PROFILE

An Ethnologist in Cyberspace

Sociologist Sherry Turkle explores the emotional and intellectual connections to virtual pets, chat rooms and other products of the computer age.

Beep. "At a certain point you want to kill it," says Sherry Turkle, pressing the tiny buttons of her daughter's virtual pet. Beep. Like many mothers the world over, Turkle is sometimes enslaved to a demanding electronic toy while her six-year-old is away at school. Beep, bleats the little plastic object. More buttons pushed. Turkle feeds it. Cleans up after it. Tends to it. Beep. But the dinosaur-like critter inhabiting the gray screen wants more of everything. "Because it is young, it needs attention every minute," Turkle sighs. "That is part of the deal."

Sitting at the kitchen counter, surrounded by her daughter's handmade books—which have bright-colored paper covers, a page or two of text or illustration and titles such as "Soccer is for Boys: Fiction"—Turkle sketches the brief history of electronic toys. The professor of sociology at the Massachusetts Institute of Technology describes how digital devices used to be targeted solely at boys and how, in many ways, these video games taught them to be comfortable with computers. Now, as Tamagotchi, the most famous brand of virtual pet, become the rage for girls, the lessons are shifting. "The transition is from objects-to-think-with to objects-to-nurture," Turkle explains. "The new hook for these kids, and not just for kids, is nurturance instead of control and mastery."

Turkle—who has been described as the Margaret Mead of cyberspace—is concerned about the implications of this transition. "You know intellectually that it is not another creature, but the emotion of not being able to let the Tamagotchi down is on a different register," notes Turkle, who has been studying these toys and their caretakers for a year or so. "The point is not just to be involved with technology; the point is technology for what? What is it doing to us?"

These questions are ones Turkle has been asking since she arrived at M.I.T. in 1975. For more than 20 years, she has delved into the psychology of our interactions and relationships with computers, paying particular attention to children. She has explored how people foist projections and needs—intellectual and emotional—onto computers and, more recently, the on-line world. "I am trying in one way or another to get people to look at the subjective side of technology," Turkle says. "My focus is on the individual experience, on the construction of identity and the way technology is used in the construction of identity."

Because she studies individuals and groups of users—hackers, hobbyists, artificial-intelligence researchers and teenagers, for example—Turkle's findings cannot always be summed up in a neat sound bite. "I can't have a conversation with someone without giving them a dissertation topic," Turkle says, laughing. "It is kind of a professional deformation. Like Cindy Crawford probably can't have a conversation without lipstick." As a result, Turkle's work offers some enriching gray, fine-grained detail to the often black-and-white generalizations about computer use.

In her most recent book, Life on the Screen: Identity in the Age of the Internet, Turkle describes how people visit chat rooms and other kinds of multiuser domains to explore facets of their personalities—and how they integrate what they learn into "RL," or "Real Life." (Turkle herself prefers the acronym "ROL," or "Rest of Life." ) She found, for instance, that some women who assume male names on-line can talk more easily and are listened to more readily. Whereas men posing as female characters are occasionally harassed sexually or upbraided for talking too much.

Far from being a place littered with cybergirls and people trying to avoid responsibility, Turkle has found the Internet to be a world where people can often subtly expand, in a healthy way, their repertoire of interactions—just as they did when the telephone appeared, she notes. At the same time, Turkle is worried about the trend of taking things on the computer purely at "interface value"—that is, not understanding or caring to understand why or how they work. And she is concerned about the consequences of allocating so much of our emotional being to, among other things, psychology programs, software agents and the ubiquitous Tamagotchi.

Turkle says her own childhood was relatively technology free. She grew up in...
Brooklyn and attended public school. In 1965 she won a scholarship to Radcliffe College. When her mother died a few years later, Turkle decided to drop out of school and—based entirely on a much loved course on French civilization that she had taken at Harvard University—head to Paris.

Armed only with a letter from the cultural attaché, Turkle immersed herself in classes at the Institute for Political Studies. When the student protest in May 1968 catalyzed strikes and led France into political upheaval, Turkle found herself enthralled. Although the country seemed to return to normal a few months later, Turkle saw that a profound intellectual shift was under way in France—and that psychoanalysis was at the heart of it. She began to examine how ideas of mind—in this case, Freudian beliefs that had previously been reviled—were permeating general culture and finding new resonance. These observations led, many years later, to her first book, *Psychoanalytic Politics: Jacques Lacan and Freud’s French Revolution* (1978).

Turkle returned to the U.S., finished up at Radcliffe and then spent a year at the University of Chicago, where she studied with anthropologist Victor Turner. Turner is famous for his work on transitional, or liminal, moments—times of passage when traditional social structures may be suspended, evaluated and often reconstituted. In 1971 Turkle returned to Cambridge, pursued a joint doctorate in sociology and personality psychology at Harvard and, finally, settled in at M.I.T.

It was there these many intellectual currents—psychoanalytic politics, studies of French structuralist and post-structuralist thinkers and reflections on liminality—all came together. “Right away when I got there, I began to see ways in which ideas about the computer as a model of mind were getting into people’s individual ways of thinking about themselves,” she recalls. The computer seemed a perfect liminal object: it was both alive and not alive, both mind and not mind. “Some people said, ‘What a nice girl like you who knows about French poststructuralism doing in a place like this?’ But it was and is still the theme for me,” she laughs.

Turkle began to explore the comput-er as Rorschach blot. In 1984 her next book, *The Second Self: Computers and the Human Spirit*, opened up the world of computing to the lay public. In it Turkle discussed, among other topics, how boys and girls often had very different attitudes to programming. Two fourth-graders whom she interviewed embodied this difference. The boy envisioned his program in its entirety, then broke it down into parts and tackled one piece at a time. Turkle labeled this approach “hard mastery.” The girl, however, was less reductionist and went back and forth with her program: she would do one thing, step back, evaluate, then proceed—a process Turkle described as “bricolage,” a term borrowed from anthropologist Claude Lévi-Strauss.

This idea of bricolage—roughly defined as tinkering—has recently taken on new meaning, Turkle maintains. Because the graphical-user interface (embodied by the Macintosh and Windows operating systems) has become the dominant paradigm, most computers users, male and female alike, use bricolage: they cannot see the engine under the hood of the car. “Everything is on the surface. You don’t read the rule book: you do it by tinkering,” Turkle explains. “The danger is that this sort of bricolage becomes a model for all understanding.”

Which is something she is beginning to see in children. In a recent article, Turkle gave the example of Tim, a 13-year-old who was playing the game SimLife while she interviewed him. As she became frustrated because she could not understand the rules of the game, Tim tried to comfort her: “Don’t let it bother you if you don’t understand. I just say to myself that I probably won’t be able to understand the whole game anytime soon. So I just play.”

Turkle maintains that rather than focusing on red herrings, such as Internet addiction, parents and educators should figure out how to impart critical reading skills to children. When we read, she argues, we think “who, what, when, where and why” about the text; we question it critically. But in a culture of simulation, she says, we are much more passive.

The job ahead, Turkle continues, is to put the computer in its rightful place, emotionally and intellectually—something she sees many children, including her own daughter, doing quite readily. Rebecca, for instance, loves to read books, but she also loves the liberation of writing on the computer because it is faster than writing by hand. She plays checkers on the computer and has learned analytical skills, but she recognizes that drawing is better when done in ROL. And while Rebecca is very much in the real world, she has “also learned the seduction of a world without emotional aspects,” her mother observes.

Everyone needs to integrate both realms, Turkle says, and part of the key to this synthesis seems to lie with children: “This generation of kids, in confronting digital objects and virtual space, are completely comfortable with—call it cycling through, call it bricolage, call it tinkering, call it a radical heterogeneity of theory. Call it what you wish. But it is an acceptance of fluidity that is striking.”

Whereas many of their parents are sitting at desks and counters everywhere, struggling with the diurnal cycles of Tamagochis. “What are we becoming if we are emotionally relating to these objects that are evoking these responses that are meant to be our responses to our children?” Turkle asks, pointing at the dinozoid, which is silent and sated if only for the moment. It is a question she seems destined to answer.

—Marguerite Holloway