

## MIRRORING SHERRY TURKLE: A DISCUSSION ON AUTHENTICITY, HUMANITY AND TECHNOLOGY.

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*"We expect more from technology and less from each other... Technology appeals to us most where we are most vulnerable.. "[1]*

### Abstract

This paper expresses a reflective approach to the themes and issues surrounding Sherry Turkle's new book, *Alone Together: Why We Expect More from Technology and Less from Each Other*. This can be seen as the culmination of a trilogy of books concerned with human and computer relations and its implications for identity and psychology (*The Second Self*, 1984 and *Life On the Screen*, 1995). Turkle argues that, having already filtered companionship and relations through machines, we are now facing our own "robotic moment". Real life interactions with flesh and blood people are becoming onerous and too stressful and untidy. Instead, we prefer to organise them through digital interfaces and ultimately even replace them with technological alternatives. In response to Turkle's questions, we speculate: are we changing what it means to be human? Have we become over-reliant on technology to mediate human relations? Does social networking encourage us to become narcissistic and to regard others as merely problems to be managed, resources to be exploited? And do we, the creative community, have some responsibility in considering these ethical dilemmas and making technologies that respond to these questions? Juxtaposed with Turkle's insights is a commentary on the work of the neuroscientist Susan Greenfield. Her research on the neuroscience of identity offers a biological interpretation of how the brain adapts to environment which suggests that Turkle's question of what it means to be human is complexified further by unprecedented changes to identity itself.

**Key words:** alone together, dystopia, speculative futures, authenticity, robotics, electronic textiles and technological based arts, digital: identity; heritage; death, and visual arts.

### Introduction to Human Computer Relations

Sherry Turkle published *The Second Self: Computers and the Human Spirit* in 1984 where she observed the changing relationship between people and technology, particularly computers. At the

time she questioned the affect these new technologies are having on our lives, relationships and cognition. This is a theme that still runs through all of Turkle's work as she analyses the changing role and social positioning of technology and human beings over time. In 1984 Turkle was already questioning whether 'machines' were truly an extension of their users or whether they were something 'other'. She defined machines as something 'other' if they imposed their own rhythm, pace and rules onto the person using them. In this case, Turkle observed, rather than humans simply using computers to extend their physical capabilities, as was previously the case with tools, the computer actually affected human cognition [2]. Through sustained interaction computers have successfully altered our pace, rhythm and sense of self. As society becomes more complex we develop new technologies to cope with our current situation, assuming that this will make things easier. However by developing new technologies we are inevitably changing the most fundamental of human principles: our conception of self, our relationships to others and our understanding and practice of love and death.

In Turkle's most recent book *Alone Together: Why We Expect More from Technology and Less from Each Other* [3] she considers how technology affects the younger generation's definition of life, death and authenticity. She suggests that the mid-1990s saw a turning point for her research. She described two key developments, the first being the 'fully networked life' in which we are infinitely connected to anyone from anywhere, and the second being the robotics movement. Turkle argues that what connects these two seemingly disparate topics is our reduced need for authenticity, especially within the younger generation. Turkle even documents cases where some children begin to preference their robotic pet over their current organic ones. When asked why, they simply state 'they are easier to care for and don't die' [4].

Perhaps we should consider the fact that although this may seem an obvious reaction to things that make us uncomfortable, we must consider what roles 'loss and forgetting' [5] play within society and be very careful of attempting to erase the very aspects of randomness that also make life, people and relationships interesting, spontaneous and metamorphic.

### Brave New World

Having asked what may be lost through the continual development of the computational technologies without a critical examination of the ethics posed by these new systems, this section aims to map out in greater depth the "future" fictions and narratives surrounding the current tableau of digital human relations.

In literature which represents fictional societies, a number of novels portray ideas, characters and scenarios of future relations with technology. This is the case, for example, in George Orwell's *Nineteen Eighty-Four*, Aldous Huxley's *Brave New World*, Ray Bradbury's *Fahrenheit 451*, or Margaret Atwood's *The Handmaid's Tale*. The editor of an anthology based upon Ira Levin's short story fiction *This Perfect Day*, Jeremy V. Pitt [6], makes the point that Science Fiction, as an extrapolation into the future, is often rooted in the fears of its own present:

"Tomorrow's world is a place where computers rule, where monthly treatments keep people docile, where sex is programmed weekly, and where death occurs at the age of sixty-two in the interest of efficiency (...)"[7].

*This Perfect Day*, published in 1970, imagined a (supposedly) utopian global society governed by a single computer. At the time the novel was considered to be one of the great dystopian thrillers ever written—alongside Aldous Huxley's *Brave New World* (1932). In his introduction to Levin's story in the anthology *This Pervasive Day, The Potential and Perils of Pervasive Computing*, Pitt notes that "in common with other science fiction novels of the time, [it] avoided apocalyptic nuclear conflict but touched a number of socio-technical nerves (or aspirations) of the time"[8].

We may debate whether or not the social, political, and/or technological developments surrounding pervasive computing may render Levin's social vision plausible. Beyond that one may also ask whether it is feasible to build and program a computer to fulfill the functionality attributed to it in Levin's book. What, then, is the potential — and what are the perils — of the necessary computing and communications technology for the actual human society as we experience it in the twenty-first century, from social, legal, ethical, political, and/or economic viewpoints? Cultural critics such as Karen Barad [9], Lucy Suchman [10], and Donna Haraway [11] know how technology is taken up in, and

influences, broader culture, as well as how cultural background can encourage the development of certain forms of technology and utopian discourse at the expense of other arguments and positions.

### Technological Provocations

Susan Greenfield is a neuroscientist who wonders what the brain will physically look like in future generations. As articulated in her book *iD : The Quest for Identity in the 21<sup>st</sup> Century*, her central anxieties are that galloping technological advances, and the social changes that they bring, will not only transform our sense of who and what we are, but might alter our identity to the point where we may no longer have the capacity to be fully developed persons [12]. Her prediction is that interaction with technology, from mobile phones to video games, might produce a brain as a first-person perspective of identity that is stuck in what she terms “infancy immediacy”. Twenty-first-century technologies may bend our brains, and hence erode our identities, she argues, but in ways previous generations could not have envisaged. However none of the interesting questions about subjective identity and objective identification are explored in *iD : The Quest for Identity in the 21<sup>st</sup> Century* [13].

Greenfield argues that sensation has replaced cognition, process has replaced content and movement has replaced thought. In response to a question on a BBC Radio 3, Nightwaves BBC programme [14], about how interaction with technology is responsible for this, Greenfield took up the theme of ecstasy, which in Greek means ‘to stand outside of yourself’. Greenfield drew upon this theme in order to explore the tension between, on the one hand, letting go and, on the other, achieving things and having a little niche, a personal identity, a brick in the wall. Anxiety over the stripping of cognitive content in the wake of rave music venues where flashing lights and sweaty bodies, loud music and abstract patterns propels Greenfield’s concerns. She further argues that the brain connections get meshed up and consequently sensory overload, in the moment, will give rise to a schizophrenia of the perpetual present. But Greenfield’s point is that when individuals let themselves “go the focus is on the here and now, it’s the sensation that matters.”

Greenfield fears that a child habituated to a “strong sensationalist present” will become addicted to thrill-bombardment,

and that, instead of becoming Someone, the future human brain will remain No One – a collection of “inputs”, which is perhaps a rather gloomy view and rooted in the fears of the present. Following this line of thinking, cyberspace kids and teenagers, blitzed with information from anywhere and everywhere, may never acquire the capacity to see things in context; they may never get beyond the stage of “taking the world at face value”. Does Greenfield reduce humanity to the “physicochemical context of the brain itself”?

Greenfield is in agreement with other leading neuroscientists. “You are your brain”, said Nobel prizewinner Eric Kandel; “You are nothing but a bunch of neurons”, wrote Francis Crick, one of the co-discoverers of the structure of the DNA molecule in 1953. The problem with this reductionism is that it equates a part with the whole andeschews much of the complexity of thinking. The brain is not a problem-solving machine but an evolved organ adapted to enhance the survival changes of the organisms they inhabit. How does our brain assess current situations? How does it compare them with past experiences? How are appropriate actions generated? It is this evolutionary imperative that has resulted in our large and complex brains. We don’t have a comprehensive brain theory that lets us bridge the gaps between molecules, cells and systems to enable us to begin to answer the questions: how do we experience and how do we remember what we wore when we were 4 years old? What images and sounds are meaningful to us over our lifetimes? These get confused according to the stories we want to tell about ourselves. It is possible to stimulate particular brain regions to evoke sensations, memories, even emotions, but does this mean that a particularly memory can be located in that region or is it that the activity in that region is a correlate to the memory? The best anyone can do, in Greenfield’s view, is match up “biochemical processes with reports of how people feel”. We all have the hunch that incessant escape to cyberspace (youngsters are in front of screens six hours a day on average in the UK which correlates to some of Turkle’s findings in the USA) must be having a bad effect. In *iD : The Quest for Identity in the 21<sup>st</sup> Century*, Greenfield sets out to give this hunch respectable scientific backing. In summary, the implication of the book seems to be that when societies change, such as by developing new technologies, this must by extension alter the

very physical make-up of the brain. In the chapter, “Twenty-First Century Thinking,” Greenfield suggests that the decline of reading in favour of fragmentary encounters such a computer games or the internet, threatens the substance both of our neurological makeup and our social structures.

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

Sherry Turkle thinks it may be necessary to learn about the limitations as well as what we can know about our behavior and the brain. Right now we think we can look into the brain and see what’s happening and in her research she advises that our cognitive faculties decay as we enter the marketization of life, live in the schizophrenia of the perpetual present and skim distractedly from one webpage to another.

The argument in Turkle’s *Alone Together: Why We Expect More from Technology and Less from Each Other*, unfolds in two halves. The first section deals with objects that imitate living things. Turkle’s subjects, mostly children and the elderly, are given robot companions for varying lengths of time [15]. A bond is formed. Accordingly, the Furby – a fluffy, robot toy, which was popular in the late 1990s and looks part hamster and part owl and which is programmed to respond to human attention – exerts a hold over anyone who nurtures it for a few weeks.

Turkle reports that scientists developing the latest robots report feelings of pseudo-parental attachment. In Turkle’s observations, the difference between playing with a doll and playing with a robot is the difference between pretence and belief. She argues that even when a replica behaves implausibly, we compensate, filling the gaps in its repertoire with imagined feelings. This is perhaps not the sensory overload that Greenfield is skeptical of, but rather a move from the “robotic moment” of “infancy immediacy,” sweaty bodies and flashing lights, to Turkle’s provocation of the “robotic moment” as companions are filtered through machines and robots are deployed in ‘caring’ roles. Children, she suggests, are no longer entertaining or nursing the elderly, filling gaps in the social fabric left where the threads of community have frayed.

Sherry Turkle has been called the “Margaret Mead of digital culture” in her

analysis of how young people navigate the emotional undercurrents in today's technological world [16]. As an anthropologist, Mead had been trained to think in terms of the interconnection of all aspects of human life so that the production of food cannot be separated from ritual and belief, and politics cannot be separated from childrearing or art. This holistic understanding of human adaptation allowed Mead to speak out on a very wide range of issues, and in particular the relationship between generations [17]. When she wrote of a global culture made possible by mass media, her words actually foresaw fundamental changes made by computer communication networks that were just beginning during the period in which she conducted her research. Mead believed that in the past culture was transmitted from an older to a younger generation through social rituals and an exploration of what might be shared experience in the process of full attention face to face. Turkle argues that new technologies – including e-mail messages, Facebook postings, Skype exchanges, role-playing games, Internet bulletin boards and robots – have broken this tie. The more networked and wired we are, the more seduced and addicted to an 'autistic' world we become, where we expect more from technology and less from each other. Turkle isn't just concerned with the problem of on-line identity, she is disquieted by the banalities of electronic interaction, as a younger generation of Americans' range of expression is constrained by gadgets and platforms, a networked life of loneliness and failed solitude. This implies an even greater separation between generations and cultures than ever before.

At this point, Greenfield's and Turkle's ideas come perversely close, though both are writing from different disciplines and from different sides of the Atlantic. In spite of Facebook and Twitter, our strongest social relationships still tend to be with those people we physically live near. Greenfield's core thesis is that one part of the brain may stimulate an apparently dissociated part in the creation of memories, attitudes and skills. If the brain is like anything, from a social point of view, it is like the distributed internet, not human relations which are enforced by our embodiment in the physical world. One of the most pervasive metaphors in neuroscience is that brains are like computers, whereas Greenfield sees brains as akin to society, and consequently, society's current so-

cial and technological troubles must even affect our neurons and synapses.

From Turkle's anxieties about teenagers constantly performing on the digital stage to incipient roboticism, the 'robotic moment' is not a point in history but a threshold in ethics. Ethical questions start to surface when we see robots as having subjectivity. Turkle is concerned about the way we set up such important social, ethical questions, "quandaries" she calls them, such as: "Do you want seniors lonely and bored, or do you want them engaged with a robotic companion?"

She wants to make sure we've considered moral issues not only when setting up a quandary, but also when responding to it. Turkle takes on this task by questioning how we think about our relationship with technology and therein lies the challenge posed by *Alone Together*.

### Reconsidering our Relationship towards Technology

As a final provocation we move from focusing predominantly on the dystopic issues addressed within *Alone Together* to considering if they can provide an adaptive framework for the design of and creative engagement with contemporary technologies in ways that might also be affective. Such technologies may involve playing with complicated themes such as loss and forgetting from a creative perspective without trying to hide from or eradicate them.

In *Alone Together* Turkle argued that communication tools such as portable devices and, in general, the internet 'on the go' have created an escape window for people which didn't exist before. This gateway allows users to sidestep whatever reality they are in, creating new realities in their "virtual" world.

Turkle's presentation on TED California in 2012, *Connecting, but alone?*, presents the view that human beings, as users, have always been obsessed with finding new ways of communicating through various computational technologies. We cannot deny that there has been a rapid technological change that allows us - the users - to communicate through alternative ways. However what is not addressed in Turkle's writing is whether social networks or indeed robotics could be designed with these ethical stipulations and concerns in mind, both as speculative art works and as practice-based research [18] or interaction design [Mari Velonaki, panel discussion, ISEA).

As humans continue to develop new technologies and new interfaces that are interconnected within our lives, creating social networks, we might reflect on Marshall McLuhan's predictive statement from 1962 that "the next medium, whatever it is - it may be the extension of consciousness"[19].

We, as creatives and academics, conclude by suggesting that these statements are new challenges for us. As a community we have a changing responsibility that places us at the core of how we might shape our brains and relationships to technology and other people, developing new strategies and ethics to comprehend and interact with contemporary technologies - guided by some of the warnings and speculative futures discussed within Turkle's texts and Greenfield's metaphorical musings.

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