the new "technologies of the self" enframing the subjectification of the "user." How does the redefinition of the reader as "user" contribute to the disciplinary programming of gendered subjectivities

4 See *The Jargon File*, or *Hacker's Dictionary*, s.v. "user" and "luser": <http://www.msue.msu.edu/jargon/>.

and bodies circulating in "everyday" life? How does the ideology of the Internet as "digital democracy" conduct readers into a rarefied and regulated field of possibilities — manipulating and controlling individual bodies, turning them into normalized, servicable subjects directed toward strategic ends and goals? These are just a few of the questions to which future literary critics must attend.

Electronic Chatter and Digital Avatars. Electronic chat rooms on the Internet have recently received a virtual facelift with the introduction of 3-D virtual "avatars" which serve to "embody your digital presence" against the background of various digitized environments.⁵ In virtual chat rooms such as Worlds Chat on WWW, one's digital avatar moves around in first person perspective (one is able to see other avatars but not one's own) from space to space, as one seeks out new "cyberfriends." Not only is each user embodied in a virtual face and body, each user also adopts a digital pseudonym, thus making the contact between users utterly anonymous even when discussing the most intimate details of one's life, family, job, etc. From a literary critical perspective, what is most fascinating is the possibility of creating a digital persona, a literary "I," which is highly individualized and yet remains unattached to the proper name. The possibility of remaining anonymous in the midst of intimacy deconstructs the boundaries between interiority and exteriority so that exteriority becomes both the condition of possibility and impossibility for gaining access to the interiority of other users' avatars. In the digital theater of electronic chat rooms, "you" do not "communicate" a "message" to "me," since each of these terms has no more substance than an electronic blip on the screen. Interlocutors are no more than digital personae, digital simulations of subjectivity, signification, and communication. No anchorage is possible in the extra-digital world, only contingent linkages without substance.

Personal Home Pages. Not unrelated to the digital avatars of electronic chat rooms are the newest form of digital self-staging to take the WWW by storm: personal home pages. What happens when "being-in-the-world" becomes digital? Do the virtual auto(bio)ographies of WWW home pages display a being-in-the-world which is "at home," or a being which is "not at home"? Such questions are of interest not only to Heideggereans, but to anyone concerned with issues of privacy in the digital zone. Presently, e-mail can reach its "destination" whether the addressee is in the same place and time zone as the server or somewhere else altogether, halfway across the world, multiple time zones away. But such deconstructive *dislocations* and *asynchronicities* notwithstanding, the *difference* of the digital address — the fact that both differing and deferral are possibilities unique to the bearer of

5 See Tanaka and Croal 12 and Worlds Chat at <http://www.worlds.net/>.

the digital address — has somehow failed to displace the growing individuation of the “user” under commercial and governmental programs. Since it is already possible to keep track of who and how often “users” visit a particular “home page,” or send e-mail to a particular digital address, there is little reason to doubt that the trajectories we follow as “users” are already being compiled in the form of “user” profiles and sold as data-commodities for both commercial and governmental uses. As the digital identification of the “user” increases, a genealogy of the “user” will be an important task for future critics of the digital literary.

The Digital Panopticon? In *The Road Ahead* Microsoft CEO Bill Gates articulates his vision for a new form of portable personal computer, the “wallet PC”: “Your wallet PC will be able to keep audio, time, location, and eventually even video records of everything that happens to you. It will be able to record every word you say and every word said to you, as well as body temperature, blood pressure, barometric pressure, and a variety of other data about you and your surroundings. It will be able to track your interactions with the highway — all of the commands you issue, the messages you send, and the people you call or who call you. The resulting record will be the ultimate diary and autobiography, if you want one” (267). Gates’ Orwellian dream of a wallet PC, which would keep track of one’s whereabouts at every moment by means of the Global Positioning System, comes frighteningly close to a digital version of the Panopticon that Foucault outlined in *Discipline and Punish*, wherein “each individual has his own place; and each place its individual” (154). If on the Internet each user has a place, and each place its user (even if that place frequently shifts from nodal point to nodal point across the Internet), then an important task for future literary critics will be to determine whether the birth of the Internet coincided with the emergence of a new disciplinary technology and power-knowledge grid with its own techniques of surveillance, information gathering, classification, and so forth. Is there a certain “docility-utility” (Foucault 137) peculiar to the “user” of literary e-texts on the WWW?

Digi-literacy. Just as the emergence of print was the technological condition of possibility for what Wlad Godzich has called “the culture of literacy,” so too the emergence of the digital is the technological condition of possibility for a new form of literacy, what could be called “digi-literacy” (or, according to Nancy Kaplan, “e-literacy”). Digi-literacy involves competency in computer-oriented modes of discourse and practice, a necessary prerequisite for such acts as navigating the Net, downloading and processing e-mail, e-texts, e-zines, and so forth. Rather than lament what the Librarian of Congress has described as the “aliteracy” of today’s students — i.e., “the ability to read without the desire to do so” (Lamm 6) — it might be more effective to attend to the emergence of new forms of subjectivity, as younger generations move away from the culture of Print with its distinctive modes of readerly reflection

and rationality towards the hypermedia culture of Data with its audio-visual forms of reflection and “sound-bite” (digi-byte?) rationality. In the near future, the “illiterate” will describe those “digital homeless” who do not understand cyberspeak.

In the Wake of Print. Here the mad literary critic fell silent and looked again at the e-mail messages appearing on his computer screen. At last he threw his computer to the ground, and it broke into pieces and burned out. “I have come too early,” he said then; “my time is not yet. This tremendous event is still on its way, still wandering; it has not yet reached the eyes of readers.” It has been related further that on the same day the mad literary critic forced his way into several university publishing houses and there struck up his requiem for Print. Led out and called to account, he is said always to have replied nothing but: “What after all are these publishing houses now if they are not the tombs and sepulchers of Print?” (Nietzsche 125).

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