## We, Lonely Robots

## A review of



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

by Sherry Turkle

New York, NY: Basic Books, 2011. 360 pp. ISBN 978-0-465-01021-9.

\$28.95



## Reviewed by Marianne LaFrance

Not all technological advances are greeted with open arms and minds. Indeed, new technological developments are often met with fear and loathing. In the late Middle Ages, a respected Swiss scientist, Conrad Gessner, sounded the alarm about the unmanageable flood of information set loose by the printing press (Bell, 2010). Today, some 500 years later, the alarms apply to the psychological and moral disintegration being unleashed by social media and social robots.

Situated in the middle of these current warnings is a new book by a psychoanalytically trained psychologist, Sherry Turkle, titled *Alone Together: Why We Expect More From Technology and Less From Each Other*. Turkle examines how children interact with companionate robots (e.g., Tomagotchi, My Real Baby) and the extent to which adolescents and young adults rely on Internet-based communication (e.g., Facebook), seeing in both not the cultivation and nourishing of social bonds, but their dilution and dissolution.

Alone Together is the third book by Sherry Turkle, a professor at the Massachusetts Institute of Technology, to address the psychology of computer use. The conclusions of the first two, The Second Self: Computers and the Human Spirit (Turkle, 1984) and Life on the Screen: Identity in the Age of the Internet (Turkle, 1995) were quite sanguine about people's reliance on personal computers and their increasing dependence on the Internet. In Alone Together her early benign appraisals have gone the way of cassette recorders.

Turkle describes advancements in social robotics (also known as *affective computing*), especially the assumption that robots will be able to serve in the not-too-distant future as stand-alone companions to the aging or as babysitters to the young, seeing this not as a viable solution to the shortage of caregivers but as bringing increased isolation for target individuals and significant moral hazards for the rest of us. When human caring is replaced by machine "caring," society has a problem.

Turkle worries, too, that interactions with emotionally expressive robots are causing children to develop new models of interpersonal attachment far different from those they have had previously with teddy bears, action figures, and even with people. The difference arises in part because companionate robots possess some capacity to learn and hence are able to adapt to each individual child. Social robots are also programmed to be contingently emotional with children who interact with them. As such, the attachments children form to social robots like My Real Baby come uncannily close to real-life attachments but, as Turkle points out, without the usual responsibilities that come with human relationships.

When Turkle turns her attention to how young people use technology she also sees trouble. She surveys adolescents' passionate attachment to their cell phones (which includes sleeping with them) and notes that they are no longer used for talking but for texting. Texting is the new handset, the preferred means of communication allowing more detachment and control, a combination that paradoxically induces compulsive use. However, face-to-face interaction, in contrast to texting, is complicated and requires some modicum level of empathy and accommodation.

Turkle is disturbed, too, by the degree to which the Internet has become central in the lives of young adults. She argues that although the Internet has made interpersonal connections easier, it has made them both more superficial and more intrusive, contending that, for example while individuals may have lots of "friends" on Facebook, they probably have fewer real friends.

As a counter to this, a recent study found that college students overwhelmingly use Facebook to keep in touch with old friends and deepen relationships with new ones (Ellison, Steinfield, & Lampe, 2007). Turkle argues instead that in Facebook, any one relationship matters less because most contacts are fully public, and postings are never-ending performances. Even complex negotiations like apologies are "posted"; they no longer derive from and reflect empathetic impulses but are just one more routine to put on someone's "wall."

Turkle describes her research methodology in *Alone Together* as *intimate ethnography*. Her data are anecdotes taken from conversations with children, adolescents, and young adults who range in age from 5 to 20 years. They number over 450 people, approximately two thirds of whom are children. No demographic details are provided, but it is probably safe to say that her informants were not randomly selected. For example, participating adolescents were students at seven high schools, five of which were private. There is no attempt to provide explanations for her observations—they are presumed to speak for themselves.

In *Alone Together*, Turkle asks a number of interesting psychological questions: Does virtual intimacy degrade real intimacy? What happens when people would rather text than talk? If we are always on line, what happens to solitude? Are children becoming too comfortable with robotic companions?

Such questions are provocative, but unfortunately Turkle's evidence is rhetorical rather than empirical. Relevant psychological theory and research are all but absent. For example, loneliness is a major theme, but no reference is made to the work by Cacioppo and others (Cacioppo & Patrick, 2008); getting lost in computer games is described, but not Csikszentmihalyi's (2008) findings on "flow" (total involvement); the need for others in response to anxiety is noted, but no acknowledgment is made of the extensive social psychological research on anxiety and affiliation (Leary, 1983); new research examining how children bestow agency on objects is not consulted (e.g., Scholl & Tremoulet, 2000), nor is Pennebaker's (1997) program of research on the effects of confession when she describes individuals' use of online confessions.

Alone Together draws on the personal stories of children, adolescents, a few elderly folk, and the author's own experiences to describe how people frame their connections to computers and the Internet circa 2011. Alas, the formulation is also conversational, veering toward the advisory rather than the verified. Turkle is clearly passionate in describing what she sees as the looming social isolation being wrought by the new technology. Although less alarm and more science would have been more convincing, Alone Together does offer a needed counter to the wholesale adoption of the social media and social robots.

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PsycCRITIQUES 1554-0138

December 21, 2011, Vol. 56, Release 51, Article 4 © 2011, American Psychological Association