*A Du Preez*

# Performing the virtual double:
# Notes on self-amputation and self-amplification

*ABSTRACT*

In what follows the idea of the online double is historically contextualised and analysed. Beginning with the contemporary idea of the 'selfie' as online self-induced double, I proceed to discuss the *Doppelgänger*'s (double) mythical and literary roots, in order to expand the discussion of the selfie to include the online double. Two instances of the online double are unpacked, namely the double as shadow and the double as a stand-in or alter-ego, which correspond significantly with Marshall McLuhan's analysis of the Narcissus myth and technological use. McLuhan reveals the doubled nature of our technological engagement that leads to either self-amputation or self-amplification. In my analysis, the double as shadow is correlated with self-amputation and the double as alter-ego with self-amplification. It is argued that the double as shadow is evoked online through the mining of data regarding the self that is captured consciously and unconsciously to create what is known as the Data *Doppelgänger*. The figure of the *Doppelgänger* is further vividly conjured through virtual stand-ins or alter-egos that act on behalf of the self to create a tele-presence through examples such as *Project Lifelike* and *rep.licants.org*.

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## *INTRODUCTION*

This paper tracks the historical trajectory of the phenomenon of 'doubling' or mimetic representations of the self, and how such representations are changed and modulated by technology. In particular the paper argues for new mutations in the forms of self-representation facilitated and enabled by the internet and social media. In what follows the burgeoning discourse on selfies is first briefly introduced after which the discussion moves beyond selfies as merely capturing the self via digital cameras towards selfies that take on new dimensions of doubling. It can almost be argued that the online double or mask swallows up the self (as art historian, Ernst Gombrich suggests in another context: "The mask swallowed up the face" (Gombrich, 1972:13)). Here Otto Rank (1971:12) provides guidance by distinguishing two narratives associated with the double namely, the double that is clearly a visible cleavage of the ego (shadow, reflection) and the double that confronts the self as a separate real physical entity with "unusual external similarity". Two main trends or types can accordingly be identified: the double as repressed split shadow (double by division) and the double as replica (double by duplication).[1] These two doubles correspond with McLuhan's two-pronged exchanges with technology, namely where technology extends our capabilities or self-amplification and the overwhelming engagement that leads to numbness or self-amputation. The double as shadow refers to an unconscious state of not knowing and accordingly overlaps with self-amputation, whereas the amplified self refers to the online persona that extends the self's presence as alter ego.

## *1.   SELFIES AS ONLINE DOUBLES*

The selfie, defined as "self-generated digital photographic portraiture, spread primarily via social media" (Senft & Baym, 2015:1558), has become the preferred means for self-expression in the digital age.[2] Selfies stand in the tradition of doubling, imitation, twinning, cloning, alter egos, mirroring, masks, and shadows. To the degree that selfies are impersonations, they are also mimetic, thus, performative. In other words, they perform interactions between self and other, subject and object, presence and absence, presentation and representation. The recent outrage caused by South African Pastor Mboro's so-called "heaven selfies"[3] (Figure 1) indicates the extent to which selfies have become stand-ins that perform on our behalf. Pastor Mboro of the Incredible Happenings Ministries in Johannesburg, allegedly disappeared during an Easter

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[1] See Gary Faurholt (2009), who also makes this distinction between the double as divided and the double as duplicated.

[2] Reportedly there are about 53 million photos tagged with the hashtag #selfie on Instagram and the word selfie is mentioned over 368,000 times on Facebook updates. Google also reports that in 2014 approximately 93 million selfies per day were taken on Android models alone. See Richard Brandt (2014).

[3] Pastor Mboro, or Paseka Motsoeneng, is a "self-styled prophet" who has claimed several miraculous acts such as delivering "a fish from the womb of pregnant woman" (BBC trending, 1 April 2016). After the heaven selfies the South Africa's Commission for the Promotion and Protection of Cultural, Religious and Linguistic Communities (CRL Commission) is filing charges against Mboro. The smartphone with the photos also disappeared before investigators could search for evidence of the selfies.

Sunday service in April 2016 and returned with selfies taken in heaven on his Samsung Galaxy S5. The images were made available at a cost of R5000 as a pledge to the Church. But some images were leaked to the press and their authenticity came under scrutiny. Pastor Mboro nevertheless sticks to his version of the event and his selfies, as online doubles, are presented as proof of the divine encounter.
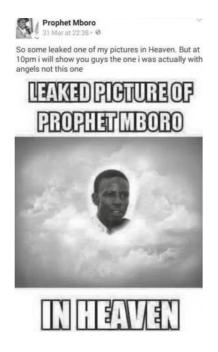


**Figure 1: Facebook selfie of Pastor Mboro in "heaven" (2016).**

The manner in which the self manifests primarily on social networks, and on Facebook specifically, is through the profile, which includes biographical and professional information, personal preferences and photos. Often the profile pic is a selfie that announces the virtual substitute or avatar that interacts on behalf of the (real) self, or as one of Sherry Turkle's (2011:165) respondents describes her Facebook profile, as "an avatar of me" or even more tellingly, "my Internet twin". Senft and Baym (2015:1589) interpret the selfie as both a "photographic *object* that initiates the transmission of human feeling", and as "a practice – a *gesture* that can send different messages to different individuals". The selfie thus negotiates the complex intersection between subject and object as the self is both photographer and the subject photographed, creator and created. However, it is important to note that although "the selfie signifies a sense of human agency" it is transmitted, displayed and tracked through nonhuman agents, meaning that its digital presence tends to "out[live] the time and space in which it was orginal[ly] produced" (Senft & Baym, 2015:1589).

Through this (technological) othering the selfie performs a presence in the absence of the physical self—to be more precise, the selfie becomes a telepresence that facilitates continuous accessibility and omnipotence. (The extent and reach of this omnipotence will become evident in the examples discussed later on). It is probably more accurate to refer to selfies, not in terms of mimetic resemblances, but rather as processes or performances spread over digital communities and networks globally (Avgitidou, 2003:131). Instead of aiming at duration and documenting likeness truthfully, as traditional self-portraiture proposed, the selfie is created in anticipation of the momentary glance and admiration of online onlookers. Also, selfies are serial by nature or repetitive. One selfie is never enough: "Digital self-presentation and self-reflection is cumulative rather than presented as a definitive whole" (Walker-Rettberg, 2014:35). The accumulation has become so rapid with the pauses in-between shrinking that it is more accurate to refer to the serial self-disclosure as a form of "lifecasting".[4]

Putting your life on display via digital mediation became popular with the notorious webcam girls of the late 90s of whom lifecaster, Jennifer Ringley (19 years old at the time) on the *JenniCam* site, is perhaps the most well-known.[5] In Ringley's case, it is probably correct to state that she became a shadow of herself in real life while her online personality flourished. When Ringley now reflects on her "performative experiment" she prefers to avoid the "internet-based lifestyle she helped pioneer" (Knibbs, 2015). Ringley has survived her digital avatar and nowadays rather tries to return to (real) life again. This is more or the less the premise for the television series *Selfie* (2014) in which the protagonist, Eliza Dooley (played by Karen Gillan and with a definite reference to Eliza Doolittle and the Pygmalion myth), similarly has to find her way back to reality. Eliza's character invests all her time and energy in obtaining social media fame and forgets the cues for human interaction in the flesh. After her virtual self is "assassinated" by a viral video, she has to relearn how to interact meaningfully in real life with the help of a young man.

I am not suggesting that real life interactions are unmediated or not tinted by role playing or performances. In fact, as Erving Goffman (1959) suggests, there are certain rules and roles that also apply to presenting the self in everyday life. Everyday personhood goes hand-in-hand with wearing a mask. Although this may sound counter-intuitive the mask allows for the ability to present an acceptable social front. The social front consists of embodied cues and signs that permit us to understand and interpret one another. We, therefore, play roles (put on performances) during our exchanges such as playing the role of the doctor or patient, teacher or student. By playing roles, unintentional gestures that may slip through and cause misunderstandings can be contextualised and interpreted. Thus we are always busy with "impression management", according to Goffman (1959:161). Without the embodied cues and context misinterpretations can be transposed to self-representations online that may lead to misguided expectations and deceptions (compare for

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[4] Lifecasting is the continual broadcasting or streaming of one's personal life through digital media e.g. *iJustine*.

[5] In 1996 Jennifer Ringley started the webcam phenomenon or webcasting (also lifecasting) through capturing her private life on a webcam and streaming it live and unedited to the JenniCAM website (jennicam.org). The webcam was initially installed in her dorm room at the Dickinson College in Carlisle, Pennsylvania. Jennifer maintained the webcam site for more than seven years.

instance the phenomenon of deceit that slips in with the notorious over-flattering MySpace angles and other misleading digital impersonations as revealed in the *Catfish* MTV series).[6]

Fundamental interactions (or offline interactions in real life) include shared co-presence in terms of place and time, where appearances, gestures and voice correspond (Autenrieth & Neumann-Braun, 2011:18). During online interactions, our words, appearances, gestures and voices do not necessarily correspond but are differentiated and separated. We are not confronted online with corresponding embodied elements, therefore, online interactions require new skills to effect meaningful communication and gain insights into one another. It also indicates that we have to compensate for the loss of co-presence online. Naturally, these factors impact on how we depict ourselves online and how onlookers may respond to our self-depictions.

But, is such a stark division between the virtual and real self really tenable since we no longer 'go online', since we are in a certain sense always already on? Ubiquitous computing is "where we already are and of which we are increasingly a part" (Elwell, 2013:235). As Elwell proposes,

> The transmediated self describes the integrated, dispersed, episodic, and interactive narrative identity experience in this space between the virtual and the real. The transmediated self is not the exclusively online identity of Facebook or the identity construct compiled by data mining companies. Neither is it the tangibly embodied identity of the analog world. Rather, it refers to the identity experience emerging from the feedback loop between the digital and the analog whereby one domain informs the other in an ongoing dialectic of existential equivalence. (Elwell, 2013:243).

The self exists equally in both the digital and real realms, according to Elwell, and what else is the "transmediated self" but a virtual double?[7] Therefore, the selfie can be described as a self-induced online double or virtual *Doppelgänger* that complies with the demand to be 'always on'. As part of this demand, Facebook users, for instance, utilise the social media platform not only to expand networks, create connections, share information or be entertained, but indeed use it for self-expression and self-disclosure. It is for this reason that selfies are often linked to narcissism, and if Kim Kardashian's *Selfish*, containing more than a thousand selfies, is any indication, this may be a very plausible assumption.

The obsession with the self is poignantly identified by Van Zoonen as "*I*-Pistemology", with "*I* (as in me, myself) and *I*dentity, with the *I*nternet as the great facilitator" (2012:60). In the era of *I*-pistemology, the self turns into the centre and sole source of knowledge and truth (Van Zoonen,

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[6] In the context of digital media "catfishing" refers to the act of luring someone into a relationship by means of a fictional online personae. In other words, it is to deceive someone or trick someone into a relationship through digital mediation. Catfish: The TV Show is a MTV series produced by the same producers of the Catfish (2010) documentary film. The premise of the film and the television series is to document online relationships and how the virtual and the real impact on one another.

[7] "The Doppelgänger is this liminal subject that allows for the relation between image and signification to be infinitely repeated, while that repetition, in turn, allows for the subject's differential identity" writes Dimitris Vardoulakis (2006:114).

2012:57, 60). At an alarming rate networked culture offers the opportunity to transform the self into a product of immaterial labour through *self-branding* (Chen, 2013; Hearn, 2008; Kanai, 2015; Page, 2012). Self-branding "involves the self-conscious construction of a meta-narrative and meta-image of self through the use of cultural meanings and images drawn from the narrative and visual codes of the mainstream culture industries" (Hearn, 2008:198). The branded self is created by means of "a detachable, saleable image or narrative, which effectively circulates cultural meanings" (Hearn, 2008:198). The currency in which the branded self prefers to trade is "the very stuff of lived experiences" (Hearn, 2008:213), which are shared through an endless stream of updates, pictures and – pertinently - selfies. The definitive aim is to create an "authentic self-brand" (Banet-Weisser, 2012:73) by inflecting the self into the double strategy of prosumption: where the distinction between production and consumption, producer and consumer have been blurred (see Zajc, 2013). If the selfie is then understood as the epitome of self-branding, we see the self thus "transforming what it doubles and extends, producing a version of self that blurs distinctions between outside and inside, surface and depth" (Hearn, 2008:201). However, it would be erroneous to deduce from this trend that all selfies can be understood in terms of narcissism only.

Firstly, an analysis skewed towards narcissism tends to ignore the expressive qualities that social network sites afford users and how selfies in particular, as "mirror images" (Walker-Rettberg, 2005:184), aid in exploring and coming to an understanding of ourselves. There is also evidence of oppositional politics and resistance performed through selfies, as Conrad Murray (2015) indicates, especially by young women. In Murray's analysis of the work of young female artists he proposes that they utilise their selfies as "self-preservation" that allow them contra the engulfing wave of late capitalist self-indulgence to "envision themselves anew" (2015:512). In contrast, the online magazine *ALL4WOMEN* props the five selfie queens of South Africa with the telling slogan: "A selfie a day keeps women feeling empowered…." (www.all4women.co.za). One of the contenders for the crown, model and TV personality Pearl Thusi, reveals her talent for taking selfies while shopping for less (Figure 2). This populist rendition of women's empowerment is obviously not what Murray purposes when looking at marginalised female artists' selfies as a form of self-preservation.



**Figure 2: Screengrab of Pearl Thusi's Instagram page.**
**(https://www.instagram.com/p/BHhoCUHh394/?taken-by=pearlthusi**

Solving the narcissistic versus empowering binary in selfie discourse does not form part of this article's focus. The aim is rather to complicate understandings of the selfie phenomenon. If, for instance, one follows Marshall McLuhan's guidelines in his essay "The Gadget Lover", wherein he employs the Narcissus myth to interpret technology use, it becomes apparent that it would be an over-simplification to merely identify self-reflection and self-love with the legend (and with selfies, for that matter).

If the myth is opened up to the roots of the term Narcissus, which stems from the Greek term narcosis or numbness, a richer understanding arises. What is revealed is that the myth does not suggest self-recognition as such, but rather 'self-amputation'. McLuhan (1994:41) maintains: "The youth Narcissus mistook his own reflection in the water for another person. This extension of himself by mirror numbed his perceptions until he became the servomechanism of his own extended or repeated image". Narcissus did not fall in love with his "selfie" but more accurately was self-amputated, numbed by the image, and stood in service of the image: "He had adapted to his extension of himself and had become a closed system" (McLuhan,1994:41). McLuhan (1994:42–43) tries to explain our fascination with technologies as an extension of ourselves and how it leads to a "kind of autoamputation" or "generalised numbness or shock" in an attempt to cope with the over-stimulation of the new device or technology. As our bodies are extended by new technologies they are also amputated in the process to obtain equilibrium again (e.g. the invention of the wheel leads to the 'amputation' of our legs). In terms of the myth, Narcissus was not so much flattered by his image as shocked into numbness.

Thus, two main processes can be extracted from McLuhan's discussion of our interaction with technologies, namely self-amputation and self-amplification (extension of the self) (See Wendt, 2014). The selfie accordingly runs the risk of becoming an all-consuming reflection that both extends (viewed from a narcissistic angle) and amputates (viewed from a traumatised viewpoint). I will utilise the two processes in my analysis of contemporary examples of where the self is performed through amplification and amputation through the virtual double.

## 2.   SEEING DOUBLE

The *Doppelgänger* is a mythical creature whose spectre has haunted ancient folklore and myth but became particularly fashionable during the early nineteenth century amongst artists and novelist of German Romanticism and the British Gothic movement.[8] The ominous figure of the *Doppelgänger* is captured as literary motif in amongst others Jean Paul's Siebenkäs (1796); Feodor Dostoevsky's *The Double* (1846), Robert Louis Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886) and Oscar Wilde's *The Picture of Dorian Gray* (1891).[9] According to Otto Rank's *The Double. A Psychoanalytic Study* (1971), the double has rich and layered

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[8] The term was coined by Jean Paul Richter in his novel, *Siebenkäs* (1796).

[9] The shadowy double has also appeared in numerous films from Hitchcock's *The Wrong Man* (1956) to Ingmar Bergman's *Persona* (1966); Chuck Palahniuk's *Fight Club* (1996) and Darren Aronofsky's *Black Swan* (2010), and recently *The Double* (Richard Ayoade (Dir.), 2013) to name only a few.

anthropological, religious and psychological origins, elaborating "the relationship of the self to the self" (1971:xiv). The term *Doppelgänger* literally means "double-goer" or "double-walker". The double can appear as twin, ghost, shadow, guardian angel, the soul, or a mirror reflection; materialise in waking daylight and in dreams, in spirit and the material realm; and manifest itself both as visible and invisible. The *Doppelgänger* is mostly visualised through strategies made possible by mirrors, paintings (as in the example of Dorian Gray), photographs and latterly by digital replication. The double is, therefore, an image *of* the self or *in* the image of the self. It is a representation.

During the early twentieth century, Freud's psychoanalytical interpretations of the double contributed to the proliferation of the double "in the modern imagination" (Jeng, 2005:246). Freud interpreted the double as a repressed part of the self that is encountered in the form of an uncanny stranger (*Das Unheimliche*). The modern revitalisation of the theme of the double differs significantly from the more benign and neutral versions in traditional societies (see Živković, 2000, and also Faurholt, 2009), as the modern version becomes a metaphor for disenchantment with irreconcilable differences and a symptom of "mankind's chronic duality and incompleteness" (Živković, 2000:122). Whereas the double figured as a symbol of the eternal soul (immortality) in traditional societies; it turned into its opposite by becoming a messenger of man's imminent demise (mortality) (Živković, 2000:124) in modern times. In short: meeting the modern *Doppelgänger* is the kiss of death.

### 3.  PERFORMING SELF-AMPUTATION THROUGH THE DOUBLE

As selfies become ubiquitous, other impostors such as the Data *Doppelgänger* (the digital data trail one leaves behind consciously or unconsciously), lurks beneath online selves like a repressed shadow. The concepts of the shadow and the *Doppelgänger* are intimately interlinked, not only in literature but also in psychology, as put forward in CG Jung's theories on individuation and integration of identity. Jung identifies the shadow as the repressed and unacknowledged aspects of the self "consisting not just of little weaknesses and foibles, but of a positively demonic dynamism" (Jung, 1916:35). The shadow is not yet integrated in the conscious self and functions autonomously "in opposition to the conscious personality" (Casement, 2003:31), therefore it is a liminal encounter similar to the encounter with the *Doppelgänger*. Although, Jung does not perceive the shadow in negative terms only—for him its effects can be positive as well as negative. The trick is, however, to become aware of the shadow, "to find a way in which [one's] conscious personality and [one's] shadow can live together" (Jung, 1952:12).

In Romantic literature exploring the theme of the *Doppelgänger* the shadow and the soul are often conflated, as, for instance, in Adelbert von Chamisso's *Peter Schlemihl's Remarkable Story* (1814). After selling his shadow to the devil, the main protagonist, Schlemihl, has to go through life without a shadow.[10] What is also interesting is that the state of being shadowless is

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[10] The shadow is clearly a metaphor for the soul and Rank (1941:68) confirms this by linking the double to the "immortal soul".

often synonymous with lacking a reflection in the mirror. Similar to Von Chamisso's character, Schlemihl, who spends a lifetime searching for his shadow; in ETA Hoffman's "The Story of the Lost Reflection" (1815) we are introduced to Erasmus Spikher, who exchanges his mirror image for a life of artistic decadence. Possessing no shadow or reflection refers to the divided double that has been visibly severed from the self, or in McLuhan's terms to self-amputation via the technological double. In both Schlemihl and Spikher's cases, the split from the shadow and the mirror reflection, respectively, speak to a chasm within the self which can only be reconciled at a price.

When transposing the divided double to the sphere of ubiquitous digital media, it becomes clear that the shadow of the self can take on a life of its own in the flow of data and metadata. As the *Human Face of Big Data* social network project explains, we leave a trail of digital exhaust in the form of streams, texts and location data that will potentially live forever.[11] The picture that arises from this trail of data is "frighteningly complete". As we search for information and check-in to places, we leave data crumbs that are picked up and shared by platform owners "with third parties for the purpose of customised marketing in exchange for free services" (Van Dijk, 2014:197). We constantly contribute data explicitly and implicitly to data tracking devices; meaning the explicit data is willingly provided while the implicit data is unknowingly deposited through searches, logons and site views (Walker-Rettberg, 2009:461). According to Van Dijk, the compliance with personal information can be interpreted as "a trade-off" because "masses of people—naively or unwittingly—trust their personal information to corporate platforms" (2014:197). This seemingly neutral and innocent transaction of data exchange, as for instance utilised in Big Data research, is identified by Van Dijk as "the ideology of *dataism*" (2014:198). What is useful for my analysis is that dataism assists in performing or mirroring another self, unknown or undefined up to this point—a data double. It is for this reason that most of data collection or 'life-mining' is focused on the body: "First it is broken down by being abstracted from its territorial setting. It is then reassembled in different settings through a series of data flows. The result is a decorporealised body, a 'data double' of pure virtuality" (Haggerty & Ericson, 2000:611). In a similarly foreboding tone Reppel and Szmigin argue that "The Data Doppelganger can be described as this shadow developing a life of its own, repelling the desire of the host to maintain control over it" and therefore, according to them, the *Doppelgänger* metaphor provides a useful platform to initiate a "debate on the dark side of digital identity" (2011:501).

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[11] The *Human Face of Big Data* is a global social media project "that focuses on humanity's new ability to collect, analyze, triangulate, and visualize massive amounts of data in real time". (Retrieved October 21, 2015, from http://thehumanfaceofbigdata.com) The project has created an app that track loads of information about one's daily whereabouts and are able to find someone who has the same data profile— your data doppelganger. This may for instance be a person with the same phone habits, similar commute and internet habits.

**Figure 3: Image accompanying article by Tim Chester, *Sunday Times Magazine*, Quantified Self, August 11, 2013. http://timchester.com/sunday-times-magazine-quantified-self/**

The most visible form that the data double takes is through the provision of "self-monitoring practices" (Ruckenstein, 2014:68) or what is otherwise known as the quantified-self movement.[12] By tracking for instance heartbeat, movements, calories consumed and the number of stairs taken, the self is quantified and mapped onto a data double. In fact, the self is turned into a project where "optimization becomes not only possible, but also desirable" (Ruckenstein, 2014:69). The data double reveals another self not previously reflected upon, similar to the mythical and psychological shadow that remained mostly unconscious and invisible. As the self is codified into data, a ghostly twin takes shape as part of what Arnzen (2014) identifies as a "hauntology of the world wide web". We may well speculate about the accuracy of the self that comes to the fore through the data double. Consider, for instance, *Dopplr.com*—a free social media network service—generating a

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[12] The *Quantified Self Labs* describe their activities as "a collaboration of users and tool makers who share an interest in gaining self-knowledge through self-tracking". The *LiveScience* website describes the aims of the quantified self-movement as "to measure all aspects of our daily lives with the help of technology. Wearable devices such as activity trackers, along with apps that let us log our every step, snack and snooze could bring us a better understanding of ourselves, our nature, and may even benefit our health" (Retrieved October 21, 2015, from http://www.livescience.com/topics/quantified-self).

portrait of travellers by compiling shared travel itineraries into visualisations.[13] Also the *Narrative Clip*, which is a wearable camera documenting every moment of your life, and which promises to deliver a true image of the self. But as many theorists indicate, the digital double may rather be closer to a "(mis)interpretation by others and a (mis)representation by an individual" (Reppel, Szmigin & Funk, 2011:121). The data double that appears is both too narrowly focused and vague at the same time. As Walker-Rettberg reflects on her use of self-tracking devices:

> We don't typically think of these self-tracking tools as self-representations in the same way as we do self-portraits or diaries, but they do preserve and present images of us: images that are both very accurate and very narrow, whether they track steps, heart rate, productivity or location. (Walker-Rettberg, (2014:62).

The double that takes shape, therefore, has pertinent limitations; it can be said to render a view that is too close-up and too focused. In other words, it does not provide a situated overview or integrated perspective of the self, but one mainly geared towards the quantifiable. If the quantified self meets up with the qualified self, are they indeed twins? Does the quantified self not create a shadow that aims to make me transparent to myself? But as we know, human existence often challenges us with unspeakable phenomena and overwhelming experiences that resist complete data translation and containment. In fact, there are many aspects of being human that cannot be translated into data.

Finally, the *Human Face of Big Data* project provides a handy application that can be downloaded to meet your data doppelganger on screen. The app promises to assist in "learn[ing] about yourself, how you compare to others, and what your phone can tell you about your life. Compare answers about yourself, your family, trust, sleep, sex, dating, and dreams with millions of others around the world. "Find your Data Doppelganger" (*Human Face of Big Data* website). On the site we can see the happy merging of data twins—people who share the same quantifiable interests—as male and female faces morph and different ages and races become one and the same. Although fascinating, the question arises: if one shares the same data profile as someone else, does it mean we are mirror images? What is the nature of that mirroring? How many shadows does one have? If our shadows are reflected through "a 'data double' of pure virtuality" what does this mean in terms of our understanding of ourselves interacting with technologies?

The fear of being overtaken by the shadow double is not a new theme within the literature and discourses on the subject. Oscar Wilde's *The Picture of Dorian Gray* has to be one of the most obvious examples (as already suggested), where Dorian is immortalised through his shadow portrait hidden in the attic. The shadow threatens to overtake his life and in the end Dorian has no choice but to kill both. Whether our data doubles will indeed overtake us remains merely speculative, but these spectres do confront us with aspects of ourselves not heretofore observable.

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[13] The Dopplr.com service was launched in 2007, but has since been disbanded.

### 4. *PERFORMING SELF-AMPLIFICATION THROUGH THE DOUBLE*

The double does not only manifest as a shadowy data double, but also as a self that has duplicated or cloned itself in the form of an alter-ego. Here the interaction with technology is typified as one of self-amplification in McLuhan's terms. The amplified self is evident in various manifestations, of which the selfie, discussed earlier, is perhaps the most productive. As already suggested, the selfie requires incessant maintenance and updating, since it is geared towards immediate presentation and not longevity or duration. This means the online self is not a static expression or an autonomous project (as was the case with traditional self-portraiture), but rather figures more as a communicative instrument that requires continuous participation and interaction (Van Doorn, 2009:585). The production of the selfie is however not only fixated on instantaneousness but also omnipotence. As communicative demands increase, the virtual presence progressively replaces or stands in for the "rare commodity of physical presence" (Autenrieth & Neumann- Braun, 2011:19). More and more the "real space of customary activity" is replaced by "the 'real time' of interactivity" (Virilio, 1999:69), which requires a different type of self: one that never sleeps, is "always on", and remains ever vigilant – a telepresent amplified self.

Examples of virtual twinning abound in contemporary popular culture since techniques such as split screen shots, e.g. Dead Ringers (1988, director David Cronenberg) and digital facial cloning in *The Polar Express* (2004, director Robert Zemeckis), are used in film-making to turn real actors into standby doubles. Through "performance capturing" techniques, the movements of real actors are captured and transposed onto digital clones.[14] This technique is pushed to its extreme in the recent TV series *Orphan Black* (2013, director John Fawcett) in which the main protagonist Sarah Manning (played by Tatiana Maslany) meets several cloned versions of herself. The same duplicity occurs online through avatar personas created by users of the Massively Multiplayer Online Role Playing Games (MMORPGs), *Second Life*, for instance. Evidently the amplified self is not merely a copy of the original but expands beyond the reach and limitations of the offline self, as Procter notes, "Avatars are distinct selves, not just conduits for offline identities" (Procter, 2014). A similar alter-ego venture is detectable in artist Matthieu Cherubini's *rep-licants-org* (2011) web service that allows one to create an artificial intelligence or bot on social media such as Facebook or Twitter.[15] The bot interacts on the account holder's behalf. According to Cherubini,

> The bot [is not born] with a fictitious identity, but will be added to the real identity of the user to modify it at his convenience. Thus, this bot can be seen as a virtual prosthesis added to a user's account, with the aim to build him a greater social reputation. Moreover, this bot can be perceived as a threat by defrauding even more the reality of who is really who on the cyberspace and by showing the poverty of our social interactions on these so-called social networks (*rep-licants-org* website). (Cherubini, 2011).

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[14] Digital Cloning describes the process of capturing an actor's performance and optionally their likeness in a digital model. The captured performance can be used as a virtual stunt double, or mapped to a physically distinct character such as a child or animal.

[15] For more information visit the project's website: http://mchrbn.net/rep-licants-org (Retrieved June 14, 2015)

The feedback of users making use of *rep-licants-org*'s supply of virtual doubles is quite startling, such as instances of the real self that becomes confused about who actually sends a message: the user or the bot? Or, in another case, the real self actually starts a conversation with his bot double. In this sense, the bot double has indeed become an externalised self that reflects or mirrors the original self. In fact, Cherubini's bots have become distinct beings by documenting their conversations with unknowing users, calling it bot's diary.[16]



**Figure 4: Alex Schwarzkopf and his virtual double from Project Lifelike website (2013) [http://www.sjameslee.com/project/project-lifelike/] With kind permission of the Electronic Visualization Laboratory at the University of Illinois at Chicago, and University of Central Florida.**

It is, however, the development of programmed digital personae in sites such as *Project Lifelike* and *Virtual Eternity* that interest me most. These digital lookalikes simulate presence by interacting with others online in the place of the absent person. Thus, the online persona not only looks like the person, but now performs on behalf of the person. In this sense the online persona no longer re-presents but rather presents the self. For instance, *Project LifeLike* is a collaborative research project to create a more natural computer interface in the form of a virtual human.[17] One of the first interfaces is the avatar "Alex" who is the digital double of Alex Schwarzkopf (Figure 4), a former director of the National Science Foundation, USA. Alex is introduced as follows:

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[16] Another example is *MyCyberTwin*, that "enables organisations to provide web-based sales and support service 24 hours a day by using of sophisticated artificial intelligence technology embodied in software-based robots called CyberTwins" (Retrieved June 16, 2014, from http://www.mycybertwin.com).

[17] According to their website, *Project LifeLike* "is collaborative research project funded by National Science Foundation in the USA from 2007. It aims to create more natural computer interface in the form of a virtual human. A user can talk to an avatar to manipulate accompanying external application or retrieve specific domain knowledge. *Project LifeLike*, a collaboration between the Intelligent Systems Laboratory at the University of Central Florida and the Electronic Visualisation Laboratory at the University of Illinois at Chicago, is an attempt to create an avatar that completely supplants the physical form of the individual, for remote interaction both in virtual reality and physical space". (Retrieved October 21, 2015, from http://www.virtualworldlets.net/Resources/Hosted/Resource.php?Name=ProjectLifeLike,).

> Right now cyber Alex only comes alive when he is turned on; but down the road, he'll be like the old Max Headroom living on-line 24/7, standing in for the real Alex and even appearing several places at once […] Avatar Alex combines CG realism with just enough artificial smarts to pick-up verbal and non-verbal cues. In other words, he just doesn't speak - he converses (*Project LifeLike* website).

Alex—the double—is not only a dummy that speaks, he can seamlessly respond and engage with his audience. The most astonishing claim made by the project is the promise of immortality. The project packages its new tribe of alter-egos as "immortal avatars" who may one day be "speaking to future generations about the times of the 21st century" (*Project LifeLike* website). The alter-ego will thus outlive the original and find an existence beyond the confinements of the real self who would soon become just a relic of the past.[18] In fact, an immortal alter-ego is what another astonishing venture, namely the *Virtual Eternity* project promises, by offering participants the opportunity to create an eternal avatar before death strikes.[19] The avatar will then be able to console and interact with loved ones after the person has deceased.

But what would it be like to meet and chat with a deceased loved one online? Would this encounter be uncanny? The meeting with the double has been identified as an uncanny experience by Freud, perhaps signifying as a premonition of our future engagements with our virtual doubles (see Vardoulakis, 2006). In fact, the place where we are most likely to meet our doubles is in the digital domain or the "Uncanny Valley",[20] where that which is familiar, perhaps too familiar, becomes strange. The roboticist Masahiro Mori identified the moment when a robot (or virtual double in this case) becomes too human as also precisely the moment when it appears strange to us. This phenomenon was dubbed the Uncanny Valley. But as audiences become more and more sophisticated and exposed to new technologies, that limit shifts. This is termed the "Uncanny Wall" (Tinwell, Grimshaw & Williams, 2011:327) and refers to the trend of viewers to continually improve their "discernment of the technical trickery used in the character's creation" and how this growing discernment "prevents complete believability in the human-likeness of...Character[s]". In other words, as technologies develop we develop with them and we intuit the difference between the real self and the virtual double. Interestingly enough, Mori associated "corpses, zombies and

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[18] This has definite moral and legal implications. See in this regard Shannon Smith's "If It Looks like Tupac, Walks like Tupac, and Raps like Tupac, It's Probably Tupac: Virtual Cloning and Postmortem Right-Of publicity Implications" (2013).

[19] The Virtual Eternity Program, created by Intellitar, "gives family members the chance to create their very own Avatar – yes, an avatar – which will act like a time capsule for the future generations of your family. While you are alive and well, you can manipulate your Avatar to be as much like you as possible – Personality traits, looks and conversation styles. Then, after you pass, members of your family can get access to your avatar clone and converse with it as if it were you. This service is digitally preserving your essence and allowing family to interact with past members. Imagine signing on to the computer and listening to your grandparents tell you stories of the past as if they were still here. Creepy . . . yet fascinating! Check it out & start creating your own digital legacy!" (Retrieved April 18, 2014, from https://www.virtualeternity.com).

[20] Note that Mori did not refer to valley in terms of a geographical place but rather to the curve on the graph.

lifelike prosthetic hands" (Tinwell et al., 2011:327) as examples of the Uncanny Valley. Upon encountering a deceased friend's avatar (dare I say corpse?), will we not be thrown consistently into the chasm of familiarity and strangeness? Will the "dead ringer" of the deceased console or upset? There may, however, come a time when these two collide and the difference is no longer obvious or important. At that point, the virtual double will no longer merely represent the self but will in all likelihood become the present self.

## 5. CONCLUSION

In the discussion that started with the selfie as a symptom of current engagements with technologies, it has become obvious that the selfie confirms both strands of self-amputation and self-affirmation. The overwhelming tendency to interpret selfies in terms of narcissism is vindicated by the self-affirmative elements of the proliferating project to capture oneself digitally. On the other hand, the more unconscious process of the self that is subsumed and numbed by technology becomes just as apparent. Both these processes of performing selfies give birth to the appearance of digital doubles. In the case of the self-affirmative double, the cloned self takes on the form of a virtual avatar that promises to present the self even after its demise. In contrast, the amputated self takes form in shadow-like debris that follows the online self wherever and whenever it shares data about itself. This data is also said to live forever.

What transpires from this analysis of the two-faced digital self is the definite shift from representative media and technologies towards presentative structures. David Marshall (2010:38) draws a distinction between "*representational* culture" that is replaced by "*presentational* culture" as the selves created online are more presentative in nature because the illusion is created that the online self is closer to the real self than other former representations. Generally, it seems that we are moving from self-representation unfolding over time and place (duration), towards instantaneous presences that are available everywhere and always. Clearly, the Data *Doppelgänger* (double as shadow) and the immortal avatar (double as alter-ego) are examples of selves that assure longevity beyond the fragility of the embodied self. Whether this is feasible, and even bearable, is another question altogether. Perhaps Dorian Gray's sad encounter with his ever-present double provides some pointers?

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