Extended self and the digital world

Russell Belk

As originally conceived, the extended self is composed of a person's mind, body, physical possessions, family, friends, and affiliation groups. With the advent of the Internet (especially 'Web 2.0'), social media, online games, virtual worlds, and other digital activities, together with the devices through which participation in such activities takes place, there is a greatly expanded set of ways in which we may represent ourselves to others. Research and theory on the extended self must now consider features such as dematerialization, re-embodiment, and co-construction of self. This review outlines research in these areas and emerging challenges. A summary table outlines the changes to the extended self concept and the nature of possessions resulting from these features. The paper concludes with recommendations for future research.

Address
Schulich School of Business, York University, Canada

Corresponding author: Belk, Russell (rbelk@schulich.yorku.ca)

Introduction

The extended self formulation [1] envisions that certain possessions and certain other people are seen to be a part of us. They extend our identity beyond our mind and body alone. When they are damaged, die, or are lost, we feel their loss as an injury to the self. The idea of the extended self can be traced to William James [2] and his 1890 *Principles of Psychology*. Self extension is readily seen with tools, musical instruments, and weapons that literally extend our capabilities. But it is also the case that self expressive clothing, automobiles, homes and home décor, the places we frequent, the people we know, and the books we read are also partly constitutive of our selves. Alternative formulations of the way we incorporate such things into our ideas of self [3] include the expanded self [4], the extended mind [5], and various object oriented ontologies such as actor network theory [6]. But like the extended self, these alternatives were developed before the enlarged self presentational possibilities of digital media and online realms of communication, engagement, and interaction. The focus of this paper is on the new phenomena of extended self in the context of current digital worlds. For further discussion of how consumer behavior is affected by digital and social media see Stephen [56]. For further discussion of the extended digital self see Belk [7**,8].

Besides providing new vehicles for expressing ourselves, digital media also allow new ways of buying, collecting, communicating, playing, dating, investing, donating, gambling, learning, watching, listening, and more. Inadvertently we also present ourselves to advertisers who track such activity. But the concern here is how we more self-consciously present ourselves to non-commercial others online as well as how our digital productions and activities affect our own sense of self. Consider, for example, how the multi-function mobile phone affects our self presentation and sense of connectedness. With text messaging, instant messaging, and applications such as Twitter, Facebook, WeChat, WhatsApp, and Instagram we are potentially in constant contact with others [9,10]. We can post and receive photos, videos, messages, comments, and other updates that suggest we are living interesting lives and are part of an active network of others, some of whom form a part of our aggregate extended self. There is evidence that being disconnected from such access provokes anxiety and discomfort [11–13]. We suffer from 'FOMO' (fear of missing out) [14] or 'nomophobia' (fear of no mobile access) [15]. Like phantom limb syndrome among amputees, many digital consumers feel phantom vibrations from mobile phones, even when they are not carrying one [16].

In order to more systematically understand how digital affordances are affecting the extended self, the three sections that follow highlight changes that occur in going from analog to digital devices, possessions, and mediated activities. They are not the only important changes, but constitute an initial agenda of topics in need of further research [7**].

Dematerialization

Our 'written' communications, recorded music, photos, videos, and data are among the once-tangible artifacts that have dematerialized into digital ciphers of their former selves. One study [17] found that compared to their more tangible predecessors, e-mail, e-cards, e-books, digital journals, photos, newspapers, audio recordings, and video recordings were perceived as less able to be controlled and owned. As a result, consumers inevitably make back-up copies or hard copies, but still see these products as less secure, meaningful, and authentic than tangible

equivalents. Just as our digital office documents have not done away with paper equivalents, vinyl records, film photography and videography, paper greeting cards, hard-copy books, and print newspapers have not disappeared, even though sales have diminished. Perhaps there is something that cannot be replaced by the digital form, or perhaps the total takeover by digital media awaits the dying off of an older generation of users raised with material media.

It is easier to discard an e-mail or e-card than a signed personal letter or paper greeting card [17]. It is also more difficult to display a collection of digital music or films. Material audio products previously acquired a patina of hisses, pops, and worn album covers. These markings created a personalized familiarity and helped singularize them and provide a sense of past for their owners [18]. It may still be possible to personalize digital objects [19,20], but it is certainly more difficult. As a result they remain fungible and identical to perfect copies owned by others. This makes it more difficult for them to become mementos [21] or collectables [22,23].

We nevertheless do become attached to digital virtual possessions such as the online avatars we select or design and 'drive' on screen [24], virtual weapons acquired in videogames [25], online blog posts [26,27], 'selfies' [28], and personal web pages [29,30]. There is evidence of individual differences however. For example, those who are more involved with music feel a greater desire for tangible rather than digital format musical possessions [31] and younger consumers are more likely to see digital possessions as a part of their extended self than are older people [32]. The latter finding may also suggest generational change in the tendency to incorporate digital possessions in the extended self.

Re-embodiment
Compared to face-to-face meetings, we are disembodied when we use social media, e-mail, blog, engage in online dating or virtual worlds, or play digital video games. However, in most of these cases we are now re-embodied via avatars, photos, or videos. In the early days of the Internet when multi-user domains/dungeons (MUDs) were purely textual, this was not the case [33]. But with more interactive and visual Web 2.0 we are more likely to represent ourselves visually in virtual bodies. This does not necessarily mean, that we represent ourselves accurately or honestly online, and there is a tendency to choose online visual representations that are closer to the fantasy or ideal self than the actual self [34,35]. But there is some evidence that our activity on online social networking sites is likely to reveal personality characteristics accurately [36]. Moreover, with the guise of pseudonymity online, it is easier to first come out in a new gender identity online before doing so offline [37,38].

Two differences from the original notion of the extended self [1] are found in the presentation of the digitally updated version [7••]: the core self is no longer seen as singular (although the illusion of a continuous core self is still prominent) and the critical role of the physical body is diminished by the use of avatars and other visual re-embodiments. It might be thought that in game play and virtual worlds that a first person point of view (seeing through the eyes of the avatar) might create a greater feeling of embodiment and telepresence than the third person POV of being able to see the avatar we are controlling or 'driving.' However, this does not seem to be necessary and it may even be disturbing not to be able to see your character's body [39]. As with wearing a mask [40•], we behave differently when we operate an avatar [41•] although it is not quite a simple as the shape shifting of the ancient Greek god Proteus [42••]. Rather, the stereotypes, prejudices, and scapegoating that take place in the so-called real world, also take place online.

Unlike watching television or films, the ability to control avatars in digital media such as video games and virtual worlds means that we are more likely to fully identify with these characters as being not only a part of the extended self, but for all practical purposes, they are us. We are not just donning props like clothing to enhance our self-presentation [1,43]; we are transferring ourselves into another (avatar) body. In social media presentations, by contrast, we are using digital props to enhance our self presentation in a more 'traditional' manner [44]. However, as the next section suggests, this does not mean that we are the sole proprietors of this persona. Rather our self is also shaped by others.

Co-construction of self
More than 100 years ago Charles Cooley [45] suggested that we come to know ourselves through the mirror of others' reactions to us. In the digital world, tagging, comments, endorsements, 'likes,' and similar feedback provide much more input than the feedback we are likely to get face-to-face. In one case, teenage girls who posted a selfie of them in the dresses they were trying on in a retail shop, got feedback suggesting what they should buy even before they left the dressing room [7••,46,47]. On the more negative side, public shaming online can ruin the reputations of those thought to be behaving badly and cost jobs, marriages, and friendships [48]. Reputations can also be ruined online by former partners after rancorous breakups, especially if the two had previously shared passwords [49]. As these examples suggest, despite the added possibilities of self expression and presentation of the extended self in digital media, it is not always something that is completely in our control. Others' comments, tweets, retweets, and other input into our self presentation mean that they can help shape our self image and self concept in ways that were not possible previously.