

Being Digital
by Nicholas Negroponte
New York: Alfred A. Knopf, 1995

Reviewed by David W. Gill www.ethixbiz.com

Books on technology and its various roles in our culture are pouring from the press these days. In the "Amen corner" is Nicholas Negroponte, Professor of Media Technology at MIT, Founding Director of the Media Lab, and columnist for *Wired* magazine.

Being Digital is a breathless, adoring tour of the technological future allegedly at our doorstep. This will be a world of high-speed, high-volume movement of "bits" of digitized information---pretty much replacing the movement of "atoms." "The change from atoms to bits is irrevocable and unstoppable" (p. 4). Digital communication brings not only a quantum leap upward in volume, it changes our relationships to time and space. Your location is your (portable) e-mail address; other geographic places can (virtually) come to you (p. 165). Asynchronous communication becomes more and more prevalent (answering machines, e-mail, on-demand television, etc.). The whole rhythm of work and play changes: the old nine-to-five, five-day work week in the office is gone. Now we can work wherever we want, whenever we want. In contrast to those who might appreciate a break in time and space from their work, Negroponte testifies "some of us like to be 'wired' all the time" (p. 193). It is probably not too reckless to predict that in Negroponte's digitally-obsessive future, psychotherapists will continue to do a booming business.

Oddly enough, just as we manage to escape having to deal with real human beings, Negroponte dreams "that computers will be more like people" (p. 101). He looks forward to the time when computers will read and respond to our presence and our speech (sort of a sophisticated version of motion-sensing light switches). "In the next millenium, we will find that we are talking as much or more with machines than we are with humans" (p. 145). The joys you now experience with ever-extending phone-mail menus may soon be with you in all areas of your life and work!

Negroponte's digital world will inundate us with multi-media possibilities and choices. But "pull" instead of "push" will determine what we see and hear. "Being digital will change the nature of mass media from a process of pushing bits at people to one of allowing people (or their computers) to pull at them" (p. 84). The "news" (and our entertainment---though it may be difficult to know the difference!) will be whatever we want it to be, whenever we want it. The current "information age" is characterized by massive information directed at mass audiences. "In the post-information age, we often have an audience the size of one. Everything is made to order, and information is extremely personalized. . . . In being digital I am *me*, not a statistical subset. . . . True personalization is now upon us" (p. 164).

The digital world, Negroponte predicts, will be great for education. Students will use computer simulations to replace or augment their lived experiences; they will play with information instead of memorizing facts. "Today kids are getting the opportunity to be street smart on the Internet, where *children are heard and not seen* [Negroponte emphasis]. Ironically, reading and writing will benefit. . . . The Internet provides a new medium for reaching out to find knowledge and meaning" (p. 202). Nor need we mourn the disappearance of the extended family, for with thousands of AARP members on line . . . "making just that enormous body of knowledge and wisdom accessible to young minds could close the generation gap with a few key strokes" (p. 203). And you thought it was more complex than that!

"Personal computers will make our future adult population simultaneously more mathematically able and more visually literate. . . the pursuit of intellectual achievement will . . . cater to a wider range of cognitive styles, learning patterns, and expressive behaviors. . . The middle ground between work and play will be enlarged dramatically. The crisp line between love and duty will blur by virtue of a common denominator---being digital" (220-21)

"The Information Superhighway is . . . creating a totally new, global social fabric" (p. 183). Does Negroponte see any downside or difficulty with the new social order? "Netiquette" is a problem, although more so for the lack of brevity than for the presence of lies and disinformation, or of the crude, rude, and

lewd. "Every technology or gift of science has a dark side. Being digital is no exception" (p. 227). There are problems of intellectual property abuse, invasion of privacy, digital vandalism, software piracy, data thievery, and loss of jobs to automation. Furthermore, "bits are not edible; in that sense they cannot stop hunger. Computers are not moral; they cannot resolve complex issues like the rights to life and to death" (pp. 228-9).

But for Negroponte, these are merely glitches in a powerful, unstoppable cultural change. Four powerful qualities of the digital world will lead inexorably to triumph: decentralizing, globalizing, harmonizing, empowering. The globalizing and harmonizing qualities are clear enough. Negroponte's readers may harbor greater doubts about whether true decentralization and empowerment will occur.