AVOIDING ROAD-KILL ON THE INFORMATION HIGHWAY

TECHNOLOGY

by

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Q: What’s the largest man-made [sic] structure in the U.S.?
A: The Interstate Highway System.

—Traditional Bar Bet

Q: What’s the largest co-authored text in the world?
Hint: (It’s a trick question.)

Several years ago, in a discussion of telecommunications, I noted how the unique nature of electronic conversations generated a wide range of interesting issues peculiar to the medium. These included questions regarding language, gender, ethics, and “the host in the machine.” I wondered, however, if I were “looking for more complexity and nuance than the situation or the technology warrants” (Marcus, 1989).

Would that were the case.

In the intervening years, there has been enormous growth and interest in educational on-line services, writing-related telecommunications projects, electronic teacher networks, and, perhaps most significantly, attention at the federal level to the creation of an “information highway.” These activities, both within and related to educational settings, have been preceded by and are concomitant with developments that are by turns intriguing, exciting, and deeply disturbing.

There seem, in fact, to be ample reasons for applying the advice of educational philosopher Paul Nash regarding anticipating a previous crisis. That is, we would do well to understand and to prepare ourselves and our students for coping with the problems and fulfilling the promise of yet another putative improvement in our lives wrought by technology.

It will be enough here, I hope, to introduce some of the relevant terms, practices, and notions that are evolving from a new world that is both strange and familiar. I also want to identify at least a few of the National Writing Project sites that have taken the lead in exploring the great value of telecommunications to further the NWP mission.

First, however, let’s explore some history and territory.
Browsers, Hunters, and Data Base Fascination

In the early days, large computers (mainframes and mini-computers) were used for organizing, storing, and retrieving information — thereby putting at our disposal so-called data bases. Different preferences for using these systems soon became evident. Some individuals were quite content to browse through a data base, looking for anything that was interesting and following lines of inquiry that evolved from the information retrieved. Other individuals preferred a more goal-oriented approach. They came to the computer knowing what they were looking for, and they enjoyed the hunt for a specifically defined target, i.e., the information relevant to a particular question or problem.

Both browsers and hunters soon became familiar with a phenomenon that came to be called “data base fascination.” People would sign on to a system, start retrieving information, and “suddenly” realize that a lot of time had passed. They had succumbed to the mesmerizing effect of looking into (or “through”) their computer screen, entering a world that consisted entirely of information.

This was certainly something akin to the experience of those who loved going into libraries or bookstores. However, as pointed out by media critic Neil Postman, there are important consequences to changing the form of information, its quantity, speed, or direction. In addition, the proliferation of microcomputers has created a booming population of data base junkies.

Flamers and Lurkers

With the growth of electronic mail systems, bulletin boards, discussions, and conferences, people had access to “data bases” that consisted of more immediate and personal data, that is, the ongoing exchange of ideas, conversations, and other information, whether stored or emerging in “real-time” interactions.

In this new setting, known generally as telecommunication, two particular behavioral patterns emerged. Some individuals would join a conference or free-wheeling discussion and just “listen in” or “observe” what was going on. They contributed rarely or not at all. They were known as lurkers, although the term didn’t connote any necessarily nefarious intent. Some people just didn’t seem to have much to say, but they enjoyed, or at least were content with, hanging around the fringes of the activity.

Other individuals, however, became known as “flamers,” characterized by extremely hostile, angry, and often personal attacks on others in the group or on the topic being discussed. Flaming continues to be a problem — for others and sometimes for themselves. In the business world, for example, individuals often don’t seem to realize that their remarks about their supervisors may be copied by the system to a broader audience than they intend. In educational settings, some students use the anonymity that an electronic forum sometimes provides to redirect toward others their own self-dissatisfaction.

My own first experience with a flamer occurred about thirteen years ago when I was typing a paper at a terminal on a university mini-computer. On that particular system, it was possible to send “mail” to someone through the system from one terminal to another. If the recipient was currently working on-line, the message would suddenly appear embedded in the text that was already on the screen, even if that text was merely a word processing document.

As I was working on my paper, a message suddenly appeared that invited, or rather directed, me to perform a reflexive act that, while now falling perhaps under the generally understood rubric of safe sex, was nevertheless anatomically inconvenient at best, if not altogether impossible. I was, of course, startled. Who could be angry enough with me to send a message like that? After a moment’s reflection, I realized that the person had probably, for unknown reasons, asked the computer for a list of the account names for people who were currently logged on to the system. It happened that I was using the account of a person who was known on campus for generating a lot of ill-will. The flaming had been directed, not at little old me, but at the person the angry individual thought was there.

There is the possibility that you might not be communicating with the person you think is there — and the concept of “there” is intriguing in its own right, as suggested below. This state of affairs is what prompted my original discussion of the question, “Is this the party to whom I am speaking?” (Marcus, 1989). It also leads us to one other unfortunate dark corner in the world of telecommunicationss.
Sexual Predators

A recent segment of a morning television show dealt with the proliferation of hard-core sex discussions available through various electronic information services. The show’s host was “going ballistic” over the content of some of these discussions and was trying, without much success, to articulate the situation for parents and to suggest that something should be done about it in order to protect their children. It didn’t help that the two guest experts weren’t suited to the nature or needs of the audience.

In point of fact, there are individuals who adopt a friendly persona in order to find lonely and unhappy kids. These individuals, usually adults, develop relationships with the children and often get them to reveal who they are and where they live. There is a dimension of “not speaking to strangers” that applies to electronic playgrounds, and any halfway savvy classroom teacher knows enough to establish guidelines for telecommunicationss, including warning students not to give out home phone numbers or addresses. For whatever reasons, making even this obvious advice explicit didn’t occur to the individuals on the show referred to above.

The issues of making yourself available and of presentation of self take on new twists in the electronic landscape. More elaborate — and healthier — versions of these phenomena exist in what are sometimes referred to as “virtual communities.”

MUDs and MOOs

It will help broaden our notions of what’s going on if we spend at least a little time re-considering our notions of the medium. Don’t think of telecommunications (computers, modems, electronic mail and bulletin board systems, etc.) as a technology. And don’t think of it as merely a method of communication. Instead, as suggested by computer visionary Brenda Laurel, you should think of telecommunications as a destination. That is, telecommunications is not simply a “conduit” for getting information from one place to another. Instead, it is itself a place to go.

What’s been happening is the growth of discourse communities that exist only in what is sometimes referred to as “cyberspace,” i.e., the universe of information (more about this term, below). Groups of people sign on to a system through their computers, modems, and phone lines and join others who have sometimes assumed alternate identities and who have been carrying on conversations and playing games using only text as the mode of communication. These “multiple user dimensions” sometimes use “object oriented” computer programming languages—hence, MUDs and MOOs.

These electronic communities develop their own guidelines for appropriate behavior, for dealing with dissidents, and for setting identities, goals, and values. Individuals join the communities after having decided who they will be (or, in fact, what “form” they will take). There is, for example, a significant amount of gender-switching that takes place; people explore the differences they experience when they are “taken for” someone with a very different background.

As described by Linda Polin (1993), such a simulated environment is a “small, contained, but evolving world that has many analogs to daily reality. There are buildings, people, and things with which the user can interact . . . There are other real people logged in to the same community at the same time as I am . . . I can sit on the couch in the living room and chat with whoever has wandered in . . . I can write and send mail to people I know, or send notes to appropriate authorities to ask for help or to discuss a community problem . . . I write my own descriptions for my objects and for me. To talk, I write; to listen, I read the talk others have written. To hold, touch, or manipulate objects, I must write directives.”

These virtual communities require real writing for a real audience. Things get created and happen only by virtue of people’s active participation. There is no there, there, unless you construct it.

There’s Nooplace Like Home

Teilhard de Chardin described an arena for consciousness and mind that J.S. Huxley, Marshall McLuhan, and others have discussed in terms of a “noosphere,” which McLuhan identified in The Gutenburg Galaxy as “the externalization of senses . . . or technological brain for the world.” This concept can be related to the notion of cyberspace, a term used to refer to the “place” where electronic information accumulates and exists, access to which is theoretically available to everyone.

Recall Postman’s dictum (noted above) that there are important consequences to changing the form of in-
formation, its quantity, speed, or direction. In cyberspace, “information wants to be free” (a rallying cry for many cybernauts), and everyone is contributing to its growth, shape, content, and nature.

The metaphor of the “information highway” is a workable concept; it’s a good delivery-model for communicating a somewhat intimidating change in the way the world will accomplish its business — and the content of its business. But the highway metaphor actually obscures as much as it reveals. It suggests an electronic “pathway,” a means of getting something from one place to another. This is analogous to filling a new medium with an old content: like imagining that a word processor has you working with paper.

Cyberspace might more accurately, if more complicately, be identified with the nöosphere, the “place” where a collective consciousness is articulated by the collectively produced text, which itself is linked from system to system through a “network of networks” like the Internet. In this regard, the totality of the textual content available in cyberspace constitutes a single “text,” existing in the nöosphere, of which all participants are co-authors. The manner in which it may be said to exist “in the world” depends on the level of abstraction at which the issue is discussed. In any event, the growing interest and active participation in cyberspace suggests that it evokes a kind of fascination even more engaging than that discussed above regarding simple databases. People seek it out and find an intriguing and complex kind of comfort there.

National Writing Project Involvement
Several affiliates of the National Writing Project have taken the lead in developing the kind of expertise in electronic communication — both for student writing and for teacher support and training — that will prove invaluable in years to come. Sheldon Smith at the Central Coast WP (San Luis Obispo, California), Richard Sterling at the New York City WP, and B.J. Wagner at the Chicago Area WP are just three Writing Project leaders who are pioneering the field. They are helping enlarge and clarify the repertoire of resources, voices, and behaviors to which students and teachers have access. The choices made, and the consequences of the choices, fall within the central concerns of Writing Project teachers.

We have the skills and the mission to develop our own and our students’ talents in this and in other ways we all use language to make ourselves literate. And to retain a useful metaphor, we also have the responsibility to help ourselves, our colleagues, and our students acquire continuing “driver’s education,” to avoid the unpleasant consequences of speeding down the digital highway.

References and Resources

For collections of articles dealing with writing and telecommunications projects, see The Writing Notebook, A Focus on Writing in the Global Village, November/December 1993; also, The Writing Notebook, A Focus on Writing via Telecommunications, April/May 1989. The Writing Notebook, Visions for Learning, P.O. Box 1268, Dept. ETR, Eugene, OR 97440-1268.

The National Public Telecomputing Network has information regarding core curriculum projects. For information on the “Academy One Project List,” send your e-mail request to: aa005@nptn.org


America’s Smartest Home Videos—Second Annual Awards Project

The National Writing Project Technology Network is helping sponsor an event to encourage and reward the creation of classroom-produced videos that prompt, document, or celebrate the use of writing—in any subject area. For an application form and guidelines, write Stephen Marcus, SCWriP, Graduate School of Education, University of California, Santa Barbara, CA 93106. Deadline for submission of tapes is March 11, 1994.