BACKGROUND BOOKS

WIRED FOR WHAT?

I f you have not yet visited cyberspace—and most Americans have not—no amount of description can quite do it justice. The next best thing to a visit to this nerdy netherworld may be a run through **The New Hacker's Dictionary** (MIT, 2d ed., 1993), compiled (from online data bases) by Eric S. Raymond. There, among the inscrutable definitions of inscrutable terms such as "pessimizing compiler" and "sandbender," one learns that to gweep is "to hack, usually at night," and that to hack is, among other things, "to work on something (typically a program)." One definition seems to distill the essence of hacker existence:

ha ha only serious [from SF fandom, orig. as mutation of HHOK, 'Ha Ha Only Kidding'] A phrase (often seen abbreviated as HHOS) that aptly captures the flavor of much hacker discourse. Applied especially to parodies, absurdities, and ironic jokes that are both intended and perceived to contain a possibly disquieting amount of truth, or truths that are construction on in-joke and self-parody. This lexicon contains many examples of ha-ha-only-serious in both form and content. Indeed, the entirety of hacker culture is often perceived as ha-ha-only-serious by hackers themselves; to take it either too lightly or too seriously marks a person as an outsider, a wannabe, or in larval stage. For further enlightenment on this subject, consult any Zen master. See also Humor, Hacker, and AI koans.

As the avant-garde of cyberspace, the tiny minority of hackers has so far set the tone, albeit more on the Internet than on the smaller, commercial on-line services such as Prodigy and America Online. (The latter apparently are a bit too user-friendly, with their flashy graphics and easy-to-follow instructions, for most self-respecting technically minded sorts.) In both realms, useful deposits of highly specialized information can be found and retrieved. Alas, many of the bulletin boards and discussion groups, those oftproclaimed waves of the future, are less than scintillating, with dialogues (or monologues)

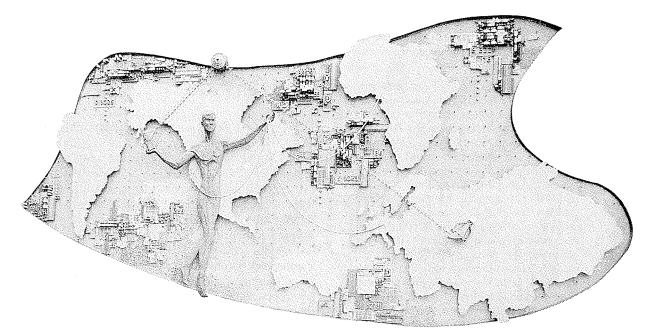
conducted at a level of sophistication closer to that of the exchanges that occur on the walls of public restrooms than to the great intellectual salons they are often compared to. This world still awaits its chronicler-with luck we may find a book called something like Dave Barry Goes On-line stacked by the front door of the local bookstore someday. In the meantime, some insight into on-line goings-on can be gleaned from three magazines (listed in order of increasing distance from the mainstream): Wired, Whole Earth Review, and Mondo 2000. Each has its virtues, but each takes its subject perhaps a bit too seriously. The hacker's smirks-HHOS-that are allowed do not intrude upon the sense, à la Star Trek, that readers are boldly going where no one has gone before.

he bookstores *are* full of Internet guide books and directories, and the thinking individual will quickly deduce from the impressive thickness of these volumes that cyberspace is not an easy place to get around in. It is another one of the dirty little secrets of the Internet that conditions on this trendy data highway are quite primitive. Not only are there obscure codes and commands to memorize and all manner of other obstacles to overcome, but there are a multitude of mundane perils, such as the dread possibility (some would say likelihood) that a burst of static on the phone line or some other mysterious occurrence will freeze the cybertraveler's computer-causing him or her to become "hung" or "wedged," according to the New Hacker's Dictionary-and forcing a timeconsuming withdrawal from the Internet. In any event, the classic introduction to the Internet is Brendan P. Kehoe's Zen and the Art of the Internet (Prentice Hall, 2d ed., 1994). The Whole Internet User's Guide & Catalog (O'Reilly & Associates, 2d ed., 1994) is one of the oldest and still one of the best of the rising pile of more detailed manuals. Another useful volume is Paul Gilster's Internet Navigator (John Wiley & Sons, 1993).

What the guidebooks do not make clear is that learning even the basics of the Net, not to mention active "Netsurfing," requires a considerable commitment of time. Moreover, a guidebook or two is not really enough to help one get around; human guides and informants are needed. *The New Hacker's Dictionary* speaks of the "guru" ("An expert. Implies not only *wizard* skill but also a history of being a knowledge resource for others"), but this seems too exalted a term to describe what average users need (and the kind of knowledge they are likely to find on the Net). The Net's labyrinth-like quality, as well as the patchiness and recalcitrance of its resources, suggest a more medieval metaphor: the monk.

ness through technology.

At one extreme is Walter B. Wriston, the former chairman of Citicorp, who writes in **The Twilight of Sovereignty: How the Information Revolution is Transforming Our World** (Scribner's, 1992) that the information revolution is empowering individuals and boosting markets while it undermines the powers of nations and corporations. "As long as capital consisted largely of factories, heavy equipment, and natural resources, government felt free to impose rules and exact payments with no fear that the nation's capital base would steal away in the



In fact, medievalism already is an undercurrent in some corners of the Net. A popular segment of the Net is Multi-User Dungeons (MUDs), where users can assume imaginary identities and play out elaborate games set in outer space or King Arthur's Court. Among the various futurists who have tried to think about the consequences of the Net and whatever kind of information superhighway eventually grows out of it, however, the medieval model—of a segmented society of electronic communities is little discussed. Rather, the optimists among them—and most of them are optimists—tend to see the world moving toward some sort of One-

night. Extreme impositions would reduce productivity—the Communist economies never worked very well—but on the whole government held the cards." None of this is possible anymore, Wriston believes. A parallel argument about the collapse of borders is made by Robert Reich, now U.S. secretary of labor, in **The Work of Nations: Preparing Ourselves for 21st-Century Capitalism** (Knopf, 1991).

Wriston's argument is larded with examples of the positive power of information flows, such as that of the Sri Lankan farmers who recently raised their incomes by 50 percent when the coming of telephones allowed them to cut out middlemen and deal directly with buyers in the capital city of Colombo.

similarly upbeat note is sounded by George Gilder, imagining the impact of the networked "telecomputer" of the future in Life After Television: The Coming Transformation of Media and American Life (Norton, 1992): "Rather than exalting mass culture, the telecomputer will enhance individualism. Rather than cultivating passivity, the telecomputer will promote creativity.... Perhaps most important, the telecomputer will enrich and strengthen democracy and capitalism all around the world."

If cyberspace is a place being formed by the convergence of a variety of digital technologies, it is also a place where a degree of political and cultural convergence is taking place. For alongside Gilder, author of the 1981 supply-side treatise Wealth and Poverty, stand a variety of distinctly New Ageish sorts. The romance of the Net is best captured in The Virtual Community: Homesteading on the Electronic Frontier (Addison-Wesley, 1993), by Howard Rheingold, editor of Whole Earth Review. Here, in addition to the best existing reportage on cyberspace in book form, is the idea of electronic community and democracy elevated (albeit cautiously) nearly to utopian heights. In discussion groups and other locales in cyberspace, Rheingold writes, he turns for advice on parenting, collects ideas and information for professional use, engages in political discussion and activism, forms friendships, and shares grief. "In traditional kinds of communities," he writes, "we are accustomed to meeting people, then getting to know them; in virtual communities, you can get to know people and then choose to meet them."

At perhaps the farthest fringe of the optimists' camp—with enthusiastic blurbs from both

Gilder and Rheingold—is **Out of Control: The Rise of Neo-Biological Civilization** (Addison-Wesley, 1994), by *Wired* executive editor Kevin Kelly. Resurrecting cybernetics and stirring in, among other things, a few items from William Gibson, the science fiction laureate of cyberspace, Kelly speculates at length about the merger of technology and biology and "the rise of neo-biological civilization."

he critics, of course, have not been silent. In Technopoly: The Surrender of Culture to Technology (Knopf, 1992), Neil Postman, a professor of communication arts at New York University, warns of "the Technopoly story." It emphasizes "progress without limits, rights without responsibilities, and technology without cost. The Technopoly story is without a moral center. It puts in its place efficiency, interest, and economic advance." Postman recoils at "neobiological" metaphors: "The computer, it is implied, has a will, has intentions, has reasons-which means that humans are relieved of responsibility for the computer's decisions." In The Cult of Information: A Neo-Luddite Treatise on High-Tech, Artificial Intelligence, and the True Art of Thinking (Univ. of Calif., 2d ed., 1994), historian Theodore Roszak offers a similar thought: "The irony behind [information] technology is the tendency it encourages in some of its most talented and enthusiastic developers to cheapen-or even to try to replace-the mind that created the technology in the first place."

James R. Beniger's **Control Revolution: Technological and Economic Origins of the Information Society** (Harvard, 1986), which traces the origins of today's information society to the 19th century, is a useful reminder that technology does not have a life of its own but is created by human beings to serve human ends. Technology, one might conclude, is not destiny.