**Extended Personal Identity in the 21st Century**  
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The concept of technology as extensions of the human senses and other human qualities has been present in technology literature for a long time, often coupled with philosophical thought surrounding its impact on social life and the human condition. The idea basically proposes a relationship between the human organism and technology in which technological artefacts essentially function as tools, to a greater or lesser extent, to replicate or amplify human bodily or mental abilities in various ways (Brey, 2000). Vehicles, for example, can be said to serve the purpose of extending our mobility whilst writing and images extend the human consciousness and memory to span across both time and space—mobile phones and the Internet arguably do so to an even greater extent.

**Human Beginnings and Endings**

In the 1960s, Marshall McLuhan famously coined the phrase ‘the medium is the message’. To McLuhan, we began to extend our physical bodies with the invention of tools in what he called the mechanical age, and with the invention of media forms such as printing and broadcasting, we have extended our central nervous systems; the mediation of which is always present in whatever message communicated through its various extensions (McLuhan 1964). McLuhan also suggested that we were rapidly approaching the ‘final phase of the extensions of man—the technological simulation of consciousness’ (1964, 19), often referred to as a prediction of the Internet. However, as our lives are increasingly entangled in the virtual, this idea of extension may be becoming relevant in a different sense.

With the expansion of the Internet into the lifeworld, our consciousness keeps being extended, relating to our identities in new ways. Discussions of phenomena such as Internet addiction, virtual adultery, and the ever-evolving field of artificial intelligence raise important questions of how we relate to our selves and our bodies in an age where technology extends not only human functions, but perhaps also something more essential; and where the boundaries of the category ‘human’ are becoming less defined (Fuller 2011). What does it mean to be ‘me’ in the contemporary age—where do I begin, and where do I end?

Our merging with technologies increasingly suggests that our identities as we know them are transcending their grounding in our biological bodies to be placed elsewhere, or perhaps eventually even diminish completely. The discussions surrounding these issues should not only be on how we present ourselves in virtual spaces, but also very vitally about how we relate to our avatars and online selves. We are living in a time of radical change on many levels; the expansion of and immersion in various types of virtual life, but also the approaching prospects of biological and cognitive enhancement are dramatically altering our notion of who we are and how we relate to others.

There are, according to Philip Brey (2000), three main philosophical perspectives in the timeline of extension theory: that of Ernst Kapp (1877), Marshall McLuhan (1966), and David Rothenberg (1993). Kapp’s *Grundlinien einer Philosophie der Technik*—the first
work on the philosophy of technology, proposes that technological artefacts work as projections of human organs, wherein shapes or functions are unconsciously transferred from our biological bodies to the artificial, as human organs are argued to be the inevitable standard and inspiration. This perspective explains how camera lenses are constructed like artificial eyes and, potentially, how we anthropomorphise technological artefacts both in the way they are designed (androids, cars with two headlights placed like eyes, and other machines with humanlike features that are not directly related to their function), and the way we relate to them (people referring to their Roomba vacuum cleaners as ‘he’ as opposed to ‘it’).

McLuhan on the other hand, sees technology as amplifying bodily or cognitive functions. For example, clothing would be a thicker and more durable version of our skin, and Google might be a faster and more efficient version of our brains’ capacity to filter and identify information. Finally, Rothenberg’s theory is different from both Kapp and McLuhan in the sense that it focuses on a more abstract sense of the human will, as opposed to faculties, and this is also the perspective that Brey draws on in his own account. Brey himself argues for a revised version of Rothenberg’s thesis in which artefacts are seen as tools to realise intentions, instead of extending a particular part of the body (Brey 2000).

Emergent Technology

I believe McLuhan’s perspective is gaining new significance in the 21st century, if not in the way he imagined. In the context of emergent technology, McLuhan also discussed a concept of ‘numbness’—something he thought of as a kind of desensitisation of the mind in the face of the intense stimuli brought along by new technology. At this point in time, it might rather be relevant to ask whether our senses are being numbed by technology, or if we instead are withdrawing into virtual life because physical reality is felt to be numbing.

One could certainly argue that there is an increasing tendency for us to live the more meaningful parts of our lives online, while physical reality is mostly for being places we need to be; we connect with our close friends over social media platforms such as Facebook and Skype; we listen to music online on Youtube or Spotify; we shop for products we are excited about online, while most of us still get groceries and other mundane items at the local supermarket. In a Washington Post article, futurist blogger Dominic Basalt even refers to the Internet as ‘our sixth sense’ (Washington Post 2015)—and perhaps more and more it is online that we ‘live authentically’, to put things in existentialist terms.

In real life, we live in a small house, and it always rains. (Laughs) In Second Life, we’ve got a big house by the beach! —‘Kira’, a Second Life character in BBC’s documentary Virtual Adultery and Cyberspace Love (2008).

Indeed, there are distinct ways in which people feel that their ‘true selves’ are lived out virtually, rather than in physical life. The documentary the above quote is from portrays
exactly this—a married woman involved in a virtual affair to the point where she isolates herself from her physical family; a couple that never met in physical life getting married on Second Life. Arguing that transhumanist futures in which the human condition transcends our biological bodies are closer than one might think, Fuller (2011) brings up the example of a 2008 English court case where a divorce was settled on grounds of adultery after one of the spouses’ avatar had had an affair in Second Life (2011, 106). The Second Life phenomenon may be considered a niched and somewhat extreme example, but I think it has larger implications than it has been given credit for, especially with the rise of the ‘new generation’ of virtual reality (like the Oculus Rift). A number of studies on children’s emotional attachment to technology, as well as internet addiction in adults, have been published in recent years. The studies suggest that the phenomenon of ‘withdrawing’ into virtual life reaches outside the niched special interest domain that is the Second Life community.

Extension Theory

These cases of virtual adultery raise a set of questions very relevant to how we relate to ourselves, and the way they have been treated legally necessarily prompts some kind of metaphysical inquiry—am I my avatar? The uploading of parts of our consciousness to external spaces already happened with cave paintings and the invention of writing. However, with constant Internet access our consciousness is extended to a degree where we are able to interact with others in real-time, with virtual platforms offering spaces to actually ‘meet’. Case (2010) calls this kind of technology ‘technosocial wormholes’, in referring to the ability to ‘transport’ the consciousness spatially so that communication between individuals can take place.

Before smartphones and the Internet, physical interaction in the so-called ‘real life’ might have been preferred for reasons related to time and space, but as these restrictions no longer apply to the same extent, virtual interaction is becoming our interaction of choice (perhaps in a not-so-distant future, physical interaction without technological mediation will even have become obsolete). Unlike McLuhan, Case does not see this development as alienating or numbing. Instead, she suggests that it actually helps us be human (Case, 2010)—an argument also made in Boellstorff’s ethnography Coming of Age in Second Life (2008). Boellstorff suggests that online culture is not ‘posthuman’, but actually profoundly human: ‘It is in being virtual that we are human: since it is human “nature” to experience life through the prism of culture, human being has always been virtual being’ (2008, 5). The virtual real-time transport of the consciousness means that that of one’s avatar is qualitatively identical to one’s own, but that the body is entirely different. This in turn leads us to other questions. Is it the body that is adulterous, or the mind? Is the body (physical or virtual) a tool, or a part of the self?

Philip Brey’s approach to extension theory can be understood in these two ways respectively. Either our bodies constitute a vital part of who we are, or, they are like other technological artefacts, tools for the realisation of human intentions, which in this scenario necessarily is situated in the mind. If the former, one’s virtual presence is an extension of one’s body in the sense that it progressively serves the functions previously reserved for physical bodies. If the latter, however, our biological bodies might just be
serving as containers for our identities and intentions, in which case it makes sense for the self to now be upgrading to a more sophisticated container, using a machine as an upgraded, alternate tool to the physical body. This is already happening to some extent and is likely to continue in the same direction. The examples I have mentioned also demonstrate how there lies a qualitative difference in this new way we are extending ourselves—instead of having technology merely extend our sense of self, our sense of self is now actually merging with technology and being imbued in it in a way that did not happen previously.

In previous centuries, we might have written a letter and felt like we poured ‘ourselves’ into it, but our identities would not have been grounded in our letters to other people as these would only capture who we were at a certain point in time. This means that there would a) always be a ‘lag’ in interaction, and b) people would usually write letters as a secondary means of communicating, for when they were not able meet and speak to one another physically. Furthermore, the sense of emotional loss and detachment (indeed, similar to feeling like one has lost a sense) the contemporary human being experiences when their smartphone breaks down or, as we like to ascribe meaning to it —‘dies’, would not have existed in its intensity fifty, or even twenty years ago, because such significant parts of our identities were not contained in machines.

One perhaps more relatable example that demonstrates this point is the Internet phenomenon of hackers gaining access to celebrities’ smartphones and ‘leaking’ private images, often nude — the most talked about such incident happened in August 2014, which brought the issue into the public debate. It caused quite a stir on social media as a lot of people enjoyed having free access to photos of naked celebrities, disturbingly naming the incident ‘the fappening’. But, interestingly, there was also a large popular-feminist response to this where people were encouraged not to look at the photos as this would violate the depicted persons’ privacy as the owners of the photos had not given their consent.

The use of the word ‘consent’ in much of the discourse surrounding this incident is interesting because it is a word often used in contexts of sexual abuse, and thus carries implications that having pictures of one’s body shared and looked at against one’s will is analogous to having one’s actual body looked at against one’s will — which, legally speaking at least classifies as sexual harassment. Worth noting is that a photograph of a person’s body is not the person’s body, but a digital representation of the person’s body at a certain point in time. Nevertheless, this digital representation carries a heavy notion of self. However, the legal system seems to yet have to catch up with this—right now it seems like it is Apple (the hackers gained access via iCloud) that have received the majority of the blame for the attack.

If we accept the idea that technology now extends our personal identities, we must also take a look at the boundaries and consistency of identities as these may have been renegotiated. So is the adulterous avatar the same person as the married human who ‘controls’ it? Case calls our virtual presence our ‘second self’, that we have to spend time presenting and maintaining much like we maintain the presentation of our ‘analogue’ selves (2010), however the gap separating the two seems to be closing. There is of course
the quite popular view which posits that the self as a coherent entity is largely an illusion, but as society at large as well as our phenomenological experience are based on the notion of there being a continual sense of self, I will not be exploring this perspective in this piece.

The court in the Second Life divorce case clearly accepted the spouse’s adulterous avatar as some sort of extension of himself, the actions of which he was held morally accountable. In other words, there must be some degree to which the consensus was that the avatar was actually him, or that its body at least acted in a way that sufficiently represented his consciousness. But how can we tell that the person operating the avatar is the same particular person operating a physical body behind the screen? As virtual spaces for the time being do not impose much restriction on bodies in terms of what they are allowed or supposed to look like, telling individuals apart or even identifying a person is and will be increasingly difficult as our identities continue to entangle themselves in technology. At least in today’s legal system, this poses a problem to the process of prosecution, as thinking that we are the same person over time is integral to holding somebody accountable for their actions (Hughes, 2013), and that this is almost entirely based on consistency in physical attributes.

In order for the legal system to adapt to a future where more and more offences are going to be committed virtually, it will either need to enforce restrictions to digital bodies similar to those that currently govern ‘analogue’ bodies, or we will have to develop a system that does not assume personal identity (Hughes, 2013), which would also better accommodate the transhumanist calls for morphological freedom that are becoming increasingly relevant as more and more sophisticated technologies for altering not only digital bodies but also ‘analogue’ ones are emerging.

On a related note, we might also ask how I can tell that I have remained the same person since I was born; the law certainly makes a set of assumptions carrying implications for the boundaries of the self in time. For instance, a person can be prosecuted for an act committed three years ago, but only if they were above the age of 18 at the time of the act; implying that an adult would have stayed the same person, while something in the identity of someone who used to be a child three years ago has changed. Another question that is relevant to consider in the 21st century will be how far in time our identities can extend; innovations in artificial intelligence suggest that our identities in the future may be able to stay intact even after biological death.

Reimagining Personal Identity

We often figuratively claim that an experience has changed us into a ‘different person’, but in the light of how the concepts of ‘self’ and ‘human’ are being redefined, it makes sense to revisit considerations of how our identities are actually maintained over time. There are many different theoretical approaches to this, but one of the dominant views proposed, which is also the one most transhumanists are sympathetic to (Hughes, 2013), is Locke’s memory continuity criterion, wherein our identities persist if there is a psychological connection of one’s present self to one’s past. This perhaps functionalist revivalist view, which is shared by Kurzweil who calls it ‘patternism’ (2005), allows for
radical alteration of both the body and the brain as long as there is psychological consistency (Hughes, 2013: 230). This would mean that in theory, if I were to be disassembled into atoms and then put back together, I would still be the same person if I could refer to myself and my memories from both before and after. It would also mean that as long as my avatar’s consciousness has a psychological connection to my consciousness, it would qualify as being me.

Martine Rothblatt, the woman behind what is called ‘the world’s most sentient robot’ BINA48, explores this idea further in her recent book Virtually Human (2014). Rothblatt discusses how soon we will be able to upload our consciousness in ‘mindfiles’ to what will probably be virtual ‘mindclones’ of ourselves - and argues that it will be entirely possible to have emotional and intellectual continuity:

> Once creating conscious mindclones—that is, intellectually and emotionally alive humans—becomes a common human pursuit, we’ll confront many new personal and social issues, primarily broadening the definition of “me” (Rothblatt 2014, 2).

In line with Rothblatt’s argument, ‘mindclones’, would be seen as qualitatively both human, and the people the minds of whom they are clones. A mindclone would extend us even further than online avatars do; our minds would be extended spatially as separate entities from our biological selves that go about ‘their own’ business while still being a part of ourselves. They would also extend us further temporally, as they would be able to stay around as a way for people to interact with us after our biological bodies have died; Rothblatt even predicts that the word ‘computer’ in the future will mean a place for artificial consciousness (2014, 22). The meaning of the self is rapidly changing — not necessarily impeding our humanity, but possibly rather amplifying it by providing us with means to become more human through the realisation of who we want to be.

**Conclusion**

This is undoubtedly an exciting time to be alive, with change brought about by technological developments happening on a multitude of levels. One such important change is how people at least in some sense seem to identify more with virtual avatars than their biological bodies and the physical life it is situated in. If subjective views are to be seen as epistemologically significant, our online presence might in some cases better represent who we are than our physical bodies. This is not to say that the physical body lacks meaning in today’s social interactions, but rather to suggest that it is no longer the only, or even dominant grounding for our sense of self.

‘Human’ is an extremely contingent category, and so is ‘self’; but if we view our sense of identity as something that is distinctly human, then the point of technology and virtual life helping us be human extends to saying that there is a liberating character to it in how it allows us to be the persons we want to be. These new issues of personal identity in the virtual context are becoming increasingly relevant and are going to have to be addressed by not only the legal system but all spheres of society, and it is going to be very
interesting to follow the impact this change in our concept of self will most definitely bring about.

This piece was written as a preparatory roadmap outlining the questions I will be raising in my undergraduate dissertation on virtual personal identity which I am undertaking this year, where I hope to be exploring these questions further.

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References

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