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Living in the age of the embodied screen†

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ABSTRACT: The technological virtual converges with our contemporary existence in a multitude of ways, which suggests a need to interrogate the question of the virtual existentially. Merleau-Ponty's existential phenomenological account of embodiment is invaluable in this regard because the virtual is encountered from the basis of the facticity of the embodied individual – a facticity that is closely related to perception and motor intentionality. The current article argues that these characteristics of the body-subject should be taken into consideration in order to develop a clearer description of the virtual. However, beyond an embodied account that relates to early technologies, Merleau-Ponty also presents through his concept of the flesh a novel avenue for the ontological investigation of the virtual. The flesh describes the intertwining of the body-subject and the world, which is suggestive of a new account of the individual's sensibility in relation to the virtual. An original concept is suggested to describe the existential-ontological structure of the virtual: The *embodied screen*. The *embodied screen* as neologism presents an alternative conceptualisation of the coincidence of the body-subject (who understands the world spatially) with the virtual (as non-spatial). By tracing imaginative signification and embodied habitude in terms of the virtual, this article suggests certain existential implications of the virtual for contemporary being.

KEYWORDS: embodied screen, embodiment, flesh, Merleau-Ponty, virtual

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Introduction

Contemporary existence coincides, irrevocably and integrally, with the technological virtual. We find in our highly technologised societies that the virtual continually shapes and reshapes one's perception and one's existential projects.[1] Virtuality, as the basis of our contemporary digital society which emphasises virtual interactions, often leads to fears of depersonalisation and disembodiment – a point that Pierre Levy challenges in his seminal work *Becoming Virtual* (1998).[2] It seems clear from this account that the virtual relates closely to one's conception of oneself and to one's existential projects. The virtual, as material in terms of digital technology artefacts and as immaterial in terms of so-called cyberspace, is intimately related to the body-subject. It is in this regard that phenomenology as the study of consciousness and the objects of direct experience may provide a valuable avenue for theorising the virtual due to the virtual's close relation to the body-subject.

A phenomenological description of the virtual implies that we consider, already from the start, the body as "both a moving conduit for the flow of information and the fleshy core of our expressive selves" that engages with digital technology artefacts (De Spain, 2014, p. 93). Various scholars in movement and performance studies, such as Maxine Sheets-Johnstone and Donald A. Norman, have engaged productively with phenomenology to enhance the understanding of how body, movement and meaning are related.[3] Other scholars, such as Brenda Farnell, emphasise the ways in which culture intersects with bodily movement, highlighting "a conception of body movement as dynamically embodied action" (Farnell, 1999, p. 341).[4]

The relationship between embodiment and technology has also become a contemporary space of enquiry, perhaps most prominently employed by means of Don Ihde's post-phenomenological reflections. He states that in "this interconnection of embodied being and environing world, what happens in the interface is what's important. At least

1 Compare also, for example, Turkle's (2011) explication of the manner in which technology, and particularly digital technology, reshapes aspects of our humanity.

2 Levy also takes exception to the notion that "virtual" and "real" are intractable opposites.

3 For instance, Sheets-Johnstone (1981; 1999) critiques the idea of embodiment, while using phenomenology in illuminating ways to enhance the understanding of lived bodily movement. Donald A Norman's (1999) work on affordances also speaks directly to phenomenological descriptions of hands, movements and intentionality.

4 Farnell (2000) presents a phenomenological model that takes the performance of signifying acts of speech and action seriously and which "locates agency in the causal powers and capacities of embodied persons to engage in dialogic, signifying acts" (Farnell, 2000, p. 397). Farnell and Varela (2008) also highlight the relation between the somatic and semiotic in their research.

that is the way a phenomenological perspective takes shape" (Ihde, 2002, p. 8). The relation between body and artefact is crucial in conceptualising the virtual. Mirella Misi and Ludmila Pimental (2016), for example, utilise the studies of Ihde on the "embodiment relations" between technological artifacts and the body in relation to Merleau-Ponty's concepts of "body schema" and "flesh" to explicate the relation of bodily experience and media-dance (by developing innovative forms of body representations and novel ways for the public to experience dance). In terms of prostheses, the relation between embodiment and technology also plays a crucial investigative role.[5] Such studies lay important groundwork for investigating embodiment in relation to the virtual. Jung et al. (2017) argue that hybrid materialities arising in virtuality reframe how interactivity is perceived. Irwin (2014; 2020), for example, discusses the use of digital technology for storytelling from the basis of embodiment and considers human-technology-world experiences through early perspectives on filmmaking.[6]

This article intends to build upon these embodied studies in relation to (digital) technology and virtuality by means of an engagement with Merleau-Ponty's thought in the context of our contemporary digital society and its concurrent turn to the virtual. I find resonance in this regard with Ollinaho's (2018) approach to Alfred Schütz's work.[7] It is suggested that there is much potential to develop classical phenomenological thinking on embodiment in terms of contemporary digital technologies to address the question of the virtual. In investigating the virtual from an embodied perspective, particularly embodiment as described by Merleau-Ponty, an existential phenomenologist of embodiment, I argue that certain particular characteristics are revealed that emergently cluster around the phenomenon of the virtual. Such characteristics, which relate to one's perception and motor intentionality, are part and parcel of tracing the existential constitution of contemporary being. In other words, the virtual is closely related to specific existential implications that one must consider in its description, including sense-making and the generation of individual meaning.

Thus, if as Merleau-Ponty ([1962] 2002, p. xix) suggests "we are condemned to meaning", then such meaning is today founded in the virtual. This article traces the existential coinciding of the body-subject with the virtual to explicate a primordiality of our encounter with the virtual – a primordial account that intends to recast not only traditional questions of digital technology use, but also questions of spatiality in terms of the virtual by means of the phenomenological approach.

Merleau-Ponty and embodiment

Contemporary approaches towards technology often take recourse in pragmatic and social constructivist perspectives, which have become prominent positions since the empirical turn in philosophy of technology (Brey, 2010). Swer and Du Toit (2020) question the prominent regard that such perspectives hold in contemporary philosophy of technology as these perspectives do not engage with the macro-characteristics (or phenomenon) of technology due to such approaches' focus on micro-studies, the fact that such perspectives take value relativism as a normative basis, and because pragmatism and social constructivism postulate that all of technology may be reduced to social epistemology. They argue that "a singular focus on either sociology or pragmatism leads to an impoverishment of the investigative aspects of the field and increasingly a fragmentation of the field" (Swer & Du Toit, 2020, p. 244). Similarly, Van den Eede et al. (2017) argue that methodology is chiefly at stake in the philosophy of technology and suggest the need for looking at technology from the perspective of the philosophical notion of the "art of living".

In a similar vein, and as a starting point for investigating the virtual, I argue that one must search for an integrative framework, a unitary point of reference, from which to undertake one's inquiry into technology (and the virtual) not by means of pragmatism or social constructivism, but rather in terms of the virtual as a part of one's way of life (i.e. related to our everyday living). The body-subject is suggested as such an integrative basis for the encounter of technology and the virtual, due to the body-subject's pre-theoretical facticity, unitary character and close relation to meaning in encountering the phenomenon of the virtual. These latter considerations are crucial for countering accounts of the virtual from disembodied or purportedly objective perspectives that remove the lived experience of the individual from accounts of the virtual.

Embodiment, in the Merleau-Pontian sense, is a development of Husserl's ([1952] 1989) description of the "lived body" (*Leib*), or "liveliness" (*Leiblichkeit*). Husserl identifies the body as playing a constitutive role with regard to the intentionality of consciousness, and argues that the body must be crucially considered in how experience of various kinds of things take place (Cerbone, 2014). Husserl ([1952] 1989, §18) asserts that the "body is, in the first place, the medium of all perception; it is the organ of perception and is necessarily involved in all perception". The body that Husserl and Merleau-Ponty therefore intuit owes much to the German word *Leib* – the living body, or the body-as-lived – in contrast to the German word *Körper* (one may note the etymological relation to the English word *corpse*) which describes the body as just another physical object in the world (Cerbone, 2014).[8] One's body is a radical element of the world, a dynamic horizon of experience, and the basis for perception. It has existential currency.

Perception

Merleau-Ponty ([1962] 2002, p. 235) argues that "the theory of the body is already a theory of perception". For him, perception is found in one's primordial engagement with the world and he suggests that the "objective thought" of our perception – particularly visual perception – as the causal interaction between objects and the body should be challenged. Rather, this natural tendency (the "objective thought" of perception) should be replaced with the "ante-predicative knowledge" that one has of

5 For example, Craig D. Murray (2004) wishes to gain an understanding of the embodied perceptual experience of successful prostheses.

6 Compare also Irwin (2015).

7 Ollinaho seeks to clarify what is at stake with the virtualisation of the late modern society by investigating virtual worlds.

8 Compare

> [r]ejecting the exclusive assumption of the natural sciences and modern psychology, which treats the physical body (*Korper*) as a thing, object, instrument, or machine under the command and control of an all-knowing mind, thereby challenging the Cartesian cogito, Merleau-Ponty (re)claimed the centrality of the lived body (*Leib*) and embodied experience as the very means and medium through which the world comes into being and is experienced (Zarrilli, 2004 , p. 48).

one's body (Baldwin, 2003, p. 79). In so doing, one re-engages with one's "bodily commerce with the world" (Taylor, 2004, p. 46). This bodily commerce with the world suggests that the body and that which is perceived cannot be disentangled from each other – there is an integrity in perception and an integrity in bodily self-expression (Cerbone, 2014).

In describing the body-subject in relation to the virtual we are thus attempting to remain true to lived, bodily experience – the body-subject is grounded in contingent and temporal corporeal experience. Therefore, an individual's existence as "being-in-the-world" (Merleau-Ponty, [1962] 2002, p. xiv) suggests that the permanence of this "being-in-the-world" is "not a permanence in the world, but a permanence on my part" (Merleau-Ponty, [1962] 2002, p. 104) which serves to emphasise the fundamental importance of embodiment in describing experience. When discussing the intentionality of consciousness, Merleau-Ponty is thereby aligning said intentionality with embodiment to such an extent that "consciousness is in the first place not a matter of 'I think that' but of 'I can'" (Merleau-Ponty, [1962] 2002, p. 137), which points to the fundamental role of motor intentionality with respect to all forms of intentionality.

Motor intentionality

The facticity of the body as constitutive of perception of the world provides us with a point of anchor, a point of facticity, for our description of the virtual from the first-person perspective. Merleau-Ponty ([1962] 2002, p. vii) emphasises that the individual engages with the world through her bodily existence as an "always 'already there' before reflection begins" in the world, and it is through the phenomenological account of one's embodiment that one "[re-achieves] a direct and primitive contact with the world". Bodily mediation entails the direct, lived experience of the world rather than the explanation of the world through the application of strictures of theoretical constructs superimposed over one's experience of the world.

What distinguishes bodily intentionality from intellectual reflection is the "generality" or "primordiality" that is found in the body-subject's intentionality (Merleau-Ponty, [1962] 2002). Intentionality reveals the world through an operative intentionality at work before any positing or judgement (ibid.), an operative intentionality that is fundamental to acting intentionally. Through intentionality in perception and bodily motility one may grasp the meaning or sense of the world. The basic intentionality of bodily movement (motor intentionality) is seen reflected in the act of picking up a pair of scissors. The individual's hands are "potentialities, already mobilized by the perception of the scissors…the central end of those 'intentional threads' which link [oneself] to [the object one wishes to pick up]" (Merleau-Ponty, [1962] 2002, p. 106). Similarly, a door handle beckons for a specific form of intentionality if one wishes to open a door. This embodied intentionality is highlighted when Merleau-Ponty ([1962] 2002, p. 160–161) says that "being towards the thing through the intermediary of the body" becomes an "I can" of potentiality. Intentionality, in this way, characterises the unitary being, allows the manifestation of the "tacit cogito", the "presence of oneself to oneself" and forms the basis of embodiment (Merleau-Ponty, [1962] 2002; 1964).[9]

For Merleau-Ponty, motor intentionality is the basic phenomenon, which is manifest in both abstract and concrete movements (Cerbone, 2014). Abstract movements are not simply representational and objective, but rather based on the pool of motor skills found in concrete movement; concrete movements similarly are not simply reflexive and mechanical, but rather intelligently situated and directed (Cerbone, 2014). Our bodily abilities outstrip our representational capacities in terms of both concrete and abstract movements, which leads to Merleau-Ponty ([1962] 2002, p. 137–138) positing that "movement is not thought about movement" and that

> bodily space is not space thought or represented…In the action of the hand which is raised towards an object is contained a reference to the object, not as an object represented, but as that highly specific thing towards which we project ourselves, near which we are, in anticipation, and which we haunt.

This account of motor intentionality, and the basis of embodiment therein, strongly links to Merleau-Ponty's conception of technology that underlines his phenomenology of embodiment.

Technology

The early Merleau-Pontian ([1962] 2002) account of technology presented in *Phenomenology of Perception* focuses on five specific technological artefacts: A feathered hat, a car, a blind man's stick, a typewriter, and an organ. Such examples of technological artefacts, rather than developing a particular account of the phenomenology of technology itself, present an explication of his phenomenology of embodiment (Latour, 1999; Ihde & Selinger, 2004). To this end, the description of the blind man's stick is telling of both a motor habit (as one learns to use the cane) and a perceptual habit that is bounded within motor intentionality.

> Once the stick has become a familiar instrument, the world of feelable things recedes and now begins, not at the outer skin of the hand, but at the end of the stick… the stick is no longer an object perceived by a blind man, but an instrument with which he perceives. It is a bodily auxiliary, an extension of the bodily synthesis (Merleau-Ponty, [1962] 2002, p. 175–176).

The blind man's stick reveals an image of technology as instrument, of tool-use, that is present throughout Merleau-Ponty's early thought on technology. What he argues is that a tool (such as the cane) is incorporated into the blind man's body schema ("*schema corporel*" or "body image") to become transparent, while allowing for expanded perceptual and motor potentiality – the body schema being a practical diagram of our relationships to the world, an action-based norm with reference to which things in the world make sense (Halák, 2018).[10]

Such examples of technology suggest that from an embodied perspective one is engaging with technologies as virtualising in terms of the body schema (through expansion of the body-subject's repertoire of potentiality, while sometimes delimiting other aspects). I argue that, in Merleau-Ponty's early account of technology in relation to the body schema,

9 It should again be highlighted that the individual's embodiment is distinguishable from the objective body, which is a thing in the world, and is reflected in the postural schema, or body schema, the "I can" of the relationality of the body to the world in terms of its movement and ability.

10 Compare also Swer's (2014) view of embodiment relations in instrumentalist accounts of technology.

technology therefore serves a virtual or virtualising function. One important corollary in describing technology as virtual or virtualising in the Merleau-Pontian account is that this function may more aptly be described as proto-virtual (in contrast to contemporary technological virtuality) in the sense that such functions are generally measured against the factual aspects of bodily spatiality and bodily capability (in terms of spatial conceptions) – a car may allow us to "run" faster and further, a telephone may allow me to "speak" across vast distances, and so on. In this early account of technology, things in the world may be measured against my body – as things that may be handled through motor potentiality – while the contemporary virtual that is concurrent with contemporaneous societies may relate to horizons of completely altered engagement wherein questions of measurement and spatiality become subsumed into larger existential concerns.[11]

Such altered horizons of engagement are also hinted at in Merleau-Ponty's early account. Merleau-Ponty's instrumentalist conceptualisation of technology encompasses his examples of the car and the organ, as well as his description of a feathered hat and a typewriter, but he introduces in these examples the idea of skilful technological use. A feathered hat and a typewriter serve as illustrations of how technology relates to the extension of the body through embodied *skills*, and that skilful use of an artefact is needed to utilise said artefact as an instrument. Samuel Wilson (2013) draws on Merleau-Ponty's phenomenology of embodiment to describe pianistic technologies as inherently engaging with the embodied relationships that exist between player and instrument in the moment of performance. His account describes how an instrument, such as a piano (or organ, in the parlance of Merleau-Ponty) serves to make an instrumentalist of the student who is learning how to play an instrument.[12] This suggests that technology has an existential component through skilful utilisation, that there is a relation to notions of self and identity that speak directly to our encounter of contemporary virtuality.

In tracing technology and the virtual from the basis of embodiment, it therefore appears that we are on solid footing (as discussed in the Introduction), and there are two advantages in beginning our description of the virtual from the basis of embodiment, however. Firstly, describing the virtual from the basis of embodiment ensures that we take account of a crucial feature of the virtual, a feature which is surprisingly often overlooked, which is that the virtual is based in material technological artefacts that we materially engage with by means of our bodies. Without the material circuit, there is no virtual, at least not as encountered in the technological spaces of the contemporary world. Secondly, we keep at the forefront of our consideration the body-subject as constitutive of experience of the virtual. Without embodied use of a technological artefact by means of some embodied individual, these artefacts remain inert and no experience may take place. However, moving from an instrumentalist, proto-virtual account of technology in our analysis of the virtual towards a more robust ontological account is crucial lest we disregard the seemingly immaterial characteristic of the virtual. Such a shift in focus is reflective of the shift that Merleau-Ponty's thought makes from his early conceptualisation of the body-subject to his later thought regarding the flesh as ontology.

Merleau-Ponty and the flesh

With the introduction of his concept of the flesh, Merleau-Ponty moves to a fully-fledged ontology of constitutive presence and being that answers what Merleau-Ponty believed to be the primary flaw of *Phenomenology of Perception* (a remaining Cartesian dualism) by dissolving the division between body-subject (or consciousness) and the object (or world) (Matthews, 2002).[13] The flesh goes beyond perception as described in *Phenomenology of Perception*, instead presenting an account of the intertwining of chiasmically associated "dualisms" (such as world and consciousness, or sensing and sensible) that are in fact interdependent.[14]

In Merleau-Ponty's later thought, the sensible thing promotes a style of being through transcendent "rays of the world", across time and space, by its solicitation of the flesh; the flesh can capture the presence of things because it is elemental being, moving to adjust itself to the axes of the visible (the idea of a wagon, of movement, is central here).[15] This is the genesis of sensibility, for "he who sees cannot possess the visible unless he is possessed by it, unless he *is* of *it*..." (Merleau-Ponty, 1968, p. 134–135; emphasis in original): just as there is encroachment between the two poles of these "dualisms", so the world encroaches upon us and alters us. However, while we are *of* the world, we are paradoxically not *the* world (Merleau-Ponty, 1968).[16]

The flesh thus includes the faculty of sensing and the sensible thing, a reaching across of the world and the body-subject as a "space" of connection – a co-implicity.[17] Essential to flesh is the characteristic of circulation and oneness, of the continuous thread that binds sensing to sensed, mind to nature, while allowing for the proliferation of appearances through which being can appear in different ways. Another concurrent characteristic of flesh is that of divergence or separation, of providing an openness or *ecart* (Steeves, 2004). It is argued

11 Compare also Hoel and Carusi (2015; 2018).

12 A dual sense of the word instrumentalist is at play here, a sense of both an individual who plays a musical instrument and of an individual who makes use of a technological artefact.

13 Compare also Glen Mazis (2002) who counters traditional forms of dualism or separation of the in-process embodied self from the world.

14 The notion of intertwining and crossing is an idea already introduced in *Phenomenology of Perception*, however. Compare "the body...will carry with it the intentional threads linking it to its surrounding and finally reveal to us the perceiving subject as the perceived world" (Merleau-Ponty, [1962] 2002, p. 83).

15 The word *la chair*, translated from French, here implies a "container", a "reservoir", as well as a "wagon" that carries (one's perception).

16 The idea that the world is not merely an object does not mean that there was a fusion or coinciding of me with it: on the contrary, this occurs because a sort of dehiscence opens my body in two, and because between my body looked at and my body looking, my body touched and my body touching, there is overlapping or encroachment, so that we may say that the things pass into us, as well as we into the things (Merleau-Ponty, 1968, p. 123).

17 Co-implicity in this regard is suggestive of the perceptual *sensorium commune* described in *Phenomenology of Perception* as the space of the intertwining of the senses "sometimes affected from one side, sometimes from the other" (Merleau-Ponty, [1962] 2002, p. 244).

that, in accounting for the co-implicity that always resides in the body-subject and in the world at the same time, Merleau-Ponty may ground a new account of technology in general and the virtual specifically.

There is much expansion of the instrumentalist style of thinking on technology in Merleau-Ponty's later work through the concept of the flesh, with Hoel and Carusi (2015; 2018) noting that instruments, tools, and technologies seem to become a constant preoccupation of Merleau-Ponty's later thought, particularly in *The Visible and the Invisible* and in his unfinished manuscripts and lecture notes. A mutuality of body-subject and world is crucial for understanding the equating of tools and symbols in later Merleau-Ponty (1964). In these works, both tools and symbols are shown to be a means by which experience of the world may take place; tools and symbols are placed on equal footing because they have a similar capacity to decentre the perceiving body (Hoel & Carusi, 2018). The flesh, by describing our engagement with technological artefacts (objects in the world) as a mutual constituting experiential field, is crucial for the phenomenological description of the virtual developed in the next section.

The embodied screen

In attempting to describe the virtual, we need to explicate an ontology of the virtual; we need to take seriously not just first-person aspects of said encounter, but also the intersubjective, not just what is presented to experience, but also the material basis wherefrom it arises. We must move from a structure of embodiment and ambiguity to a more robust account of reversibility (again, a movement that is reflected in the development of Merleau-Ponty's phenomenological account, whose later work similarly shifts towards ontology). Such a shift allows us to reconsider not just the virtual in its hyper-technological sense, but rather as brute, wild, or primordial, for a true ontology must disclose the "brute or wild being" (*L'être brut ou sauvage*; Merleau-Ponty, 1968, p. 170).
Some clarification of the sense wherein I use the term *virtual* is needed here, particularly in terms of the coinciding of the virtual with contemporary existence. As a point of departure, we may relate the use of the term virtual to *that which arises in the engagement of the body-subject with the digital technology artefact*. These two elements (body-subject, digital technology artefact) direct us towards the question of the nature of the virtual but can only take us partway there. We may ask what the spatial contours of the virtual may be, or what the virtual's relation to the world of everyday objects is, and completely disregard how fundamentally its coincidence with existence takes place; in other words the fact that the virtual has an ontological structure that coincides with one's existence in an encompassing way.

To this end, the *embodied screen* is suggested as a neologism that describes the unique embodied existential-ontological structure of the virtual from the basis of primordiality. The *embodied screen* does not refer to the embodied individual's contact with technology in general but is necessitated by the immersion of the individual in the phenomenon of digital technology (the virtual), specifically due to its challenge in terms of spatiality and resultant existential implication. In the following sections, I will explore the neologism of the *embodied screen* from three perspectives, firstly the relation of the *embodied screen* to spatiality, then an explication of the embodied process by which the *embodied screen* functions in a unique manner, and finally the existential implications of the *embodied screen*. In the following section, I question the potential spatiality of the virtual as the basis of the embodied encounter thereof by the individual.

Spatiality and measurement

The virtual is found in neither the digital technology artefact alone, nor in the individual as embodied being alone. Rather, virtual space arises as that "between" in the relationship between the digital technology artefact and the embodied individual. This claim does not lead us closer to a description of the virtual in its most primordial sense, while indeed suggesting a structure for the virtual to arise, because the question of spatiality remains. What this description does suggest, however, is that the virtual is an emergent phenomenon – it arises from the circuit between the body-subject and the technological artefact.

The virtual as emergent characteristic of digital technology broadens the horizon of what would traditionally have been described as virtual space; indeed, such a conceptualisation allows for an existential description of the individual's engagement with the virtual without answering the question of what such spatiality may be. By means of the postulation of virtual space, we find that the individual's perception and behaviour are emergently altered, foundationally affecting the individual's sense-making of the self, the world and the other – this is the central importance of spatiality in terms of the virtual. Such emergent alteration of the individual's perception and behaviour, rather than being tangential to virtual space, must be essentially accounted for to allow a foundational, encompassing and multimodal description of the embodied individual's functioning and emplacedness in the virtual spaces of contemporary civilisation.

The *embodied screen* suggests a reciprocal structure, with digital technology artefacts providing a context to the individual's perception of self, the world and the other on the one hand, and on the other hand the embodied individual (or body-subject) as a necessary part of the circuit. The *embodied screen* takes seriously the idea that without the flesh (as modulated by digital technology artefacts) the lived experience of the phenomenon of digital technology would be impossible, just as without the digital technology artefact no lived experience of the phenomenon of digital technology would be possible. The *embodied screen* as concept and methodology, as ontology and epistemology, focuses on where these two "screens" meet, the contact point in the circuit, as a means to account for the virtual as non-spatial space. Virtual space relates not to distance nor to dimension, but rather to reciprocity in its encountering.

This non-spatial spatiality suggests why we need to rethink the idea of cyberspace as traditional space, and why the intertwining relation between the individual and the digital technology artefact is spread across a multitude of digital instances that the individual encounters (from cell phones, to computers, to tablets, to televisions, to GPS devices in cars). The virtual is not just found in one click or swipe, in one artefact or interface, because such attribution is based on traditional conceptions of spatiality. The *embodied screen* thus necessarily refers not merely to a single point of engagement with the virtual, but rather to a complete immersion of the individual in the virtual – an immersion that is

only tangentially spatial (in the traditional sense of spatiality), but which is persistently existential. It is argued that this new concept serves as an encompassing conception for the unique immersive interaction of the phenomenon of digital technology, a conception that necessitates a shorthand neologism for reference. Even one digital technology device used rarely would not reveal the necessity of describing the phenomenon of digital technology by means of the *embodied screen*, for the emergent characteristics of the phenomenon of digital technology could only be observed as such emergent characteristics influence the individual's perception of the world when said perception is *continually and constantly modulated or challenged* – in other words, as encountered by individuals embedded in the structures of our contemporary technologised societies.

The virtual therefore presents a particular challenge for correlating embodiment with spatiality in our contemporary societies. The *embodied screen*, as presenting an account of the virtual from the basis of embodiment which presumes that the virtual is identifiable in space and time, strangely also suggests that the virtual reaches beyond any particularly identifiable space and across any particularly identifiable moment. This idea is discordant, in other words, with Merleau-Ponty's argument that "my body is not only one perceived among others; it is the measurant (*mesurant*) of all, *Nullpunkt* of all the dimensions of the world" (1968, pp. 248–249). What we find as part of the *embodied screen* is that spatiality is subsumed into the virtual – the body as measurement of space and time is lost.

In our everyday lives, we measure the world in relation to our body, and the world becomes involved in our bodily capacities and perspectives – the world presents a space of potentiality and existential projects, and our bodies a zero-point for engagement with such existential projects. The body-subject is the measure of the world, even in our intersubjective relations to others. From such a point of view, we recognise that attributing spatiality to the virtual is problematic, for the basis of measurement (our body) cannot be mapped onto this context. The ludicrous character of assigning spatiality to the virtual becomes obvious when we point at a computer screen and claim that the virtual is *there*. In this instance we are at the very least presenting an inaccurate description, or even being mildly dishonest, for as Merleau-Ponty ([1962] 2002, p. 58; emphasis in original) says: "nothing is more difficult than to know *precisely what we see*". The question of the virtual thus problematises such a description. On the other hand, however, we remain embodied beings that inescapably understand a world in terms of spatiality and bodily potentiality; it therefore makes sense for us to attempt to describe the virtual in the same manner. It thus seems sensible to consider the virtual by means of a framework of embodiment that can be correlated to the forms of embodiment we assign to things in the everyday world. However, the virtual cannot be grasped spatially as we might grasp technological artefacts (as we might grasp, for example, a hammer or a cell phone) – this is often where our confusion begins.

There is a perceptual indeterminacy that leads our attempts to attribute spatiality to the virtual astray, an indeterminacy that is part and parcel of everyday perception (Merleau-Ponty, [1962] 2002). This duality of the embodiment of the body-subject and the non-spatiality of the virtual lies at the heart of rethinking existence as coinciding with the virtual. Furthermore, this indeterminacy is important, for as Merleau-Ponty ([1962] 2002, p. 6) argues "we must recognize the indeterminate as a positive phenomenon" for it is integral to perceptual experience and this indeterminacy of structured perceptions should not be replaced by recourse to objective theorising.

There is a surprising correlation here with the work of Paul Virilio (1991), who suggests that spatial and temporal dimensions are disrupted, even becoming meaningless beyond the instantaneous, in terms of the technological. Encountering telecommunication technologies, Virilio (1991, p. 12) suggests, means acquiring a system of orientation fundamentally different from that of material spatio-temporality, an orientation that obliterates distance and positionality for (architecturally) the "intramural-extramural opposition collapsed with the transport revolutions and the development of communication and telecommunications technologies". What is being intuited here is thus an embodied engagement with a virtual that sees time and space obliterated, or at least haphazardly arranged and deranged (Virilio, 1991). The non-spatiality or even immateriality of the virtual suggests that the *embodied screen* always reaches beyond the framework of the current engagement – due to its close relation to embodiment as presence rather than spatiality, the *embodied screen* seems to stretch beyond the confines of materiality as a non-spatial envelopment.

Such envelopment may suggest that a "tipping point" of engagement and entanglement of the embodied individual with digital technology artefacts may be reached in highly technologised societies. This tipping point refers to the encompassing immersion of the individual which takes place within the overwhelming bodily and epistemological influence of digital technology artefacts, which does not occur in such an encompassing manner with older forms of technology but relates to how the individual is "surrounded" by the phenomenon of digital technology. For example, the user of a cell phone is often spatially near her phone, and when she is not within reach of the device her expectations are still shaped around the device (she may feel "disconnected" from others, or may "imagine" that her phone buzzes) due to the emergent characteristics of the virtual related to the device. In this sense there is a qualitative dimension (the perceptual and experiential nature of the encounter) and a quantitative dimension (multiple encounters over long periods of time and across various devices) to this tipping point. The next section will explore the embodied basis of such engagement with the virtual across time and space.

Signification and habitude

The virtual serves, from the outset, as a challenge to one's perceptual faith.[18] Perceptual faith is the pre-reflective conviction before knowledge or proof that perception, while taking place from the basis of the body-subject, corresponds to the world as it actually is. In this sense, perceptual faith characterises our being-in-the-world or natural attitude as our

> experience, prior to every opinion, of inhabiting the world by our body, of inhabiting the truth by our whole selves, without there being need to choose nor even to distinguish between the assurance of seeing and the assurance of seeing the true (Merleau-Ponty, 1968, p. 28).

There is a clear link between signification and perceptual faith for Merleau-Ponty, between truth and falsehood.

18 Perceptual faith is a concept that underlies Merleau-Ponty's conception of the flesh.

According to Merleau-Ponty, the theories of the natural sciences and philosophies of reflection cannot rationally articulate this certitude's apparent paradoxical character because of their unacknowledged reliance thereupon – the natural scientist considers not their perception of things pre-theoretically. Merleau-Ponty (1968) describes how perceptual faith is established in intersubjectivity and the engagement with a common world. However, while unproblematic in our encounter with a world wherein our existence is not infused with the virtual, I argue that this "unjustifiable certitude of a sensible world" has been eroded in contemporary society, that intersubjective engagement with a common world has been fractured. Discussions on fake news and echo chambers highlight this fragmentation and indicate that we are no longer speaking of a common intersubjective world but of multiple worlds – we can no longer consider merely our *faith in*, rather than *knowledge of*, our being in the world as constitutive of assurance between merely seeing, on the one hand, and seeing the true, on the other.

The idea that the virtual, in a sustained and deliberate manner, challenges the fundamental possibility of having faith in a world beyond oneself has serious implications for sense-making. The *embodied screen* describes this sustained challenge to the perception of the world as a direct result of the very functioning of digital technology artefacts. Digital technology artefacts present, to some extent intuitively, the pretence of representing a world in some accurate way, or at least as presenting the world in a way that is assumed to correlate with some form of reality for the individual. Though we may be consciously aware that the virtual is somehow a skewed or unreal account of our sensory experience, in terms of sense-making we cannot remain in the moment of theoretical distance for the entirety of our encounter with the virtual. We can only take a step back for so long before we are subsumed again into the pretence of a reality that the virtual offers us (the impossibility of the phenomenological reduction that Merleau-Ponty suggests, herewith only in terms of the virtual, comes to mind here).

We may be taken back into the virtual in this manner because our theoretical recognition that our perceptual faith has been challenged becomes subservient to the need to make sense of the world as presented to our senses. When utilising a virtual reality headset for the first time, one may encounter a feeling of displacement, of disorientation, but the novelty of this feeling soon fades to the background as we re-establish our grip on a world, a world that is not simply material but virtual. We imaginatively make sense of the world as presented, and we no longer realise that the perpetual challenge to perceptual faith wrought by digital technology artefacts has caused us to fall back on a form of imaginative sense-making that allows for maximal grip on the world. So too with the myriad ways in which we engage, day by day, across various devices, with the virtual. When confronted with the virtual we find that the individual is driven to make sense of the world presented to her, to achieve a maximal grip on the world as presented to her in her perception, and to integrate her perceptual experiences of the world presented to her into her everyday experience of the world.

Because the challenge to perceptual faith is so encompassing and so immersive the primary recourse left to the individual is to imaginatively signify – not merely as a means to generate new perceptual information as regards the entirety of world, but also to integrate and link diverse perceptual experiences from our digital devices. The *embodied screen* describes centrally how diverse fragments of perceptual information received from digital technology artefacts are combined with other more everyday sources of perceptual information, while missing fragments of perceptual information are imaginatively constructed and re-constructed. The world of our everyday experience and the *embodied screen* are overlaid and intertwined, enriching both and rendering the one indistinguishable from the other.

Merleau-Ponty ([1962] 2002, p. 11) argues that the "the real is a tightly woven fabric; it does not wait for our judgments in order to incorporate the most surprising of phenomena, nor to reject the most convincing of our imaginings". The *embodied screen* suggests that one finds in the virtual that the closely, tightly woven fabric of the real becomes disentangled and reconstructed due to the influence of digital technology artefacts via both the challenge to perceptual faith and the process of imaginative signification and (re)construction. If one posits that perceptual faith functions as a glue that binds the real (perception and imagination) closely together in our pre-theoretical lived experience, then I suggest that the constitution of the virtual and the world of the everyday coincides in such a manner that the interweaving of reality with both virtual and traditional spatial objects occurs concurrently and indistinguishably.

One may question whether the experience of the virtual and the everyday can truly take place in a concurrent fashion, and to truly make sense of this statement one must recall that the perceptual "getting to grips" of the world is very much based in motor intentionality and habitude. Just as we need to make sense of the world after birth through certain perceptual habits that lead to signification, so our use of those technologies that enable engagement with the virtual are based on skilful use and habit with regard to those technological devices, for Merleau-Ponty ([1962] 2002, p. 143) argues that "the acquisition of a habit is indeed the grasping of a significance, but it is the motor grasping of a motor significance".

In discussing the question of habit, Merleau-Ponty rejects as reductionist and restrictive those purely theoretical accounts thereof (such as mechanical, physiological, behaviouristic, and reflex-arc explanations) (Corriveau, 1972). Behaviour is, for Merleau-Ponty (1963), not merely the sum of its parts – rather, it relates to the milieu that the body-subject inhabits situationally. This idea is explored in both *Phenomenology of Perception* and *The Visible and the Invisible* in relation to sensibility through the intertwined relation between body-subject and the world in order to achieve a maximal grip on the world; such sense-making takes place before thought, representation and formal symbolic activity (Corriveau, 1972).[19] For Merleau-Ponty, learning occurs through one's trying to achieve maximal grip on the world through intentional action in embodied and socially contextualised situations (Jing & Ejgil, 2017). As an embodied being in the world, learning thus relates to the sense-making of the structures of said world – we find an increasing sensibility or sense-making (increasing grip). However, this increasing grip is not necessarily of a spatial nature in terms of the account of the virtual presented by the *embodied screen*. Whereas increasing grip in the everyday world relates to presence or even *actuality*,

19 Behaviour thus transcends the merely physiological aspects of the body, while also being bound within the limitations of the body.

in terms of the virtual, such increasing grip is based in the skilful engagement with a digital technology artefact that mediates one's contact with the non-spatiality of the virtual. Thus, while achieving an increasing grip on the use of the technological artefact, we are only achieving *apparent* maximal grip in terms of the virtual (which is distinct from the spatiality of the material world). We find, through Merleau-Ponty's discussion on habitude, that the virtual becomes embodied as a perceptual habit which is merely suggestive of apparent maximal grip on a world. This latter claim suggests certain existential implications for how virtuality coincides with existence.

Existential implications

The role that challenged perceptual faith, imaginative signification and habitude plays in correlation with the virtual as "the between" that confounds traditional notions of spatiality has existential implications that speak directly to living in contemporary civilisation. For Merleau-Ponty ([1962] 2002, p. 245), one's "own body is the locus of expression and of the unity between expression and signification". Per the account of the *embodied screen*, I argue that our existential meaning is (or has already been) subsumed into the virtual.

The meaning found in the virtual is a meaning of "projection" that is incorporated into embodied habitude, whereby one confronts one's situatedness in the world not just in terms of actualities, but in terms of possibilities (Cerbone, 2014). The *embodied screen* suggests that the scale between actuality and potentiality tips more towards the engagement of the world in terms of possibility in lieu of actuality (neither is lost, however) which affects our perceptual conceptualisation of space and time. A kind of "free space" is superimposed (or rather, interposed) unto the world in such a way that the bodily potentialities of "I can" are enmeshed by the potentialities of the virtual, both in engagement with a specific technological artefact, but more importantly through changes in perceptual habitude across various instances of use. Whereas Merleau-Ponty ([1962] 2002) argues that the projective capacity is something between movement and thought, in terms of the *embodied screen* such projective capacity reaches beyond mere movement and thought to a structured non-spatial world via digital technology-mediation which is embodied through habitude.

What we encounter through the *embodied screen* is an ambivalence between the virtual as immaterial and the material world – even more, the distinction has receded due to perceptual habitude as increased immersion of our societies with the virtual has taken place. The case of Scheler is telling in this regard, specifically in the sense that Merleau-Ponty ([1962] 2002, p. 88) describes how "the phantom arm is not a representation of the arm, but the ambivalent presence of an arm". There is in the case of Scheler a clash between the "habitual body" and the "body at this moment" through the phantom limb (Merleau-Ponty, [1962] 2002, p. 82). This clash reveals the deep-seated character of habitual actions and routines, how the repertoire of our body is bound within perceptual habitude. Through the *embodied screen*, we are always in the mode of catching up to our bodily self-experience as a dimension of our being-in-the-world, always in the space between the perceptual habitude of the virtual and our body at this moment.

The world thus becomes a space haunted by the material as much as the technological immaterial, for our embodied being is immersed in the virtual by means of the flesh. What is suggested by the *embodied screen* is the absolute and ultimate reversibility between the virtual and the non-virtual. While we may argue, in terms of touching a table, "that the table is neither part of my body nor sentient in the way my body is" and that "there is an asymmetry in the reversibility thesis" (Dillon, 1997, p. 159), the world described by the *embodied screen* is a world haunted by the spectre of others, for digital technology and the virtual serve as space and a structuring of communication. Sensibility is not solipsistic in the account of the *embodied screen*. Rather, as Merleau-Ponty's (1968, p. 83–84) description of the flesh entails, one finds oneself at "the intersection of my views and at the intersection of my views with those of others" – an intermundane space (*intermondes*) or interworld that is structured materially through digital technology artefacts and immaterially by means of the virtual.

Such non-spatial worlds and intermundane spaces are, through habitude (i.e. as perceptual habit), integrated into our everyday lives and into our intentional arc – which "projects round about us our past, our future, our human setting, our physical, ideological and moral situation, or rather results in our being situated in all these respects" (Merleau-Ponty, 1962 [2002], p. 136). The *embodied screen*, as descriptive of perceptual habitude, describes how the virtual contextualises and re-contextualises our existential projects and life around the dual polarities of being-determined (delimitation) and being-undetermined (opening up of possibilities) in terms of signification, habitude, and existential acts. There is in the account of the *embodied screen* a primordiality that must be considered in our encounter with the virtual, by which I mean to suggest that the virtual presents not a question of proximity, or spatiality, but of existential constitution, of our brute being. I suggest that one reconsider not just the virtual in its hyper-technological, representational, or hermeneutic sense(s), but also as primordial, engaging with our very being through the existential-ontological structure of the *embodied screen* to disclose the bruteness or wildness of our contemporary being (Merleau-Ponty, 1968).

Conclusion

The indeterminacy in our perception of the virtual suggests the need for a rethinking of the virtual, first from the point of embodiment and then ontologically in terms of the flesh, to explicate the coinciding of existence and the virtual. It is argued that a part of the difficulty in tracing how the virtual coincides, interrupts, and erupts into our lives is that the virtual challenges everyday conceptions of spatiality and materiality.

Furthermore, the virtual challenges perceptual faith, necessitating an increased imaginative signification and resultantly leading to a change in our habits. Such changes, as relating closely to the intentional arc of one's embodied being, are existentially important while providing an ontological explication of the individual's primordial encounter with the virtual. The *embodied screen* thus presents an account of a novel existential-ontological structure for describing the encounter of the body-subject with the virtual that is an unavoidable part of our brute being in contemporary, highly technologised societies.

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