YONI VAN DEN EEDE Free University of Brussels (VUB)

# Blindness and ambivalence: The meeting of Media Ecology and Philosophy of Technology

## ABSTRACT

This article sets the stage for a meeting between the fields of Media Ecology (ME) and the contemporary Philosophy of Technology (PhilTech), hence introducing the special issue 'Philosophy of Technology & Media Ecology'. First, both fields are briefly introduced. Second, contemporary PhilTech is elaborated upon more substantially. Third, a framework is set in place, circling around the notions of 'ambivalence' and 'blindness' – strongly represented in PhilTech and ME, respectively – to guide the discussion to follow. Fourth and finally, a short overview of the contributions in this volume is offered.

### INTRODUCTION

Notwithstanding much feverish talk about inter- and multi-disciplinarity, real and substantial dealings between disciplines remain hard to come by. Paradoxically, that even counts for disciplines that are in themselves eclectic and composed of elements hailing from many different domains. Such is, to a large extent, the case for Media Ecology (ME) and Philosophy of Technology (PhilTech).

#### **KEYWORDS**

Philosophy of Technology Media Ecology blindness ambivalence form and content interdisciplinarity Should this be surprising or not, given their respective foci? True enough, on the face of it, ME studies media, and PhilTech studies technology. Intuitively, one might suggest that those two are distinctly different things. Yet, ME forerunner and founder Marshall McLuhan equated media with technologies and vice versa. Conversely, contemporary PhilTech has a lot to say about digital media and Information and Communication Technology (ICT).

The fields are of course very alike in their constitutional features. Both have their worldwide followers, students and supporters. There exist or have existed departments, research groups and/or programmes, also around the world, devoted to them. Both have their dedicated journals: *EME* in the case of ME, and *Techné: Research in Philosophy and Technology* and *Philosophy & Technology* in the case of PhilTech. The two are institutionally anchored in associations: ME with the Media Ecology Association (MEA), and PhilTech with the Society for Philosophy and Technology (SPT). The former holds an international conference annually; the latter does so bi-annually.

On a less 'visible' level, indeed, both are in comparable degrees hard to pinpoint precisely. ME works at the intersection of a plethora of fields such as communication science, media studies, cultural studies, systems thinking, sociology, history, philosophy, psychology and anthropology. PhilTech is likewise multifaceted in spirit: though it clearly – and trivially – is and remains 'philosophy', it taps to a considerable degree into sociology, anthropology, history and more 'hands-on' disciplines such as engineering, design studies and management studies. ME appears nevertheless a bit more attuned to its own eclecticism. Regularly, in a kind of disciplinary soul-seeking way, representatives seek to 'probe the boundaries' of ME (cf. this journal, 12:3–4). But PhilTech also seems sufficiently aware of its flexible frontiers, given that several volumes and anthologies have seen the light in recent years, each with its own emphases and nuances (Dusek 2006; Ferré 1995; Olsen et al. 2013, 2009; Olsen and Selinger 2007; Scharff and Dusek 2003).

Still there has been almost no exchange or intercourse between the two fields. But perhaps we should not look exclusively at these rather superficial, 'content'-related similarities, in order to truly cast a judgement on their potential compatibility? To investigate whether the two disciplines could meet and learn interesting things from each other, and why they have not done so to a greater extent in the recent past, we should, in a media-ecological vein, look at *form* too and attempt to find out what formal characteristics – in terms of method, sources and aims – they share. That is what the current special issue sets out to do.

#### CONTEMPORARY PHILTECH

Since this is mainly a ME venue, some more introductory words on the field of PhilTech are first in place. As suggested, PhilTech has in recent decades become a full-blown philosophical subdiscipline, with its own journals and association. The so-called 'empirical turn', in Hans Achterhuis' phrase (2001), can be said to mark its beginnings.

Earlier analyses of technology had mostly been either essentialist or instrumentalist in spirit. In the former view, technology is understood as an all-encompassing realm or force that linearly works its effects upon the world. The works of 'classic' philosophers of technology Martin Heidegger (1977) and Jacques Ellul (1964) are often – though not always rightfully – named as instances of such an approach. The latter view, in contrast, sees technology as merely a neutral means to an end. This is the viewpoint often taken by users in an everyday context or by positivist theoreticians, who regard technology as just a useful instrument for the furthering of human progress.

PhilTech in its contemporary incarnation endeavours to find a middle road between these two extremes by turning to empirical research and looking at how technologies are deployed and employed in practical contexts (Feenberg 1995; Verbeek 2005). Studying how technologies work in specific situations and how people relate to them, use them, and possibly change them throws a wholly different light on the issue. The picture that emerges is one of complexity, multiplicity and ambiguity. Technologies do have effects – and certainly not always beneficial ones – but they are also open to modification by users and communities.

On a deeper metaphysical level, the field of PhilTech aligns itself with the multifarious critique of modern metaphysics that marked the twentieth century. Perspectives questioning the legacy of the Enlightenment, such as phenomenology, structuralism, post-structuralism, and so on, all offered their alternative to the strict dichotomy between (human) subject and (natural) object posited by the likes of Cartesianism. Subject and object could no longer be seen apart; for instance, the Heideggerian notion of 'being-in-the-world' seeks to grasp the primordial interrelatedness of the human being and its world. In the same vein, PhilTech problematizes the human subject *and* the technological object to such a degree that it becomes necessary and logical to understand both of them together in one and the same framework. Humans are, by nature, 'technological' – meaning, humans have always had the propensity of developing technology. Technologies are 'human' – meaning, they are neither neutral nor a strange entity apart from us and overwhelming us. The two define and 'make' each other.

As said, PhilTech has relatively loose boundaries. It shares theoretical and methodological frameworks with 'neighbouring' fields such as the Philosophy of Science, Science and Technology Studies, Actor-Network Theory, Computer Ethics, Cognitive Science and the like. Still it can be said that there exists something like a typical 'Philosophy of Technology spirit'. One may think of the work of Don Ihde (1990, 1991, 2009), Albert Borgmann (1984, 1999), Langdon Winner (1986), Andrew Feenberg (1995, 1999, 2002), Peter-Paul Verbeek (2005, 2011), Luciano Floridi (2011, 2013) and Carl Mitcham (1994; Mitcham and Mackey 1972) as prime instances. Some of these scholars have carved out their very own subfield, such as postphenomenology (Ihde, Verbeek), the philosophy of information (Floridi) or the critical theory of technology (Feenberg).

In this special issue, we endeavour to enquire to what extent ME can also be understood as such a 'neighbouring field' of PhilTech, and vice versa – or perhaps whether some hierarchy between the two should be applied? As will become clear, the authors gathered here formulate different answers to the question.

#### PHILTECH: LIVING WITH AMBIVALENCE

In order to provide a guiding framework for the investigations to follow, a couple of landmarks can be set in place (for a much fuller elaboration of the argument, cf. Van Den Eede 2012). Indications as to how ME and PhilTech may draw nearer to each other can be found by contrasting both these

disciplines' more theoretical reflections to the ways in which we mostly involve ourselves with technologies and media on everyday, practical levels. For 'us', users, technology still mainly appears in a reified way: something that is 'just there', easily defined and circumscribed. Everyone has a general idea of what technologies are: often, when technology is referred to in the press or in public debates, images of factories, car parts, printed circuit boards, satellites, astronauts or cellphones naturally come to mind. Plus, when we use technology, we are mostly not considering its side effects or wider impact; we expect technology to enable us to do *x* or *y*, and no further questions asked.

Over and against this linear expectation, contemporary PhilTech poses the principle of ambivalence. Technology cannot be analysed as something that just *is* and *does* something we can trace back, along a causal chain, to something *in* the technology. Or more precisely, it *can*, but only tentatively, within certain contexts, in relation to specific actors etc. When we extrapolate to more abstract levels, vagueness becomes the standard: all technologies are ambivalent, at the moment of their construction or design, and even later on, when they are (widely) used. Such a view goes against the grain of both the essentialist (or determinist) approach that assumes technologies to have fixed, ingrained effects, and the instrumentalist view that sees technologies as in themselves non-determining means to an end. Approaches that reckon in the ambivalence of technology, by contrast, mark the latter as, in Feenberg's words, 'underdetermined' by technical factors alone. Which specific form technologies eventually take depends on multiple actors, contexts and values.

It is especially PhilTech that has forced some breakthroughs in this regard. ME might, at first sight, not appear so attuned to the ambivalent character of technology. Was it not McLuhan (2003) who defined technology as extension, or 'enhancement'? That might suggest a simple instrumentalist view. However, enhancement, as is well known, only forms one part of the fourcomponent 'tetrad'. The tetrad demonstrates that McLuhan's analysis, and ME's perspective in general, easily supersedes the everyday reasonings of functionality – what can be done with what and how – as well. Ambivalence with regard to technology means, very simply, that 'things can go both ways'. Other uses for a technology than the ones foreseen by the designers may be worked out, possibly within different contexts, and these may even find their way back into the design. And then the cycle starts again. This idea is wholly present in the 'tetrad' analysis of the later McLuhan, or the four 'laws of media' (McLuhan and McLuhan 1988). The distribution of figure and ground elements within each tetrad presumes some of the workings of a medium to remain hidden and others to become manifest. Normal perception will only show us what the medium enhances and what it retrieves; these are its 'content' components i.e., what lies clearly in sight. But in the background the obsolescence and reversal parts are at work as 'form': respectively, what we 'lose' because of the medium, and what the medium may 'turn into' when the right conditions are met (more on content and form to follow shortly).

This means that what were first destructive tendencies of a technology may turn out to be constructive possibilities, in the right context and with help of the right actors, just as well. The 'losses' of obsolescence and reversal – actual and potential 'loss', respectively – may become 'wins' for other groups than the ones favoured at first by the figure aspects. In short, the idea of the ambivalence of technology, so central to PhilTech, is in ME already foreshadowed by McLuhanist media analysis.

#### **ME: PUSHING BACK BLINDNESS**

But uncovering ambivalence alone will not completely do. For even if one accepts that technologies are inherently ambivalent – and can thus turn out either 'bad' or 'good' – we may not be able to *see* this. Even as we keep in mind technology's ambivalence, we still run the risk of alienating our analysis from the experience of everyday users. On this level, technology recedes into the humdrum of daily routine. Technology is, up to a certain point, always invisible. It is no longer vagueness alone that rules here; blindness plays up as well.

In this context, then, pre-eminently the tradition of ME comes to our aid. Central to McLuhan's approach, and that of ME generally, is the dichotomy of form and content. Content we consciously perceive; form escapes our attention. 'Form' often includes the more impalpable parts or aspects of technologies: ways of doing, procedures, environmental influences, etc. As such, form is about the effects that the medium as such brings with it, in the broadest sense – 'the medium is the message'. But it escapes our grasp initially. 'Losses' *and* possibilities stay obscured at first. This invisibility does not equal inexistence, on the contrary. It just ensures that the boundaries between 'our existence' and 'that of technology' are blurred. Technologies appear to be part and parcel of our existence in a way in which it is hard to tell where the technology ends and our life begins. Technologies and media are not just something we use, they are something *of* us, something we *are*. And some work is needed to let these initially invisible aspects surface.

The concept of 'blindness' - 'Narcissus narcosis' (McLuhan 2003: 61ff.) etc. - in McLuhan's work finds its origins in a construct that has become a mainstay in all of the sciences: bias. The notion of bias has been particularly worked out with regard to media by one of McLuhan's most important influences: Harold A. Innis. According to Innis (2007, 2008), all communications media have a bias towards one or other societal organization: media tend to incite or co-constitute certain constellations and exclude alternatives. McLuhan takes over this concept of media bias - as well as the attending dichotomy between 'time-biased' and 'space-biased' that Innis deploys - but relocates it within the realm of the human sensorium. The ultimate place of action for all biases for McLuhan becomes the borderline between the environment and the senses. Yet it should be stressed that, given the Thomist influences in McLuhan's theory of perception, bias does not just concern our sense life plainly and simply: in the Thomist scheme, cognition is always a form of perception and vice versa. To a certain extent, every perceptual process is an act of understanding, and the other way around.

In McLuhan's perception theory, then, perception is itself twofold. *On the one hand* it involves the reception of sensory stimuli and the corresponding but exclusively sensory response to them. The terms McLuhan himself begins to use in the report eventually leading up to the publication of *Understanding Media* (2003) are 'structural impact' and 'sensory closure' (Marchand 1998: 155; Molinaro et al. 1987: 262, 286). Closure does not necessarily entail a conscious process, on the contrary: 'Perception or input is never the experience of "closure". No matter which sense receives the data the other senses rally to complement it' (McLuhan 1970: 186). There exists a dialectical dynamic between 'input' and 'output'; input, so to speak, begs the question, and output or response provides the answer. Nonetheless, *on the other hand*, beyond this rather 'technical' perception we may or may not have 'intellectual' processing, what we commonly call cognition. This covers a wide range of activities by which we attempt to make sense of the flood of received sensory data and by way of which we assign meaning to what we perceive: interpretation, reflection, analysis, etc. However, here too we may not be conscious of the 'mental sets' that shape our interpreting and thinking. Hence, the 'bias' of media is not only constituted by purely sensory blindness, but just as much by 'intellectual' blindness.

Although this idea of 'blindness' is particularly well represented in ME, it is not altogether absent in PhilTech either. PhilTech also works to remediate our limited sight, when it tries to elicit a sensitivity for technologies' wider impact. Just a couple of examples: 'classic' philosopher of technology, Heidegger (1962), still a tremendously important source for contemporary PhilTech, sees respective modes of blindness in the states of either Vorhandenheit or Zuhandenheit - blindnesses bound to our metaphysical and ontological set-up. Ihde (1990) and Verbeek (2008) allocate various degrees of perceptual transparency and opacity to different sorts of interaction with technologies i.e., human-technology-world relations. Bruno Latour (1987, 2005) of Actor-Network Theory locates a blindness in the 'social construction' of technologies, or at least a blindness that emerges after technologies have been socially constructed, when the so-called 'black box' is closed. And Feenberg (1999) subsequently adopts the black box notion of Latour and points out its consequences and outcomes for democratic change - a blindness to be situated within the political realm (cf. also, for a more elaborate overview, Van Den Eede 2011).

From McLuhan to Heidegger to Ihde to Latour to Feenberg, then, a thread can be said to run, uniting them in one great perceptual project: the spotting of blind spots, and the accompanying attempt of remedying them. In each case, moreover, a 'closure' – more or less tied to our preconceptions and/ or our perception – takes place: McLuhan's 'sensory closure', Latour's and Feenberg's 'closure' of the black box, and the closure brought on by the 'natural attitude', mapped by the phenomenologists (beginning with Husserl). The necessary 'opening up' can be induced, in each case, by paying attention, changing perspective, focusing differently. We can bend, at least to a certain extent, *not seeing* towards *seeing*.

#### **OVERVIEW OF THE ISSUE**

If PhilTech and ME have these fundamental viewpoints and aims in common, the articulation of those shared interests may benefit both. In this issue we bring together authors who work and feel at home within both traditions, or who highlight, sometimes on a more intuitive base, possible gateways for mutual rapprochement, for a meeting. There is a logic to the order of the articles that follow. Throughout the five original contributions, one can see the argument evolving from undiluted, rigorous methodological-disciplinary analysis towards innovative, no-holds-barred philosophical speculation. At the same time, there is also a progression from rather abstract, meta-disciplinary considerations to rather specific, real-world applications.

Laureano Ralón starts off, delivering one of the most thorough comparative analyses of PhilTech and ME available in print up until now. In the first part of his paper, he works out a detailed theoretical reflection, which serves as a preamble to the discourse analysis developed in the second part, in turn based upon the rich depository of research material that is the online scholarly interview website Figure/Ground – which he himself established in 2009. The results are highly interesting, laying bare as they do some of the fault lines of the mutual neglect that ME and PhilTech may have nourished towards each other – a neglect that is now, especially with what Ralón terms second-generation philosophers of technology, gradually evaporating.

Demonstrating exactly such a tearing down of walls, Paul Grosswiler engages with Peter-Paul Verbeek's perspective on 'moralizing technology', comparing it to McLuhan's deliberately non-moral stance. Grosswiler's analysis shows how complementary both actually are, but also points out a difference: Verbeek indicates more than McLuhan that morality can (and should) be designed.

Dennis D. Cali takes it a step further, comparing PhilTech as well as ME to a series of disciplines and fields, such as, for instance, Computer-Mediated Communication and Medium Theory, pointing to the essential characteristics of each. The perspective of Personalism is deployed as a sort of conceptual lubricant, helping to outline the extent to which all these approaches give, or fail to give, attention to the (inviolability of the) human person. Interestingly, Cali refuses to classify any one field as a subgenre of another, opting instead for a kind of 'topographic' way of doing. He situates all perspectives on a graph that takes Personalism as its main orientation point. This graph is sure to spur further discussion about the uniqueness and strength of each of the discussed domains.

Stacey O. Irwin, by contrast, does choose to cast ME as a subgenre of PhilTech. At the same time she shows, in line with some of the above observations, how both fields seek to study human experience, by focusing on the ways in which technology mediates it. Irwin then goes on to structure and formalize the similarities, the areas where both domains overlap – all the while using the Internet of Things (IoT) as a guiding example. That practical application will certainly form an excellent springboard for future efforts in the same style, investigating current relevant matters that ask for broad-ranging viewpoints – given their all-permeating nature (such as with IoT) – from a hybrid ME-PhilTech complex of sorts.

Robert C. MacDougall's contribution, subsequently, goes all the way in reflecting – at times wildly – upon how ME and PhilTech, and a spate of other approaches for that matter, are all part and parcel of one encompassing way of looking at and thinking about the world – a world-view radically different from the linear, Cartesian standpoint that has been the target of criticism for both ME and PhilTech. MacDougall, in turn, takes 'mind' as his central focal point, delving into among others Philosophy of Mind and Cognitive Science, and evoking the suggestion that ME as well as PhilTech are in fact concerned about that very fundamental, very general, all-affecting issue: how mind and technology, through time and space, co-constitute each other. It is a rich and eclectic picture that he paints, fitting in the end the vocabulary and style of ME perhaps slightly better than that of PhilTech (which is, in media-ecological terms, still a bit more 'linear'), but nevertheless highly relevant in terms of the multifaceted agenda it sets for philosophical research on media and technologies in the coming times.

The book review by Laureano Ralón of philosopher of technology Andrew Feenberg's latest, *The Philosophy of Praxis: Marx, Lukács, and the Frankfurt School* (2014), finally, tops off the collection... Eventually, it can be added in closing, no matter how hard to pinpoint or eclectic their work is, that what representatives in both traditions can be said to be after is, at base level, and

in McLuhan's words, 'understanding'. McLuhan often used Edgar Allan Poe's *A Descent into the Maelström* (1975: 127–40) to illustrate: by accurate observation and analysis of the environment, the sailor is able to survive the whirlpool. Blindness can be countered by more devoted and structured seeing. Interestingly, though, Daniel Czitrom adds this critical remark: 'Perhaps it is worth recalling that Poe's sailor, although able to save himself by means of an extraordinary curiosity, was powerless to save his two brothers on the ship. He escaped his fate only after he gave up hope' (Czitrom 1982: 171). There is a moral to this story: it suggests that 'understanding' as such is paradoxical and ambivalent: one cannot save without sacrificing too. It seems impossible to keep on observing keenly, without losing hope. Or, phrased otherwise: we cannot sidestep the 'losing' by counteracting it through some form of pure 'winning'. The blindness as well as the ambivalence are utterly constitutional and fundamental, and hence – alas – inexhaustible and ineradicable. Any meeting between PhilTech and ME could start with this realization.

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#### **CONTRIBUTOR DETAILS**

Yoni Van Den Eede is a postdoctoral fellow of the Research Foundation – Flanders (FWO), affiliated with the research groups Centre for Ethics and Humanism (ETHU) and Culture, Emancipation, Media & Society (CEMESO), both at the Free University of Brussels (VUB). He conducts research into the philosophy of technology, media theory and media ecology, with an emphasis on phenomenological, cultural, existential and political themes, and is the author of *Amor Technologiae: Marshall McLuhan as Philosopher of Technology* (Brussels, VUBPRESS, 2012), *Mens en media. Van Marshall McLuhan tot een hedendaagse filosofie van media en technologie* (Tielt, LannooCampus, 2014) and *Vanzelf. Tegen het efficiëntiedenken en de doelmatigheidscultuur* (Leuven, Acco, 2015).

Contact: Free University of Brussels (VUB), Department of Philosophy and Moral Sciences, Pleinlaan 2, 1050 Brussels, Belgium. E-mail: vvdeede@vub.ac.be

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