10 Always-On/Always-On-You: The Tethered Self

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In the mid-1990s, a group of young researchers at the MIT Media Lab carried computers and radio transmitters in their backpacks, keyboards in their pockets, and digital displays embedded in their eyeglass frames. Always on the Internet, they called themselves "cyborgs." The cyborgs seemed at a remove from their bodies. When their burdensome technology cut into their skin, causing lesions and then scar tissue, they were indifferent. When their encumbrances led them to be taken for the physically disabled, they patiently provided explanations. They were learning to walk and talk as new creatures, learning to inhabit their own bodies all over again, and yet in a way they were fading away, bleeding out onto the Net. Their experiment was both a re-embodiment—a prosthetic consummation—and a disembodiment: a disappearance of their bodies into still-nascent computational spaces.

Within a few years, the cyborgs had a new identity as the Media Lab's "Wearable Computing Group," harbingers of embedded technologies while the rest of us clumsily juggled cell phones, laptops, and PDAs. But the legacy of the MIT cyborgs goes beyond the idea that communications technologies might be wearable (or totable). Core elements of their experience have become generalized in global culture: the experience of living on the Net, newly free in some ways, newly yoked in others.

Today, the near-ubiquity of handheld and palm-size computing and cellular technologies that enable voice communication, text messaging, e-mail, and Web access have made connectivity commonplace. When digital technologies first came onto the consumer market in the form of personal computers they were objects for psychological projection. Computers—programmable and customizable—came to be experienced as a "second self" (Turkle 2005a). In the early twenty-first century, such language does not go far enough; our new intimacy with communications devices compels us to speak of a new state of the self, itself.

A New State of the Self, Itself

For the most part, our everyday language for talking about technology's effects assumes a life both on and off the screen; it assumes the existence of separate worlds, plugged

and unplugged. But some of today's locutions suggest a new placement of the subject, such as when we say "I'll be on my cell," by which we mean "You can reach me; my cell phone will be on, and I am wired into (social) existence through it." *On* my cell, *on*line, *on* the Web, *on* instant messaging—these phrases suggest a *tethered* self.

We are tethered to our "always-on/always-on-us" communications devices and the people and things we reach through them: people, Web pages, voice mail, games, artificial intelligences (nonplayer game characters, interactive online "bots"). These very different objects achieve a certain sameness because of the way we reach them. Animate and inanimate, they live for us through our tethering devices, always ready-to-mind and hand. The self, attached to its devices, occupies a liminal space between the physical real and its digital lives on multiple screens (Turner 1969). I once described the rapid movements from physical to a multiplicity of digital selves through the metaphor of "cycling-through." With cell technology, rapid cycling stabilizes into a sense of continual co-presence (Turkle 1995).

For example, in the past, I did not usually perform my role as mother in the presence of my professional colleagues. Now a call from my fifteen-year-old daughter calls me forth in this role. The presence of the cell phone, which has a special ring if my daughter calls, keeps me on the alert all day. Wherever I am, whatever I am doing, I am psychologically tuned to the connections that matter.

The Connections that Matter

We are witnessing a new form of sociality in which the connectedness that "matters" is determined by our distance from working communications technology. Increasingly, what people want out of public spaces is that they offer a place to be private with tethering technologies. A neighborhood walk reveals a world of madmen and women, talking to themselves, sometimes shouting to themselves, little concerned with what is around them, happy to have intimate conversations in public spaces. In fact, neighborhood spaces themselves become liminal, not entirely public, not entirely private (Katz 2006, chapters 1 and 2).

A train station is no longer a communal space, but a place of social collection: tethered selves come together, but do not speak to each other. Each person at the station is more likely to be having an encounter with someone miles away than with the person in the next chair. Each inhabits a private media bubble. Indeed, the presence of our tethering media signal that we do not want to be disturbed by conventional sociality with physically proximate individuals.

When people have personal cell phone conversations in public spaces, what sustains their sense of intimacy is the presumption that those around them treat them not only as anonymous, but as close to disembodied. When individual hold cell phones (or "speak into the air," indicating the presence of cells with earphone microphone),

they are marked with a certain absence. They are transported to the space of a new ether, virtualized. This "transport" can be signaled in other ways: when people look down at their laps during meals or meetings, the change of gaze has come to signify attention to their BlackBerries or other small communications devices. They are focused on elsewhere.

The director of a program that places American students in Greek universities complains that students are not "experiencing Greece" because they spend too much time online, talking with their friends from home. I am sympathetic as she speaks, thinking of the hours I spent walking with my fifteen-year-old daughter on a visit to Paris as she "texted" her friends at home on her cell phone. I worry that she is missing an experience that I cherished in my youth, the experience of an undiluted Paris that came with the thrill of disconnection from where I was from. But she is happy and tells me that keeping in touch is "comforting" and that beyond this, her text mails to home constitute a diary. She can look back at her texts and remember her state of mind at different points of her trip. Her notes back to friends, translated from instant message shorthand include "Saw Pont D'Avignon," "Saw World Cup Soccer in Paris," and "Went to Bordeaux." It is hard to get in too many words on the phone keyboard and there is no cultural incentive to do so. A friend calls my daughter as we prepare for dinner at our Paris hotel and asks her to lunch in Boston. My daughter says, quite simply: "Not possible, but how about Friday." Her friend has no idea that her call was transatlantic. Emotionally and socially, my daughter has not left home.

Of course, balancing one's physical and electronic connections is not limited to those on holiday. Contemporary professional life is rich in examples of people ignoring those they are physically "with" to give priority to online others. Certain settings in which this occurs have become iconic: sessions at international conferences where experts from all over the world come together but do their e-mail; the communications channels that are set up by audience members at conferences to comment on speakers' presentations during the presentations themselves (these conversations are as much about jockeying for professional position among the audience as they are about what is being said at the podium). Here, the public presentation becomes a portal to discussions that take people away from it, discussions that tend to take place in hierarchical tiers—only certain people are invited to participate in certain discussions. As a member of the audience, one develops a certain anxiety: have I been invited to chat in the inner circle?

Observing e-mail and electronic messaging during conferences at exotic locations compels our attention because it is easy to measure the time and money it takes to get everyone physically together at such meetings. Other scenes have become so mundane that we scarcely notice them: students do e-mail during classes; business people do e-mail during meetings; parents do e-mail while playing with their children; couples do e-mail at dinner; people talk on the phone and do their e-mail at the same time. Once done surreptitiously, the habit of electronic co-presence is no longer something

people feel they need to hide. Indeed, being "elsewhere" than where you might be has become something of a marker of one's sense of self-importance.

Phoning It In

The expression "phoning it in" used to be pejorative. It implied a lack of appropriate attention to what might be novel about a task at hand. Now, as pure description, it provides a metric for status; it suggests that you are important enough to deliver your work remotely. The location of the high-status body is significant, but with connectivity comes multiple patterns for its deployment. In one pattern, the high-status body is in intensive contact with others, but spreads itself around the world, traveling. In another pattern, the high-status body is in retreat, traveling to face-to-face contact in order to maximize privacy and creativity. However the traveling body chooses to use its time, it is always tethered, kept in touch through technical means. Advertisements for wireless technology routinely feature a handsome man or beautiful woman on a beach. The ad copy makes it clear that he or she is important and working. The new disembodiment does not ask you to deny your body its pleasures, but on the contrary, to love your body, to put it somewhere beautiful while "you" work.

Our devices become a badge of our networks, a sign that we have them, that we are wanted by those we *know*, the people on our "contact lists" and by the potential, as yet *unknown* friends who wait for us in virtual places (such as Facebook, MySpace, or Friendster). It is not surprising that we project the possibility of love, surprise, amusement, and warmth onto our communications devices. Through them we live with a heightened sense of potential relationships, or at least of new connections. Whether or not our devices are in use, without them we feel adrift—adrift not only from our current realities but from our wishes for the future.

A call to a friend is a call to a known (if evolving) relationship. Going online to a social networking site offers a place to dream, sometimes fostering a sense that old relationships are dispensable. People describe feeling more attached to the site than to any particular acquaintances they have on them. In psychodynamic terms, the site becomes a transference object: the place where friendships come from. "I toss people," says Maura, thirty-one, an architect, describing how she treats acquaintances on Second Life, an elaborate online social environment. Second Life offers the possibility of an online parallel life (including a virtual body, wardrobe, real estate, and paying job). "I know it gives me something of a reputation, but there are always new people. I don't stay in relationships long." Maura continues: "There is always someone else to talk to, someone else to meet. I don't feel a commitment." People who have deployed avatars on Second Life stress that the virtual world gives them a feeling of everyday renewal. "I never know who I'll meet," says a thirty-seven-year-old housewife from the Boston suburbs, and contrasts this pleasurable feeling with the routine of her life at home with two toddlers.

From the early 1990s, game environments known as MUDs (for multiuser domains) and then MMRPGs (massively multiplayer role playing games) presented their users with the possibility of creating characters and living out multiple aspects of self. Although the games often took the forms of medieval quests, the virtual environments owed their "holding power" to the opportunities that they offered for exploring identity. (Turkle 1995). People used their lives on the screen to work through unresolved or partly resolved issues, often related to sexuality or intimacy. For many who enjoy online life, it is easier to express intimacy in the virtual world than in "RL" or real life. For those who are lonely yet fearful of intimacy, online life provides environments where one can be a loner yet not alone, environments where one can have the illusion of companionship without the demands of sustained, intimate friendship. Online life emerged as an "identity workshop" (Bruckman 1992).

Throughout our lives, transitions (career change, divorce, retirement, children leaving home) provide new impetus for rethinking identity. We never "graduate" from working on identity; we simply work on it with the materials we have at hand at a particular stage of life. Online social worlds provide new materials. The plain may represent themselves as glamorous; the introverted can try out being bold. People build the dreamhouses in the virtual that they cannot afford in the real. They plant virtual gardens. They take online jobs of great responsibility. They often have relationships, partners and what they term "marriages" of great emotional importance. In the virtual is this world the crippled can walk without crutches and the shy can improve their chances as seducers.

It is not exact to think of people as tethered to their *devices*. People are tethered to the gratifications offered by their online selves. These include the promise of affection, conversation, a sense of new beginnings. And, there is vanity: building a new body in a game like Second Life allows you to put aside an imperfect physical self and reinvent yourself as a wonder of virtual fitness. Everyone on Second Life can have their own "look"; the game enables a high level of customization, but everyone looks good, wearing designer clothes that appear most elegant on sleek virtual bodies. With virtual beauty comes possibilities for sexual encounters that may not be available in the physical real.

Thus, more than the sum of their instrumental functions, tethering devices help to constitute new subjectivities. Powerful evocative objects for adults, they are even more intense and compelling for adolescents, at that point in development when identity play is at the center of life.

The Tethered Teen

The job of adolescence is centered around experimentation—with ideas, with people, with notions of self. When adolescents play an online role playing game they often use it to recast their lives. They may begin by building their own home, furnishing it to their taste, not that of their parents, and then getting on with the business of

reworking in the virtual world what has not worked so well in the real. Trish, a thirteen-year-old who has been physically abused by her father, creates an abusive family on Sims Online—but in the game her character, also thirteen, is physically and emotionally strong. In simulation, she plays and replays the experience of fighting off her aggressor. Rhonda, a sexually experienced girl of sixteen, creates an online innocent. "I want to have a rest," she tells me and goes on to recall the movie *Pleasantville* in which the female lead character, a high school teenager, "gets to go to a town that only exists from a TV show where she starts to be slutty like she is at home, but then she changes her mind and starts to turn boys down and starts a new life. She practices being a different kind of person. That's what Sims Online is for me. Practice."

Rhonda "practices" on the game at breakfast, during school recess, and after dinner. She says she feels comforted by her virtual life. The game does not connect her to other people. She is tethered to the game by a desire to connect to herself.

ST: Are you doing anything different in everyday life [since playing Sims Online]? Rhonda: Not really. Not very. But I'm thinking about breaking up with my boyfriend. I don't want to have sex anymore but I would like to have a boyfriend. My character [in Sims Online] has boyfriends but doesn't have sex. They help her with her job. I think to start fresh I would have to break up with my boyfriend.

Rhonda is emotionally tethered to the world of the Sims technology gives her access to a medium in which she can see her life through a new filter, and possibly begin to work through problems in a new way (Turkle 1995).

Adolescents create online personae in many ways: when they deploy a game avatar, design a Web page, or write a profile for a social networking site such as Facebook. Even creating a playlist of music becomes a way of capturing one's personae at a moment in time. Multiple playlists reflect aspects of self. And once you have collected your own music, you can make connections to people all over the world to whom you send your songs.

Today's adolescents provide our first view of tethering in developmental terms. The adolescent wants both to be part of the group and to assert individual identity, experiencing peers as both sustaining and constraining. The mores of tethering support group demands: among urban teens, it is common for friends to expect that their peers will stay available by cell or instant message. In this social contract, one needs good cause to claim time offline. The pressure to be always-on can be a burden. So, for example, teenagers who need uninterrupted time for schoolwork resort to using their parents' Internet accounts to hide out from friends. Other effects of the always-on/always-on-you communications culture may be less easily managed and perhaps more enduring.

Mark Twain mythologized the process of separation during which adolescents work out their identities as the Huck Finn experience, the on-the-Mississippi time of escape

from the adult world. The time on the river portrays an ongoing rite of passage during which children separate from parents to become young adults, a process now transformed by technology. Traditionally, children have internalized the adults in their world before (or just as, or shortly after) the threshold of independence is crossed. In the technologically tethered variant, parents can be brought along in an intermediate space, for example, the space created by the cell phone where everyone is on speed dial. In this sense, the generations sail down the river together.

When children receive cell phones by their parents, the gift usually comes with a promise: children are to answer their parents' calls. This arrangement gives children permission to do things—take trips to see friends, attend movies, go to the beach—that would not be permitted without the phone-tethering to parents. Yet the tethered child does not have the experience of being alone with only him or herself to count on. There used to be a point for an urban child, usually between the ages of eleven and fourteen, when there was a "first time" to navigate the city alone. It was a rite of passage that communicated "You are on your own and responsible. If you are frightened, you have to experience those feelings." The cell phone buffers this moment; the parent is "on tap." With the on-tap parent, tethered children think differently about their own responsibilities and capacities. These remain potential, not proven.

New Forms of Validation

I think of the *inner history* of technology as the relationships people form with their artifacts, relationships that can forge new sensibilities. Tethering technologies have their own inner histories. For example, a mobile phone gives us the potential to communicate whenever we have a feeling, enabling a new coupling of "I have a feeling/Get me a friend." This formulation has the emotional corollary, "I want to have a feeling/Get me a friend." In either case, what is *not* being cultivated is the ability to be alone, to reflect on and contain one's emotions. The anxiety that teens report when they are without their cell phones or their link to the Internet may not speak so much to missing the easy sociability with others but of missing the self that is constituted in these relationships.

When David Riesman remarked on the American turn from an inner- to an other-directed sense of self by 1950 (Riesman 1950), he could not foresee how technology could raise other-directedness to a new level. It does this by making it possible for each of us to develop new patterns of reliance on others and transference relationships to a suite of devices that makes the others available to us at literally a moment's notice. Some people experienced this kind of transference to the traditional (landline) telephone. The telephone was a medium through which to receive validation, and sometimes the feelings associated with that validation were transferred to the telephone

itself. The cell phone takes this effect to a higher power because the device is always available and there is a high probability that one will be able to reach a source of validation through it. It is understood that the validating cell conversation may be brief, just a "check-in," but more is not necessarily desired.

The cell phone check-in enables the new other-directness. At the moment of having a thought or feeling, one can have it validated. Or, one may *need* to have it validated. And further down a continuum of dependency, as a thought or feeling is being formed, it may *need validation to become established.* The technology does not cause a new style of relating, but enables it. As we become accustomed to cell calls, e-mail, and social Web sites, certain styles of relating self to other feel more natural. The validation (of a feeling already felt) and enabling (of a feeling that cannot be felt without outside validation) are becoming commonplace rather than marked as childlike or pathological. One moves from "I have a feeling/Get me a friend" to "I want to have a feeling/Get me a friend."

The psychoanalyst Heinz Kohut writes about narcissism and describes how some people, in their fragility, turn other persons into "self-objects" to shore up their fragile sense of self (Ornstein 1978). In the role of self-object, the other is experienced as part of the self, thus in perfect tune with the fragile individual's inner state. They are there for validation, mirroring. Technology increases one's options. One fifteen-year-old girl explains: "I have a lot of people on my contact list. If one friend doesn't get it, I call another." In Kohutian terms, this young woman's contact or buddy list has become a list of spare parts for her fragile adolescent self.

Just as always-on/always-on-you connectivity enables teens to postpone independently managing their emotions, it can also make it difficult to assess children's level of maturity, conventionally defined in terms of autonomy and responsibility. Tethered children know that they have backup. The "check-in" call has evolved into a new kind of contact between parents and children. It is a call that says "I am fine. You are there. We are connected."

In general, the telegraphic text message quickly communicates a state, rather than opens a dialogue about complexity of feeling. Although the culture that grows up around the cell is a talk culture (in shopping malls, supermarkets, city streets, cafés, playgrounds, and parks cells are out and people are talking into them), it is not necessarily a culture in which talk contributes to self-reflection. Today's adolescents have no less need than previous generations to learn empathic skills, to manage and express feelings, and to handle being alone. But when the interchanges to develop empathy are reduced to the shorthand of emoticon emotions, questions such as "Who am I?" and "Who are you?" are reformatted for the small screen, and are flattened in the process. High technology, with all its potential range and richness, has been put at the service of telegraphic speed and brevity.

Leaving the Time to Take Our Time

Always-on/always-on-you communications devices are seductive for many reasons, among them, they give the sense that one can do more, be in more places, and control more aspects of life. Those who are attached to BlackBerry technology speak about the fascination of watching their lives "scroll by," of watching their lives as though watching a movie. One develops a new view of self when one considers the many thousands of people to whom one may be connected. Yet just as teenagers may suffer from a media environment that invites them to greater dependency, adults, too, may suffer from being overly tethered, too connected. Adults are stressed by new responsibilities to keep up with email, the nagging sense of always being behind, the inability to take a vacation without bringing the office with them, and the feeling that they are being asked to respond immediately to situations at work, even when a wise response requires taking time for reflection, a time that is no longer available.

We are becoming accustomed to a communications style in which we receive a hasty message to which we give a rapid response. Are we leaving enough time to take our time?

Adults use tethering technologies during what most of us think of as down time, the time we might have daydreamed during a cab ride, waiting in line, or walking to work. This may be time that we physiologically and emotionally need to maintain or restore our ability to focus (Herzog et al. 1997; Kaplan 1995). Tethering takes time from other activities (particularly those that demand undivided attention), it adds new tasks that take up time (keeping up with e-mail and messages), and adds a new kind of time to the day, the time of attention sharing, sometimes referred to as *continuous partial attention* (Stone 2006). In all of this, we make our attention into our rarest resource, creating increasingly stiff competition for its deployment, *but we undervalue it as well.* We deny the importance of giving it to one thing and one thing only.

Continuous partial attention affects the quality of thought we give to each of our tasks, now done with less *mind share.* From the perspective of this essay with its focus on identity, continuous partial attention affects how people think about their lives and priorities. The phrases "doing my e-mail" and "doing my messages" imply performance rather than reflection. These are the performances of a self that can be split into constituent parts.

When media does not stand waiting in the background but is always there, waiting to be wanted, the self can lose a sense of conscious choosing to communicate. The sophisticated consumer of tethering devices finds ways to integrate always-on/always-on-you technology into the everyday gestures of the body. One BlackBerry user says: "I glance at my watch to sense the time; I glance at my BlackBerry to get a sense of my life." The term *addiction* has been used to describe this state, but this way of thinking

is limited in its usefulness. More useful is thinking about a new state of self, one that is extended in a communications artifact. The BlackBerry movie of one's life takes on a life of its own—with more in it than can be processed. People develop the sense that they cannot keep up with their own lives. They become alienated from their own experience and anxious about watching a version of their lives moving along, scrolling along, faster than they can handle. It is the unedited version of their lives; they are not able to keep up with it, but they are responsible for it (Mazmanian 2005).

Michel Foucault wrote about Jeremy Bentham's Panopticon as emblematic of the situation of the individual in modern, "disciplinary" society (Foucault 1979). The Panopticon is a wheel-like structure with an observer (in the case of a prison, a prison guard) at its hub. The architecture of the Panopticon creates a sense of being always watched whether or not the guard is actually present. For Foucault, the task of the modern state is to construct citizens who do not need to be watched, who mind the rules and themselves. Always-on/always-on-you technology takes the job of self-monitoring to a new level. We try to keep up with our lives as they are presented to us by a new disciplining technology. We try, in sum, to have a self that keeps up with our e-mail.

Boundaries

A new complaint in family and business life is that it is hard to know when one has the attention of a BlackBerry user. A parent, partner, or child can be lost for a few seconds or a few minutes to an alternate reality. The shift of attention can be subtle; friends and family are sometimes not aware of the loss until the person has "returned." Indeed, BlackBerry users may not even know where their attention lies. They report that their sense of self has merged with their prosthetic extensions and some see this as a new "high." But this exhilaration may be denying the costs of multitasking. Sociologists who study the boundaries between work and the rest of life suggest that it is helpful when people demarcate role shifts between the two. Their work suggests that being able to use a BlackBerry to blur the line is problematic rather than a skill to be celebrated. (Clark 2000; Desrochers and Sargent 2003; Shumate and Fulk 2004). And celebrating the integration of remote communications into the flow of life may be underestimating the importance of face-to-face connections (Mazmanian 2005).

Attention-sharing creates work environments fraught with new tensions over the lack of primacy given to physical proximity. Face-to-face conversations are routinely interrupted by cell phone calls and e-mail reading. Fifteen years ago, if a colleague read mail in your presence, it was considered rude. These days, turning away from a person in front of you to answer a cell phone has become the norm. Additionally, for generations, business people have grown accustomed to relying on time in taxis, airports, trains, and limousines to get to know each other and to discuss substantive matters. The waiting time in client outer offices was precious time for work and the ex-

change of news that created social bonds among professional colleagues. Now, things have changed: professionals spend taxi time on their cell phones or doing e-mail on their PDAs. In the precious moments before client presentations, one sees consulting teams moving around the periphery of waiting rooms, looking for the best place for cell reception so that they can make calls. "My colleagues go to the ether when we wait for our clients," says one advertising executive. "I think our presentations have suffered." We live and work with people whose commitment to our presence feels increasingly tenuous because they are tethered to more important virtual others.

Human beings are skilled at creating rituals for demarcating the boundaries between the world of work and the world of family, play, and relaxation. There are special times (the Sabbath), special meals (the family dinner), special attire (the "armor" for a day's labor comes off at home, whether it is the businessperson's suit or the laborer's overalls), and special places (the dining room, the parlor, the bedroom, the beach). Now always-on/always-on-me technology accompanies people to all these places, undermining the traditional rituals of separation.

There is a certain push back. Just as teenagers hide from friends by using their parents' online accounts to do homework, adults, too, find ways to escape from the demands of tethering: BlackBerries are left at the office on weekends or they are left in locked desk drawers to free up time for family or leisure (Gant and Kiesler 2001). "It used to be my home was a haven; but now my home is a media center," says an architect whose clients reach him on his Internet-enabled cell. No longer a safe space or refuge, people need to find places to hide. There are technically none except long plane rides where there is no cell or Internet access, and this, too, may be changing.

A Self Shaped by Rapid Response

Our technology reflects and shapes our values. If we think of a telephone call as a quick-response system enabled by always-on/always-on-you technology, we can forget there is a difference between a scheduled call and the call you make in reaction to a fleeting emotion, because someone crossed your mind, or because someone left you a message. The self that is shaped by this world of rapid response measures success by calls made, e-mails answered, and contacts reached. This self is calibrated on the basis of what the technology proposes, by what it makes possible, and by what it makes easy. But in the buzz of activity, there are losses that we are perhaps not ready to sustain.

One is the technology-induced pressure for speed, even when we are considering matters over which we should take our time. We insist that our world is increasingly complex, yet we have created a communications culture that has decreased the time available for us to sit and think uninterrupted. BlackBerry users describe that sense of

encroachment of the device on their time. One says, "I don't have enough time alone with my mind." Other phrases come up: "I have to struggle to make time to think." "I artificially make time to think." "I block out time to think." In all of these statements is the implicit formulation of an "I" that is separate from technology, that can put it aside and needs time to think on its own. This formulation contrasts with a growing reality of our lives lived in the continual presence of communications devices. This reality has us, like the early MIT "cyborg" group, learning to see ourselves not as separate but as at one with our the machines that tether us to each other and to the information culture. To put it most starkly: to make more "time" in the old-fashioned sense means turning off our devices, disengaging from the always-on culture. But this is not a simple proposition since our devices have become more closely coupled to our sense of our bodies and increasingly feel like extensions of our minds.

In the 1990s, as the Internet became part of everyday life, people began to create multiple online avatars and used them to shift gender, age, race, and class. The effort was to create richly rendered virtual selves through which one could experiment with identity by playing out parallel lives in constructed worlds. The world of avatars and games continues, but now, alongside its pleasures, we use always-on/always-on-you technology to play ourselves. Today's communications technology provides a social and psychological GPS, a navigation system for tethered selves. One television producer, accustomed to being linked to the world via her cell and Palm device, revealed that for her, the Palm's inner spaces were where her self resides: "When my Palm crashed it was like a death. It was more than I could handle. I felt as though I had lost my mind."

Tethered: To Whom and to What?

Acknowledging our tethered state raises the question of to whom or to what we are connected (Katz 2003). Traditional telephones tied us to friends, family, colleagues from school and work, and commercial or philanthropic solicitations. Things are no longer so simple. These days we respond to humans and to objects that represent them: answering machines, Web sites, and personal pages on social networking sites. Sometimes we engage with avatars that anonymously "stand in" for others, enabling us to express ourselves in intimate ways to strangers, in part because we and they are able to veil who we "really are." And sometimes we listen to disembodied voices—recorded announcements and messages—or interact with synthetic voice recognition protocols that simulate real people as they try to assist us with technical and administrative problems. We no longer demand that as a person we have another person as an interlocutor. On the Internet, we interact with bots, anthropomorphic programs that are able to converse with us, and in online games we are partnered with nonplayer characters, artificial intelligences that are not linked to human players. The games re-

quire that we put our trust in these characters. Sometimes it is only these nonplayer characters who can save our "lives" in the game.

This wide range of entities—human and not—is available to us wherever we are. I live in Boston. I write this chapter in Paris. As I travel, my access to my favorite avatars, nonplayer characters, and social networking sites stays constant. There is a degree of emotional security in a good hotel on the other side of the world, but for many, it cannot compare to the constancy of a stable technological environment and the interactive objects within it. Some of these objects are engaged on the Internet. Some are interactive digital companions that can travel with you, now including robots that are built for relationships.

Consider this moment: an older woman, seventy-two, in a nursing home outside of Boston is sad. Her son has broken off his relationship with her. Her nursing home is part of a study I am conducting on robotics for the elderly. I am recording her reactions as she sits with the robot Paro, a seal-like creature, advertised as the first "therapeutic robot" for its ostensibly positive effects on the ill, the elderly, and the emotionally troubled. Paro is able to make eye contact through sensing the direction of a human voice, is sensitive to touch, and has "states of mind" that are affected by how it is treated—for example, it can sense if it is being stroked gently or with some aggression. In this session with Paro, the woman, depressed because of her son's abandonment, comes to believe that the robot is depressed as well. She turns to Paro, strokes him, and says: "Yes, you're sad, aren't you. It's tough out there. Yes, it's hard." And then she pets the robot once again, attempting to provide it with comfort. And in so doing, she tries to comfort herself.

Psychoanalytically trained, I believe that this kind of moment, if it happens between people, has profound therapeutic potential. What are we to make of this transaction as it unfolds between a depressed woman and a robot? The woman's sense of being understood is based on the ability of computational objects like Paro to convince their users that they are in a relationship. I call these creatures (some virtual, some physical robots) "relational artifacts" (Turkle 1999; 2003a; 2003b; 2004a; 2004b; 2004c; 2005b; 2005c; 2006b; Turkle et al. 2006a). Their ability to inspire a relationship is not based on their intelligence or consciousness but on their ability to push certain "Darwinian" buttons in people (making eye contact, for example) that cause people to respond *as though* they were in a relationship.

Do plans to provide relational robots to children and the elderly make us less likely to look for other solutions for their care? If our experience with relational artifacts is based on a fundamentally deceitful interchange (artifacts' ability to persuade us that they know and care about our existence), can it be good for us? Or might it be good for us in the "feel good" sense, but bad for us in our lives as moral beings? The answers to such questions are not dependent on what computers can do today or what they are likely to be able to do in the future. These questions ask what *we* will be like, what kind

of people are *we* becoming, as we develop increasingly intimate relationships with machines.

In *Computer Power and Human Reason*, Joseph Weizenbaum wrote about his experiences with his invention, ELIZA, a computer program that engaged people in a dialogue similar to that of a Rogerian psychotherapist (Weizenbaum 1976). It mirrored one's thoughts; it was always supportive. To the comment "My mother is making me angry," the program might respond "Tell me more about your mother," or "Why do you feel so negatively about your mother?" Weizenbaum was disturbed that his students, fully knowing they were talking with a computer program, wanted to chat with it, indeed, wanted to be alone with it. Weizenbaum was my colleague at MIT; we taught courses together on computers and society. At the time his book came out, I felt moved to reassure him about his concerns. ELIZA seemed to me like a Rorschach; users did become involved with the program, but in a spirit of "as if." The gap between program and person was vast. People bridged it with attribution and desire. They thought: "I will talk to this program 'as if' it were a person"; "I will vent, I will rage, I will get things off my chest." At the time, ELIZA seemed to me no more threatening than an interactive diary. Now, thirty years later, I ask myself if I underestimated the quality of the connection. Now, computational creatures have been designed that evoke a sense of mutual relating. The people who meet relational artifacts are drawn in by a desire to nurture them. And with nurturance comes the fantasy of reciprocation. People want the creatures to care about them in return. Very little about these relationships seems to be experienced "as if."

Relational artifacts are the latest chapter in the trajectory of the tethered self. We move from technologies that tether us to people to those that are able to tether us to the Web sites and avatars that represent people. Relational artifacts represent their programmers but are given autonomy and primitive psychologies; they are designed to stand on their own as creatures to be loved. They are potent objects-to-think-with for asking the questions, posed by all of the machines that tether us to new socialities: "What is an authentic relationship with a machine?" "What are machines doing to our relationships with people?" And ultimately, "What is a relationship?"

Methodology Note

I have studied relational artifacts in the lives of children and the elderly since 1997, beginning with the simple Tamagotchis that were available at every toy store to Kismet and Cog, advanced robots at the MIT Artificial Intelligence Laboratory, and Paro, a seal-like creature designed specifically for therapeutic purposes. Along the way there have been Furbies, AIBOS, and My Real Babies, the latter a baby doll that like the Paro has changing inner states that respond to the quality of its human care. More than two hundred and fifty subjects have been involved in these studies. My investigations of

computer-mediated communication date from the mid-1980s and have followed the media from e-mail, primitive virtual communities, and Web-based chat to cell technology, instant messaging, and social networking. More than four hundred subjects have been involved in these studies. My work was done in Boston and Cambridge and their surrounding suburbs. The work on robotics investigated children and seniors from a range of ethnicities and social classes. This was possible because in every case I was providing robots and other relational artifacts to my informants. In the case of the work on communications technology, I spoke to people, children, adolescents, and adults, who already had computers, Web access, mobile phones, BlackBerries, et cetera. This necessarily makes my claims about their lives in the always-on/always-on-you culture not equally generalizable outside of the social class currently wealthy enough to afford such things.

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