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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.[1] 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.

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[1] 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. Over 250 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. Over 400 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, etc. This necessarily makes my claims about their lives in the always-on/always-on-you culture not necessarily generalizable outside of the social class currently wealthy enough to afford such things. This essay expands on themes explored in previous writing. Portions of this essay appeared in Turkle (2006b, 2006c).

Within a few years, the cyborgs had a new identity as the Media Lab's "Wearable Computing Group." What had been novel in their practice was institutionally reduced to the cyborgs as harbingers of the "cool" clothing of embedded technologies while the rest of us clumsily juggled cellphones, 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 a commonplace. When digital technologies first came onto the consumer market in the form of personal computers, they were objects for personal projection. Computers – in large part because they were programmable, plastic, customizable – came to be experienced as a "second self" (Turkle, 2005a). In the early 21st century, such language does not go far enough; our new intimacy with machines 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 new place for the situation of 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 (non-player 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, now attached to its devices, occupies a liminal space between the physical real and its lives on the screen (Turner, 1969). It participates in both realms at the same time. 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 as a mother. The presence of the cell phone to which only my daughter has the number keeps me alert to its ring all day. Wherever I am, whatever I am doing, I am psychologically tuned to my access to the connections that matter.

The Connections that Matter

We are witnessing a new form of sociality in which the isolation of our physical bodies does not indicate a lack of connectedness but may be its precondition. The connectedness that "matters" is determined by our distance from available communications technology. Increasingly, what people want out of public spaces is that they offer a place to be private with tethering technologies. When everyone is using the devices that connect them to what most "matters," 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, the spaces themselves become liminal, not entirely public, not entirely private.

In a café, a traditionally public space, one learned to lean in toward the person with whom one was speaking, lending an ear while veiling the gaze to better share it with one's interlocutor. Tethering has retrained the body. A hand motion (a finger placed in the ear not at the phone to better wall off the sounds of physical reality) signals an identity shift. On a cell call, the speaker often stares straight ahead, face exposed. He or she talks out loud, behaving as though no one around is listening.

A train station is no longer a communal space, but a space 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. Our media signal that we do not want to be disturbed by conventional sociality with physically proximate individuals.

When people have personal cellphone 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 an individual holds a cellphone (or "speaks into the air," indicating a cell with earphone microphone) they are marked with a certain absence. They are transported to the space of the new ether, virtualized. That sense of "transport" can be signalled in other ways: when one looks down to one's lap at a meal or meeting, the change of gaze has come to signify a glance towards a BlackBerry or other small communications device. The change of gaze is not read as daydreaming, but says that one is focused on other connections. The accessibility of these connections influences our ideas about travel and new experience.

The director of a program that places American students in Greek universities complains that they 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 "texts" 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." "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. She says, quite simply: "Not possible, but how about Friday." When I grew up the idea of the "global village" was an abstraction. My daughter lives it on her cell phone. Emotionally, socially, she has not left her life in Boston.

Of course, balancing (and sometimes ignoring) one's physical companions in favor of tethered connections is not limited to those on holiday. Contemporary professional life is rich in examples of people ignoring those they are "with" to give priority to online others who they consider a more relevant audience. Several scenes have become iconic: sessions at international conferences where experts from all over the world 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 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? Presenters of course, develop their own anxieties. They know that flipped open screens signal that they are at best sharing the audience's attention. And yet, when speakers take their seats in the audience, they, too, flip open their computers to do their e-mail. When an audience member closes down his or her screen, the gesture is a kind of "curtsy," a sign of respect to speakers whose status makes it unseemly to multi-task during their presentations.

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 talking with their children; couples do e-mail at dinner in restaurants; people talk on the phone and do their e-mail at the same time. Once done surreptitiously, the habit of co-presence is becoming increasingly normalized. 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, most of which feature travel. In one pattern, the traveling body is in intensive contact with others, but spreads itself around the world. In another pattern, the traveling body is in retreat, fleeing face-to-face contact 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 with a sleek computer sitting on a beach. The ad copy makes it clear that he or she is important

and is 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 may be wanted by those we *know*, the people on our "contact lists" or by the potential, as yet *unknown* friends who wait in virtual places (such as Facebook, Myspace, or Friendster). It is not suprising that we project the possibility of love, surprise, amusement, and warmth onto our communications devices. They teach us to 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 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. For some, these sites foster a sense that old relationships are dispensable. Some users of such sites describe feeling more attached to the site than to any particular acquaintances. In psychodynamic terms, the site becomes a transference object: the place where friendships come from. "I toss people on the game," says Maura, 31, an architect, of her experience on *Second Life,* an elaborate online environment that does indeed, offer the possibility of a parallel life (including a body, wardrobe, real estate, and a paying job). "I know it gives me something of a reputation, but there are always new people. I don't stay in relationships long." She continues: "There is always someone else to talk to, someone else to meet. I don't feel a commitment." Players of *Second Life* stress that the game provides them with a feeling of everyday renewal, "I never know who I'll meet," says a 37-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 multi-user domains) and then massively multi-player role playing games (MMRPG) 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 identity work. (Turkle, 1995). People used their lives on the screen to replay 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; one simply works on it with the materials one has 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 even "marriages" of signficant emotional importance. In the virtual, the crippled can walk without crutches and the shy can improve their chances as seducers. It is too limiting to think that people are tethered to their *devices*. People are tethered to the gratifications offered by their online selves. There is affection, conversation, a sense of new beginnings. And, there is vanity: building a body in a game like *Second Life* allows you to take an imperfect physical self and transform it into a wonder of virtual fitness. Everyone on the game looks different; the game enables a high level of customization, but everyone on the game looks good, wearing the designer clothes that only look elegant on their virtual bodies. With beauty comes possibilities for sexual connections that may not be available in the physical real.

Thus, more than the sum of their instrumental functions; tethering devices help to constiute 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 a "safe" house, furnishing it according to their taste, not that of their parents, and then getting on with the business of reworking in the virtual 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 reminds me of 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, after dinner. She says she feels comforted by her virtual life. She is tethered not by her need to connect to other people but to connect to herself.

> ST: Are you doing anything different in everyday life?
>
> 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 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 her game; technology enables a new access to a medium in which she can see her life through a new filter, and possibly begin to work through issues in a new way (Turkle, 1995).

Adolescents create online personae in many ways, ranging from game avatars and web pages to the far more mundane playlist. Adolescents define themselves, individually and generationally, through their music. The ipod and its MP3 cousins enable them to build musical identities in contact with hitherto unimagined libraries of sound. Creating a playlist becomes a way of capturing one's personae at a moment in time. Multiple playlists reflect aspects of self. Music is now shared actively, virally; teens forge bonds that are not only generational but local in the new, virtual sense. 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: in friendship groups among urban teens, it is common for friends to expect that their peers will stay available by cell or instant message, always at hand to share confidences, anxiety, and moments of triumph. In this social contract, one needs good cause to claim time "offline." The pressure to be always-on can be a burden. Teenagers who need uninterrupted time for schoolwork resort to using their parents' Internet accounts to hide out from their buddies. Other fallout from the always-on/always-on-you communications culture may be less easily managed and perhaps more enduring.

Mark Twain mythologized the process of separation in which adolescents work out their identities as the Huck Finn experience, the on-the-Mississippi moment, a time of escape from an adult world. Of course, the time on the river portrays not a moment, but the ongoing process in which a child separates from parents, a rite of passage, now transformed by technology. In the traditional variant, the child has internalized the adults in his or her 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 teens are given cell phones by their parents in early adolescence, the gift usually comes with a promise: they are to answer to their parents' calls. This arrangement gives the child permission to do things – 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 parent-on-tap, tethered children think differently about their own responsibilities and capacities. These remain potential, not proven. In New York City, a high school trip to visit the tenement museum on the lower east side goes awry; when the bus stalls, two fifteen-year-old students call parents who send over town cars. Without cell phones, a broken down bus might well have led to the group taking the subway. One does not need to romanticize New York City public transportation to acknowledge that the untethered solution might have done more to foster the student's sense of autonomy.

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 are intimate technologies, and 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 corrolary: "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 in the mid 1950s (Riesman, 1950), he could not forsee how technology could raise other-directedness to a new level by making it possible for each of us to develop new, more enduring patterns of reliance on others and additionally, a powerful transference to the technology that makes the others available to us. Some people experienced this kind of transference to the traditional ("land line") telephone: it became a means to receive validation and sometimes, the feelings associated with that validation were transferred to the telephone itself. The cell phone takes this projection of affect to a higher power because it is always available and there is a high probability that one will be able to reach a friend who will be available to take one's call. It is understood that the 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 validatation to become established.* The technology does not cause a new style of relating, but enables it. As we become accustomed to cell calls, checking our 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" in order 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. When people turn other people into self objects, they try to turn a person into a kind of "spare part." Disappointments inevitably follow. Teenage life today is rich in tearful crises on cell phones. The person who one calls to validate a feeling or enable the experience of a feeling often disappoints, just as self-objects do when they are in face-to-face contact with us. What digital technology changes in this equation is a sense of multiple options. One 15-year-old girl explained it this way: "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 sidestep the developmental necessity of independently managing their emotions, it can also make it hard 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 genre of contact between parents and children. It is a call that says, "I am fine, you are there, we are connected."

The text message with emoticons is another kind of check-in, too telegraphic to be anything much more. Another element that keeps the text message "light" is the ambiguity of its destination. It is sometimes meant for only one person, but its appearance on a portable screen means that it may be seen by many. The emoticons that it contains are a kind of performance art for the virtual body. They quickly communicate a state. They are not meant to open 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. Self-reflection depends on having an emotion, experiencing it, and if one elects to share it with another person, struggling with the difficulties that this entails. It requires autonomy rather than fusion. The world of check-ins, instant-messaging, texting, emoticons, and rapid response does not make self-reflection impossible, but does little to cultivate it.

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 technology has changed the rules of engagement with these developmental tasks and perhaps their resolution. 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 and disambiguated in the process. High technology, with all of its potential range and richness, has been put at the service of telegraphic speed and brevity.

Adult ambivalence about cell culture takes the form of devotion to the devices paired with complaints about them, some born of memories of what life was like in a "sometimes-on/never-on-you" communications culture. Adults feel stressed by new responsibilities to e-mail, a nagging sense of always being behind, the inability to take a vacation without bringing the office with them, the feeling that they are being asked to respond immediately to situations at work, even when no response might be preferable or when a wise response requires taking time, time that is no longer available.

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, 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.

We are learning a communications style in which we are accustomed to receiving a hasty message to which we are expected to give a rapid response. Our experience raises the question: 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 they

might have daydreamed during a cab ride, or while 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." 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," "doing my messages," implies performance rather than reflection. These are the performances of a self that can be split into constituent parts. I have noted that in previous writing about online identities in virtual communities, I wrote of a self that became habituated to "cycling through" different presentations of its aspects. Continuous partial attention in the "always-on/always-on-me" environment takes this tendency and turns it into a psychological baseline that is less like cycling through and more like co-presence.

When media does not stand waiting in the background, but is always there, waiting to be wanted, the self can lose a sense of consciously 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 phrase addiction has been used to describe this state, but this way of thinking is limited in its usefulness. More useful is to think 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 state of the

citizen in a 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 reinforces a sense of being always watched whether or not the guard is actually present. For Foucault, the task of the modern state is to create a citizen who does not need to be watched, who watches him or herself, thereby reducing the work of the state. A disciplined citizen minds the rules, the time, his or her tasks. Always-on/always-on-you technology takes the job of self-monitoring to a new level. We watch ourselves *and* our unedited lives. 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.

The effects of global connectivity on self-disciplining is complex. We are in a position to watch ourselves in new ways, but we are also able to resist pressure from local communities and their norms because we can find other, distributed communities on the Web. These communities enable us to find legitation and strength from distant friends and cohort members. Through them, discipline becomes decoupled from the physical proximity of the observing other, but no less intense and internalized.

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 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 bewteen 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.

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 the 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 limos 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 exchnage 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 BlackBerries. 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 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 "armour" for a day's labor comes off at home, whether it is the businessman's suit or the laborer's overalls), special places (the dining room, the parlour, the bedroom, the beach). Now always-on/always-on-me technology accompanies people to all of these places, undermining the traditional rituals of separation. From a perspective that takes the demarcation of roles as a positive thing, a refreshment for the human spirit in its many aspects, a "glance at a BlackBerry" does not adequately do the job.

There is a certain push back. Just as teenagers "hide out" from friends by using their parents' online accounts to do homework (I have noted that if they work on their own accounts, being "out of touch" for instant messaging can be socially unacceptable), adults, too, find ways to hide from the demands of tethering, strategies that can themselves take on ritual aspects: BlackBerries are left at the office on weekends; BlackBerries 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. When possibilities for connection are

continuous; it is disconnection that needs to be explained or justified. Periods of disconnection need to be justified: people summon adventure vacations and extreme sports.

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 that there is a difference between a scheduled call and the call you make in reaction to a fleeting emotion or because someone crossed your mind or left you a message. The self that is shaped by this world of rapid response measures success by calls made, e-mails answered, contacts reached. This self is calibrated on the basis of what the technology proposes, by what it makes possible, 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 the BlackBerry, an "I" that needs time to think on its own. These formulations all depend on an "I" that is conceived of as separate from the technology, a self that is able to put the technology aside so that it can function separate and apart from technology's demands. This formulation directly contrasts with a growing reality of lives lived in the presence of screens, whether on a laptop, palmtop, cellphone or BlackBerry-style device. This reality has us, like the early MIT experiments with fully tethered lives, learning to see ourselves as cyborg, learning to see ourselves not as separate but as at one with our devices. To put it most starkly: to make more "time" 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. The way we are being shaped by today's communications technology is far subtler than what came before. Now it follows from our increasingly intimate connection to our devices. They provide 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 Pilot, 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/To What?

Acknowledging our tethered state opens up the question of to whom or what we are connected. 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, websites, 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 "non-player characters," artificial intelligences that are not linked to human players. The games require 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 essay in Paris. As I travel, my access to my favorite avatars, non-player characters, and social networking sites stays constant as I travel; more than this, it is all that 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 partners that travel with you, now including robots that are built for relationships.

Consider this moment: an older woman, 72, 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? Her 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; Turkle et al., 2005c; Turkle, 2006a, 2006b). 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 that 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. They 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 websites and avatars that represent people. Relational artifacts represent their programmers, but are given autonomy, primitive psychologies, 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?"

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