Into the Electronic Millennium

Sven Birkerts

Sven Birkerts (b. 1951) graduated from the University of Michigan and has taught writing at Bennington College, Emerson College, Mount Holyoke, Amherst, and Harvard. One of our most outspoken critics of technology, he has won many awards for his critiques of literature, society, and technology. His essays have appeared in a wide variety of publications including the New York Times Book Review, the New York Review of Books, the Atlantic Monthly, Harper’s, and the New Republic. The following essay is taken from The Gutenberg Elegies: The Fate of Reading in an Electronic Age (1994).

The order of print is linear, and is bound to logic by the imperatives of syntax. Syntax is the substructure of discourse, a mapping of the ways that the mind makes sense through language. Print communication requires the active engagement of the reader’s attention, for reading is fundamentally an act of translation. Symbols are turned into their verbal referents and these are in turn interpreted. The print engagement is essentially private. While it does represent an act of communication, the contents pass from the privacy of the sender to the privacy of the receiver. Print also posits a time axis; the turning of pages, not to mention the vertical descent down the page, is a forward-moving succession, with earlier contents at every point serving as a ground for what follows. Moreover, the printed material is static — it is the reader, not the book, that moves forward. The physical arrangements of print are in accord with our traditional sense of history. Materials are layered; they lend themselves to rereading and to sustained attention. The pace of reading is variable, with progress determined by the reader’s focus and comprehension.

The electronic order is in most ways opposite. Information and contents do not simply move from one private space to another, but they travel along a network. Engagement is intrinsically public, taking place within a circuit of larger connectedness. The vast resources of the network are always there, potential, even if they do not impinge on the immediate communication. Electronic communication can be passive, as with television watching, or interactive, as with computers. Contents, unless they are printed out (at which point they become part of the static order of print) are felt to be evanescent. They can be changed or deleted with the stroke of a key. With visual media (television, projected graphs, highlighted “bullets”) impression and image take precedence over logic and concept, and detail and linear sequentiality are sacrificed. The pace is rapid, driven by jump-cut increments, and the basic movement is laterally associative rather than vertically cumulative. The presentation structures the reception and, in time, the expectation about how information is organized.
Further, the visual and nonvisual technology in every way encourages in the user a heightened and ever-changing awareness of the present. It works against historical perception, which must depend on the inimical notions of logic and sequential succession. If the print medium exalts the word, fixing it into permanence, the electronic counterpart reduces it to a signal, a means to an end.

Transitions like the one from print to electronic media do not take place without rippling or, more likely, reweaving the entire social and cultural web. The tendencies outlined above are already at work. We don’t need to look far to find their effects. We can begin with the newspaper headlines and the millennial lamentations sounded in the op-ed pages: that our educational systems are in decline; that our students are less and less able to read and comprehend their required texts, and that their aptitude scores have leveled off well below those of previous generations. Tag-line communication, called “bite-speak” by some, is destroying the last remnants of political discourse; spin doctors and media consultants are our new shamans. As communications empires fight for control of all information outlets, including publishers, the latter have succumbed to the tyranny of the bottom line; they are less and less willing to publish work, however worthy, that will not make a tidy profit. And, on every front, funding for the arts is being cut while the arts themselves appear to be suffering a deep crisis of relevance. And so on.

Every one of these developments is, of course, overdetermined, but there can be no doubt that they are connected, perhaps profoundly, to the transition that is underway.

Certain other trends bear watching. One could argue, for instance, that the entire movement of postmodernism in the arts is a consequence of this same macroscopic shift. For what is postmodernism at root but an aesthetic that rebukes the idea of an historical time line, as well as previously uncontested assumptions of cultural hierarchy. The postmodern artifact manipulates its stylistic signatures like Lego blocks and makes free with combinations from the formerly sequestered spheres of high and popular art. Its combinatory momentum and relentless referencing of the surrounding culture mirror perfectly the associative dynamics of electronic media.

One might argue likewise, that the virulent debate within academia over the canon and multiculturalism may not be a simple struggle between the entrenched ideologies of white male elites and the forces of formerly disenfranchised gender, racial, and cultural groups. Many of those who would revise the canon (or end it altogether) are trying to outflank the assumption of historical tradition itself. The underlying question, avoided by many, may be not only whether the tradition is relevant, but whether it might not be too taxing a system for students to comprehend. Both the traditionalists and the progressives have valid arguments, and we must certainly have sympathy for those who would try to expose and eradicate the hidden assumptions of bias in the Western tradition. But it also seems clear that this debate could only have taken the form it has in a
society that has begun to come loose from its textual moorings. To challenge repression is salutary. To challenge history itself, proclaiming it to be simply an archive of repressions and justifications, is idiotic.*

Then there are the more specific sorts of developments. Consider the multibillion-dollar initiative by Whittle Communications to bring commercially sponsored education packages into the classroom. The underlying premise is staggeringly simple: If electronic media are the one thing that the young are at ease with, why not exploit the fact? Why not stop bucking television and use it instead, with corporate America picking up the tab in exchange for a few minutes of valuable airtime for commercials? As the Boston Globe reports:

Here's how it would work:

Participating schools would receive, free of charge, $50,000 worth of electronic paraphernalia, including a satellite dish and classroom video monitors. In return, the schools would agree to air the show.

The show would resemble a network news program, but with 18- to 24-year-old anchors.

A prototype includes a report on a United Nations Security Council meeting on terrorism, a space shuttle update, a U2 music video tribute to Martin Luther King, a feature on the environment, a “fast fact” ('Arachibutyrophobia is the fear of peanut butter sticking to the roof of your mouth') and two minutes of commercial advertising.

“You have to remember that the children of today have grown up with the visual media,” said Robert Calabrese [Billerica School Superintendent]. “They know no other way and we're simply capitalizing on that to enhance learning.”

Calabrese's observation on the preconditioning of a whole generation of students raises troubling questions: Should we suppose that American education will begin to tailor itself to the aptitudes of its students, presenting more and more of its materials in newly packaged forms? And what will happen when educators find that not very many of the old materials will “play” — that is, capture

*The outcry against the modification of the canon can be seen as a plea for old reflexes and routines. And the cry for multicultural representation may be a last-ditch bid for connection to the fading legacy of print. The logic is simple. When a resource is threatened — made scarce — people fight over it. In this case the struggle is over textual power in an increasingly nontextual age. The future of books and reading is what is at stake, and a dim intuition of this drives the contending factions.

As Katha Pollitt argued so shrewdly in her much-cited article in The Nation: If we were a nation of readers, there would be no issue. No one would be arguing about whether to put Toni Morrison on the syllabus because her work would be a staple of the reader’s regular diet anyway. These lists are suddenly so important because they represent, very often, the only serious works that the student is ever likely to be exposed to. Whoever controls the lists comes out ahead in the struggle for the hearts and minds of the young.
student enthusiasm? Is the what of learning to be determined by the how? And at what point do vicious cycles begin to reveal their viciousness?

A collective change of sensibility may already be upon us. We need to take seriously the possibility that the young truly "know no other way," that they are not made of the same stuff that their elders are. In her Harper’s magazine debate with Neil Postman, Camille Paglia observed:

Some people have more developed sensoriums than others. I’ve found that most people born before World War II are turned off by the modern media. They can’t understand how we who were born after the war can read and watch TV at the same time. But we can. When I wrote my book, I had earphones on, blasting rock music or Puccini and Brahms. The soap operas — with the sound turned down — flickered on my TV. I’d be talking on the phone at the same time. Baby boomers have a multilayered, multitrack ability to deal with the world.

I don’t know whether to be impressed or depressed by Paglia’s ability to disperse her focus in so many directions. Nor can I say, not having read her book, in what ways her multitrack sensibility has informed her prose. But I’m baffled by what she means when she talks about an ability to “deal with the world.” From the context, “dealing” sounds more like a matter of incessantly repositioning the self within a barrage of onrushing stimuli.

Paglia’s is hardly the only testimony in this matter. A New York Times article on the cult success of Mark Leyner (author of I Smell Esther Williams and My Cousin, My Gastroenterologist) reports suggestively:

His fans say, variously, that his writing is like MTV, or rap music, or rock music, or simply like everything in the world put together: fast and furious and intense, full of illusion and allusion and fantasy and science and excrement.

Larry McCaffery, a professor of literature at San Diego State University and co-editor of Fiction International, a literary journal, said his students get excited about Mr. Leyner’s writing, which he considers important and unique: “It speaks to them, somehow, about this weird milieu they’re swimming through. It’s this dissolving, discontinuous world.” While older people might find Mr. Leyner’s world bizarre or unreal, Professor McCaffery said, it doesn’t seem so to people who grew up with Walkmen and computers and VCR’s, with so many choices, so much bombardment, that they have never experienced a sensation singly.

The article continues:

There is no traditional narrative, although the book is called a novel. And there is much use of facts, though it is called fiction. Seldom does the end of a sentence have any obvious relation to the beginning. “You don’t know where you’re going, but you don’t mind taking the leap,” said R. J. Cutler, the producer of “Heat,” who invited Mr. Leyner to be on the show after he picked up the galleys of his book and found it mesmerizing. “He taps into a specific cultural perspective where thoughtful literary world view meets pop culture and the TV generation.”
My final exhibit — I don’t know if it qualifies as a morbid symptom as such — is drawn from a Washington Post Magazine essay on the future of the Library of Congress, our national shrine to the printed word. One of the individuals interviewed in the piece is Robert Zich, so-called “special projects czar” of the institution. Zich, too, has seen the future, and he is surprisingly candid with his interlocutor. Before long, Zich maintains, people will be able to get what information they want directly off their terminals. The function of the Library of Congress (and perhaps libraries in general) will change. He envisions his library becoming more like a museum: “Just as you go to the National Gallery to see its Leonardo or go to the Smithsonian to see the Spirit of St. Louis and so on, you will want to go to libraries to see the Gutenberg or the original printing of Shakespeare’s plays or to see Lincoln’s hand-written version of the Gettysburg Address.”

Zich is outspoken, voicing what other administrators must be thinking privately. The big research libraries, he says, “and the great national libraries and their buildings will go the way of the railroad stations and the movie palaces of an earlier era which were really vital institutions in their time . . . Somehow folks moved away from that when the technology changed.”

And books? Zich expresses excitement about Sony’s hand-held electronic book, and a miniature encyclopedia coming from Franklin Electronic Publishers. “Slip it in your pocket,” he says. “Little keyboard, punch in your words and it will do the full text searching and all the rest of it. Its limitation, of course, is that it’s devoted just to that one book.” Zich is likewise interested in the possibility of memory cards. What he likes about the Sony product is the portability: one machine, a screen that will display the contents of whatever electronic card you feed it.

I cite Zich’s views at some length here because he is not some Silicon Valley research and development visionary, but a highly placed executive at what might be called, in a very literal sense, our most conservative public institution. When men like Zich embrace the electronic future, we can be sure it’s well on its way.

Others might argue that the technologies cited by Zich merely represent a modification in the “form” of reading, and that reading itself will be unaffected, as there is little difference between following words on a pocket screen or a printed page. Here I have to hold my line. The context cannot but condition the process. Screen and book may exhibit the same string of words, but the assumptions that underlie their significance are entirely different depending on whether we are staring at a book or a circuit-generated text. As the nature of looking — at the natural world, at paintings — changed with the arrival of photography and mechanical reproduction, so will the collective relation to language alter as new modes of dissemination prevail.

Whether all of this sounds dire or merely “different” will depend upon the reader’s own values and priorities. I find these portents of change depressing, but also exhilarating — at least to speculate about. On the one hand, I have a great feeling of loss and a fear about what habitations will exist for self and soul in the future. But there is also a quickening, a sense that important things are on the
line. As Heraclitus once observed, “The mixture that is not shaken soon stagnates.” Well, the mixture is being shaken, no doubt about it. And here are some of the kinds of developments we might watch for as our “proto-electronic” era yields to an all-electronic future:

1. Language erosion. There is no question but that the transition from the culture of the book to the culture of electronic communication will radically alter the ways in which we use language on every societal level. The complexity and distinctiveness of spoken and written expression, which are deeply bound to traditions of print literacy, will gradually be replaced by a more telegraphic sort of “plainspeak.” Syntactic masonry is already a dying art. Neil Postman and others have already suggested what losses have been incurred by the advent of telegraphy and television — how the complex discourse patterns of the nineteenth century were flattened by the requirements of communication over distances. That tendency runs riot as the layers of mediation thicken. Simple linguistic prefab is now the norm, while ambiguity, paradox, irony, subtlety, and wit are fast disappearing. In their place, the simple “vision thing” and myriad other “things.” Verbal intelligence, which has long been viewed as suspect as the act of reading, will come to seem positively conspiratorial. The greater part of any articulate person’s energy will be deployed in dumbing-down her discourse.

Language will grow increasingly impoverished through a series of vicious cycles. For, of course, the usages of literature and scholarship are connected in fundamental ways to the general speech of the tribe. We can expect that curricula will be further streamlined, and difficult texts in the humanities will be pruned and glossed. One need only compare a college textbook from twenty years ago to its contemporary version. A poem by Milton, a play by Shakespeare — one can hardly find the text among the explanatory notes nowadays. Fewer and fewer people will be able to contend with the so-called masterworks of literature or ideas. Joyce, Woolf, Soyinka, not to mention the masters who preceded them, will go unread, and the civilizing energies of their prose will circulate aimlessly between closed covers.

2. Flattening of historical perspectives. As the circuit supplants the printed page, and as more and more of our communications involve us in network processes — which of their nature plant us in a perpetual present — our perception of history will inevitably alter. Changes in information storage and access are bound to impinge on our historical memory. The depth of field that is our sense of the past is not only a linguistic construct, but is in some essential way represented by the book and the physical accumulation of books in library spaces. In the contemplation of the single volume, or mass of volumes, we form a picture of time past as a growing deposit of sediment; we capture a sense of its depth and dimensionality. Moreover, we meet the past as much in the presentation of words in books of specific vintage as we do in any isolated fact or statistic. The database, useful as it is, expunges this context, this sense of chronology, and admits us to a weightless order in which all information is equally accessible.
If we take the etymological tack, history (cognate with "story") is affiliated in complex ways with its texts. Once the materials of the past are unhoused from their pages, they will surely mean differently. The printed page is itself a link, at least along the imaginative continuum, and when that link is broken, the past can only start to recede. At the same time it will become a body of disjunct data available for retrieval and, in the hands of our canny dream merchants, a mythology. The more we grow rooted in the consciousness of the now, the more it will seem utterly extraordinary that things were ever any different. The idea of a farmer plowing a field — an historical constant for millennia — will be something for a theme park. For, naturally, the entertainment industry, which reads the collective unconscious unerringly, will seize the advantage. The past that has slipped away will be rendered ever more glorious, ever more a fantasy play with heroes, villains, and quaint settings and props. Small-town American life returns as "Andy of Mayberry" — at first enjoyed with recognition, later accepted as a faithful portrait of how things used to be.

3. The waning of the private self. We may even now be in the first stages of a process of social collectivization that will over time all but vanquish the ideal of the isolated individual. For some decades now we have been edging away from the perception of private life as something opaque, closed off to the world; we increasingly accept the transparency of a life lived within a set of systems, electronic or otherwise. Our technologies are not bound by season or light — it's always the same time in the circuit. And so long as time is money and money matters, those circuits will keep humming. The doors and walls of our habitations matter less and less — the world sweeps through the wires as it needs to, or as we need it to. The monitor light is always blinking; we are always potentially on-line.

I am not suggesting that we are all about to become mindless, soulless robots, or that personality will disappear altogether into an oceanic homogeneity. But certainly the idea of what it means to be a person living a life will be much changed. The figure-ground model, which has always featured a solitary self before a background that is the society of other selves, is romantic in the extreme. It is ever less tenable in the world as it is becoming. There are no more wilderneses, no more lonely homesteads, and, outside of cinema, no more emblems of the exalted individual.

The self must change as the nature of subjective space changes. And one of the many incremental transformations of our age has been the slow but steady destruction of subjective space. The physical and psychological distance between individuals has been shrinking for at least a century. In the process, the figure-ground image has begun to blur its boundary distinctions. One day we will conduct our public and private lives within networks so dense, among so many channels of instantaneous information, that it will make almost no sense to speak of the differentiations of subjective individualism.

We are already captive in our webs. Our slight solitudes are transected by codes, wires, and pulsations. We punch a number to check in with the answering
machine, another to tape a show that we are too busy to watch. The strands of the web grow finer and finer — this is obvious. What is no less obvious is the fact that they will continue to proliferate, gaining in sophistication, merging functions so that one can bank by phone, shop via television, and so on. The natural tendency is toward streamlining: The smart dollar keeps finding ways to shorten the path, double-up the function. We might think in terms of a circuit-board model, picturing ourselves as the contact points. The expansion of electronic options is always at the cost of contractions in the private sphere. We will soon be navigating with ease among cataracts of organized pulsations, putting out and taking in signals. We will bring our terminals, our modems, and menus further and further into our former privacies; we will implicate ourselves by degrees in the unitary life, and there may come a day when we no longer remember that there was any other life.

Exploring the Text

1. Analyze Sven Birkerts's diction in paragraph 4. What does the diction reveal about the tone Birkerts is trying to set?
2. What is the effect of including the comment by Katha Pollitt within the footnote to paragraph 7?
3. In paragraph 11, Birkerts wonders whether to be impressed or depressed by “Paglia’s ability to disperse her focus.” As you read Paglia’s statement, did you find yourself impressed or depressed? Why?
4. Do you agree with what “others might argue” in paragraph 17? How adequately does Birkerts support the analogy he makes between looking and reading at the end of the paragraph?
5. Analyze the diction in paragraph 21. In an essay about technology, discuss why Birkerts use so many words that have to do with nature. Are these choices in diction deliberate, or is our language “naturally” prone to these expressions? Is the language literal? figurative? ironic?
6. How effectively does paragraph 24 answer the essay’s essential question: how are advances in science and technology affecting the way we define our humanity? Explain.
7. Considering that so many of us have our own bedrooms, drive our own cars, plug ourselves into headphones, and so on, do you agree with the claims Birkerts makes in paragraph 25? Why or why not?
8. How do Birkerts’s references to such sources as the Boston Globe, Harper’s, the New York Times, and the Washington Post Magazine support his argument?
9. Which of the predictions Birkerts makes in paragraphs 19–25 do you believe have occurred/been realized?