



Friendship Does Not Compute

Peter Lopatin

There are two stories being told in *Alone Together: Why We Expect More from Technology and Less from Each Other*, the new book by psychologist and M.I.T. professor Sherry Turkle. The first is the cautionary tale suggested by the book's title; the second is Turkle's evolution from exuberant optimist about humanity's digital life into the teller of that cautionary tale.

"Thirty years ago," Turkle says in the opening words of *Alone Together*, "when I joined the faculty at M.I.T. to study computer culture, the world retained a certain innocence"—innocence, that is, about computers and our life with and on them. It was a world in which, she says, computer hobbyists tinkered, played simple electronic games, and mused about the philosophical implications of artificial intelligence. "I witnessed a moment," she says, "when we were confronted with machines that invited us to think differently about *human* thought, memory, and understanding."

During this time, when she wrote her first technology book, *The Second Self* (1984), Turkle was, by her own account, "full of hope and optimism" about the emerging field of personal computing. Though she had some concerns about how attached people could become to their new interactive digital technologies, her main

interest was in "how evocative computers fostered new reflection about the self." A decade later, Turkle was beginning to observe that some people "found online life more satisfying than what some derisively called 'RL,' that is, real life." Nonetheless, she

feels that her book *Life on the Screen* (1995) "offered, on balance, a positive view of new opportunities for exploring identity online."

But in *Alone Together*, Turkle's earlier optimism about the transformative power of digital technologies has faded. Thus the book inevitably reads also as a story about the loss of that initial state of innocence she describes in the opening words. "Everything that deceives may be said to enchant,"

Alone Together: Why We Expect More from Technology and Less from Each Other

By Sherry Turkle

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Virtually You: The Dangerous Powers of the E-Personality

By Elias Aboujaoude

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reads one of the book's epigraphs, from the *Republic*. It is curious that Turkle, in describing her previous work at the outset of this new book, does not wonder how Plato's observation might bear on her own perception of the ostensibly Edenic state of the world of computer users at its dawn. Is it really *the world* itself that has lost its innocence since then?

As it happens, the perplexing human tendency to ascribe aspects of our own perception to the world outside us is one of the central worries of the book. The first half of *Alone Together* focuses on our interaction with "social robots," which, though no more intelligent or emotional than any other computer, are designed to make us feel and act toward them as if they were more than mere devices. In contrast to the old popular depiction of robots as servants, the primary focus in social and personal robotics—a field pioneered at Turkle's own M.I.T.—is on ones that will be our friends. These might take the form of interactive toys to be nurtured by children, or of semi-autonomous, talkative, highly responsive bots that might, at least in the fantasies of the more starry-eyed futurists, someday nurture *us*.

Turkle has studied these robots and their interactions with test subjects at length, and she raises disturbing questions about the increasingly human-like qualities and interactive capacities of these devices. One anecdote

Turkle relates from her research is particularly telling. "Edna," a woman in her eighties, lives alone in the house where she had raised her family. When her granddaughter Gail and two-year-old great-granddaughter Amy come to visit, Turkle's research team brings along a My Real Baby—a robotic doll introduced by Hasbro in 2000 and marketed as "the most real, dynamic baby doll available for young girls to take care of and nurture."

Edna initially focuses on Amy, but becomes captivated when she is introduced to the My Real Baby. She speaks to the robot as one would to a real baby, nestling it in her arms when it starts to "cry," offering it a bottle, speaking baby-talk to it, and lavishing affection on it. She devotes the better part of an hour to "caring" for the robot while ignoring Amy's attempts to engage her attention, even telling Amy, "Shush, the baby's sleeping" when Amy offers her great-grandmother a cookie. Though elderly, Edna does not suffer from dementia, fully understands that the My Real Baby is "only a mechanical thing," and soon becomes uneasy and embarrassed at having so misdirected her attention.

This anecdote paints a picture of a broadly plausible future of human interactions with robots. And there is a logic to this future that matches up well with a certain popular self-understanding: if we ourselves are, as so many claim, just very complex

machines, then perhaps if we make machines of sufficient complexity they could be more or less like us. They could attend to some of the more time-consuming, seemingly tedious tasks to which we now devote so much human effort—such as caring for the elderly and infirm, conducting basic talk therapy with patients, and providing interactive attention to children. Indeed, Turkle sees us poised at a “robotic moment”—a point in technological history when people are increasingly “willing to seriously consider robots not only as pets but as potential friends, confidants, and even romantic partners.”

Beyond this prognostication, the anecdote of Edna helps to bring into relief the features that might be generally characteristic (if usually in less pronounced forms) of human interaction with social robots. Even now—when these robots are relatively primitive, slow, and dumb compared to what they might someday be—we are already prone to become enchanted with the seemingly personal capacities of robots, and so might easily become used to the idea that they might serve not only our practical but our emotional needs as well.

But these tendencies, says Turkle, are deeply problematic; robotic companionship cannot offer *alterity*—“the ability to see the world through the eyes of another”—an element crucial to genuine relationships and a prerequisite to true empathy. Not only

are robots clearly incapable of experiencing empathy for human beings, but, more importantly, these “relational artifacts” will present “new possibilities for narcissistic experience.” Narcissism is characterized by an inability to feel empathy towards fellow human beings; instead, other people are “experienced as a part of one’s self, thus in perfect tune with a fragile inner state.” Indeed, Turkle notes, we already speak of narcissists treating others as objects, or as “spare parts”—but robot companions will literally *be* spare parts, making them perfectly suited for narcissistic relationships. Relationships with robots, which do not demand or cultivate real empathy, threaten to degrade genuine relationships with real people.

Turkle’s study of robotics, however, forms only the first half of her book, and serves in part to provide a contrast to the far more widespread phenomenon explored in the second half: life on the Internet. One points to the other—social robots are both a plausible future path for today’s digital life, and an indicator of certain attitudes and trends of digital life taken to their logical conclusions. Between these two worlds, Turkle argues, there is a “disturbing symmetry: we seem determined to give human qualities to objects and content to treat each other as things.”

The evidence for the latter part of this perplexing insight is amply

provided in another recent book that covers essentially the same ground as the second part of *Alone Together* but takes a less philosophical and more traditional psychological-investigative approach. In *Virtually You: The Dangerous Powers of the E-Personality*, Elias Aboujaoude, a psychiatrist and director of the Stanford clinics for Obsessive Compulsive Disorder and Impulse Control Disorders, offers a clinical but deeply humane study of the psychic damage that results when people allow the boundaries between their virtual and real lives to be effaced. Aboujaoude observes that many of his patients have assumed online personalities that bear little resemblance to themselves. More broadly, he argues that Internet use has come to “interfere with our home lives, our romantic relationships, our careers, our parenting abilities—and our very concept of who we are.”

Consider the case of Aboujaoude’s patient “Jill,” an intelligent woman in her late twenties suffering from a social anxiety disorder that had not responded to psychotherapy or medication, and that had made it very difficult for her to carry on romantic relationships. At the suggestion of a psychiatrist, she turned to online dating as a way to “break the ice”—to ease her way safely and gradually into a relationship, minimizing the possibility of rejection or personality clash at the first meeting. Rather than presenting an honest

picture of who she was, however, Jill adopted an online persona named Tess, to which she bore little resemblance: in person a shy, inhibited, conservatively attired English teacher, on her profile she showed pictures of herself with far more provocative dress, and (mis)represented herself as a gregarious sales representative employed in marketing a line of high-end Italian furniture to architects. Instead of her normal sophisticated speech, she instead adopted Internet-speak—*cuz*, *lol*, *hugz*, *pic*, and so forth—and made generous use of emoticons (which she said “make emotions much easier”).

There ensued from Jill’s efforts an online courtship with a doctor named Tom—and the two fell in love without having ever met in person. But Jill started to become uncomfortable, even ashamed, of how she had dumb-ed down her persona. To complicate matters, several months into the virtual romance, Tom showed little interest in meeting Jill/Tess. As it turned out, however, this may have been in part because Tom had some secrets of his own: his real name was Ted, and he was not a doctor but a pharmacist who had always wanted to become a doctor. When, through Jill’s persistent efforts, the two finally met, the virtual personalities each had created, along with the feelings of love between them, dissolved. Their first date was their last.

Deceptions like the ones evident in this case can also be found in many

people who use online communities like Second Life, which employ avatars—virtual-reality personae that users create and customize, assigning whatever skills and beauty they choose. Similar possibilities for bending the truth about oneself exist in all online self-representations, including, most prominently, the portraits people offer of themselves in the profiles, updates, and pictures they post on Facebook.

Citing Rider University psychologist John Suler, Aboujaoude argues that the “*anonymity, invisibility, the loss of boundaries between individuals, and the lack of any real hierarchy* in cyberspace” (his emphasis) all unfetter us from the rules that govern real-life social interactions. In physical space, these act as restraints on the impulses and expression of thoughts born of anger, aggression, and concupiscence. But the persona typical of online life “is more assertive, less restrained, a little bit on the dark side, and decidedly sexier.” More worryingly, Aboujaoude observes that “our online traits are unconsciously being imported into our offline life, so that our idea of what a real-life community should be, for example, is being reconfigured in the image of a chat room, and our offline persona increasingly resembles that of our avatar.”

Behavior that is typical on the Internet has been working a change in our real-life psychology. For many people, these changes induce a sense

of liberation that may seem harmless or even empowering. From a clinical perspective, however, these people may exhibit traits of disturbance, or even pathology. Thus the cornerstone of Aboujaoude’s analysis is what he calls the “E-Personality”—a term that refers not only to our virtual personae but also to the actual traits of the real people who adopt those personae. The E-Personality is characterized by “an exaggerated sense of our abilities, a superior attitude toward others, a new moral code that we adopt online, a proneness to impulsive behavior, and a tendency to regress to childlike states when faced with an open browser.”

Through further anecdotal case reports from his clinical studies, Aboujaoude examines the effects of these traits on the offline lives of his patients, and describes how they correspond to the psychopathological personality features of grandiosity, narcissism, viciousness, impulsivity, and infantile regression. Because he approaches his subject from the perspective of a clinician observing only those sufficiently affected to seek treatment—and treatment for only certain kinds of disorders—his sample population is surely not representative of the Internet-using population as a whole. Yet it is a strength of Aboujaoude’s argument that we can discern in his clinical reports a complex of Internet-related habits, dispositions, problems—and yes, pathologies—that differ in degree

rather than in kind from ones we are familiar with in our own lives and in those close to us.

The Internet, Aboujaoude argues, has long tended to encourage grandiosity: “Since its early days, the Internet has nurtured lofty ambitions—entrepreneurial and otherwise—and a certain rush to participate in a mass experiment with nearly limitless potential.” This social-historical argument—or at least, its relevance to today’s typical Internet user—is hard to take very seriously. Certainly the feeling that one deserves and will soon receive easy and instant fame is evident in, for instance, the raft of people trying to become the next big YouTube sensation. But the hunger to make it big drives every new human frontier, and delusions of grandeur are spawned by all new media. Prevalent as they are in online culture, these drives are not a major factor in the online life of most Internet users.

But while the majority of Internet users aren’t seriously after fame and fortune, the problems of grandiosity and narcissism are more generally evident in the construction of artificial online personae on social media sites and online communities. Take, for example, Aboujaoude’s patient “Alex,” who joined Second Life. For Alex, beset with social anxiety, the “solution” to his problem was to create his alter ego, Sasha, “a gregarious former high school jock...[and

now] CEO of a high-tech company.” Alex attributed to Sasha all the qualities that he wanted but could never possess in real life: he was outgoing, handsome, and, in the world of Second Life, rich and successful. He even found a “virtual girlfriend,” Nadia, who was herself the fictive avatar of another Second Life user. Nadia allowed Alex to rework her features, and he precisely set every aspect of her appearance to his desire.

Just as Turkle noted that social robots present an ideal opportunity for narcissists to carry on relationships, not with people toward whom they feel empathy, but with objects “in perfect tune with [their] fragile inner state,” Alex’s online relationship with Nadia provided him a relationship with a person that he could literally treat like an object. Indeed, Alex compared his reshaping of Nadia to “Michelangelo working on a sculpture.” This virtual relationship with Nadia, and the seductiveness of this perfected virtual world, had very real effects on Alex’s actual relationships—to the point where he broke off his engagement with his fiancée, and ended his therapy with Aboujaoude, telling him, “I’m sorry. I’m just not invested enough in your reality at this point.”

Viciousness, too, in its multifarious guises, is a defining characteristic of the E-Personality. Aboujaoude describes the Internet in Freudian terms, as a place where the id may roam free, where “instincts run

rampant and are constantly being fed and reinforced,” and “gentleness, common courtesy, and the little niceties that announce us as well-mannered, civilized, and sociable members of the species are quickly stripped away to reveal a completely naked, often unpleasant human being.” That these observations are not simply a reflection of some singular derangement in Aboujaoude’s patients should be evident to anyone who has ever read just about any online comments thread; an “ordinary everyday viciousness,” in Aboujaoude’s words, characterizes many people’s online lives.

In some cases, the anonymity and detachment afforded by the Internet aggravate viciousness to levels of extraordinary cruelty. Aboujaoude considers the well-known tragic case of Megan Meier, a thirteen-year-old girl who in 2006 was driven to suicide by an elaborate online hoax. The hoax was reportedly orchestrated by an adult neighbor of the Meier family who was upset with remarks that Meier had made toward her own daughter. The neighbor concocted a plot to deceive Meier into carrying on an online relationship with a boy named Josh—an entirely fictional creation—only to reject, insult and humiliate her weeks later. On the day Meier died, the neighbor, posing as Josh, sent a message reading, “You’re a shitty person, and the world would be a better place without you.”

This is an extreme example, to be sure. But, as with the other traits he

observes in online life, Aboujaoude’s clinical experience and his reading of studies by other clinicians lead him to conclude that the more everyday forms of online abusiveness bleed into the offline lives of both perpetrators and victims. He sees virtual violence, for example, as leading to a desensitization to real violence. The young person who scores points in the popular computer game *Grand Theft Auto* “by soliciting and then killing prostitutes,” thereby attaining the status of a virtual psychopath, has been placed in danger of graduating into real psychopathy. Similarly, Aboujaoude argues, the student who grows up downloading his homework from websites dedicated to helping students cheat is at greater risk of viewing manipulation and deceit as normal in his adult life.

Impulsivity is among the more familiar and obvious characteristics of the E-Personality—yet Aboujaoude’s observations of it in his patients are notable because they show the emergence of a trait that might otherwise have been almost entirely dormant. One patient came into the clinic with what seemed a clear-cut case of “compulsive buying disorder.” Until recently, she had been a very careful and moderated shopper; but when she discovered a discount website, she binged to the point of bankruptcy. Another patient had been an occasional and moderate gambler, until he began using a virtual casino, and soon maxed out his own and his

wife's credit cards, until finally his wife left him.

In both cases, the medium seems to have unleashed drives that were before so carefully kept in check that they were only barely apparent. The compulsive shopper reports, "I guess if it's online, somehow it doesn't feel real...Or not *as* real. It's innocent and fun. Almost guilt-free—just like a computer game." Her words echo those of the compulsive gambler, who says that "somehow it feels better online" than at a real casino. "You're free of inhibitions, whether they're your own or imposed on you by other people. It's just you and your computer screen, with no one to disapprove of you and give you dirty looks, and no one to remind you of your responsibilities and your credit card debt."

All of these tendencies of the E-Personality converge in the most troubled arena of online life: love and sex. Rather than being simply a tool for taking romantic risks, the Internet's combination of "godlike invincibility, a false sense of perfection, [and] impulsivity" make it what Aboujaoude calls "an independent risk factor" for engaging in dangerous or dysfunctional sexual and romantic behavior. He cites a 2008 survey reporting that 22 percent of all teenage girls admitted to posting online, e-mailing, or "sexting" nude or semi-nude images of themselves; the figures are even higher for women and men in their twenties. No

less disturbing are the cases of personal misrepresentation, like those of Alex and Jill/Tess. The immortal words of Thoreau—*Go confidently in the direction of your dreams. Live the life you've imagined.*—might be revised for cyber-life along these lines: *Go uneasily in the direction of your fantasies. Pretend to live the life you invent.*

Despite their gloom, neither Elias Aboujaoude nor Sherry Turkle is a Luddite yearning for the halcyon days before the Internet (though Turkle does seem to suggest some lament for the bygone days of the *early* Internet). Neither disputes the manifest reality that the Internet is a convenient and by now essential medium of communication and source of information. Yet each has become aware that our relationship to the Internet, and to digital interactive technologies more generally, is not an unalloyed blessing, but poses hazards which we ignore at our peril.

Aboujaoude views those hazards primarily in terms of the potential pathology of the individual. At the extremes, these pathologies take the form of either "self-hatred, i.e., something that resembles depression, or a total immersion in virtual life, i.e., something that resembles psychosis." The Internet, he argues, "responds to our need for escapism by helping us generate phantasms and illusions." The cases he describes in *Virtually You* surely represent the extremes—but as Aboujaoude notes,

many more people than his patients experience milder versions of these dysfunctions, in forms not disturbed enough to seek treatment.

Turkle's analysis of online life is, in many respects, of a piece with Aboujaoude's. But her focus is less on the personal and more on the interpersonal. She sees the increasing scope of our online connectedness as matched by a lessening of its depth. We unburden or share ourselves with virtual communities, but often without the risks and obligations that go along with a good life lived in a community. Absent the social forces that moderate and mitigate the responses of real communities, we may even find a channel for incivility to strangers, and for receiving abuse in turn.

Turkle is wise to suggest that "community should have not a broader but a narrower definition"—one based upon an understanding that "communities are constituted by physical proximity, shared concerns, real consequences, and common responsibilities." And she has the clinician's understanding that there is a world of difference between the working through of conflicts that occurs in a therapeutic context and the acting

out that the peculiar intimacy and abstraction of the online community encourages.

Turkle presents a strong case that our expectations of one another seem to be diminishing to match our increasing expectations of technology: "With sociable robots we are alone but receive the signals that tell us we are together. Networked, we are together, but so lessened are our expectations of each other that we can feel utterly alone." The story of her own change of heart from an earlier stance of enthusiasm is perhaps best captured by these summary remarks: "I leave my story at a point of disturbing symmetry: we seem determined to give human qualities to objects and content to treat each other as things." As the power of robots to enchant us increases, she suggests, we are in danger of devaluing what is truly human in ourselves. And as we become more connected in the virtual world of the Internet, we risk losing connection with the things that make us truly human, and for which there can be no virtual substitute.

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