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THE ASYMMETRICAL RELATIONSHIP BETWEEN HUMANS AND TECHNOLOGIES

abstract

The aim of my proposal is to address the following question: “How the experience of interacting with a specific technology mediate our experience of the world?”. I will do this by exploring the ideas of the postphenomenological theorists: Don Ihde, Peter Paul Verbeek and Evan Selinger. Postphenomenological studies tend to focus on understanding the roles that technologies play in the relations between humans and world.

I would examine the idea that technologies mediate the world in such a way that perception of the self, world and environment changes. I am going to deepen the phubbing phenomenon, because it reveals the effect of technologies on social interaction.

keywords

Postphenomenology, Phubbing, technosphere, quasi-otherness, placeless

- 1. Introduction** The central question of my analysis is: “How the experience of interacting with a specific technology mediate our experience of the world?”. Studies of human-technology interaction have traditionally positioned the human and the technological as opposites, or at least as ontologically distinct. Rather than enabling people to achieve their own intentions, technologies are sometimes interpreted as an oppositions against human realization. In this technophobic view, technology’s development is centrally responsible for the inhuman oppression that characterized our society. One version of this approach is articulated by Andrew Feenberg. Andrew Feenberg is a political philosopher who investigates the relationship between neo- Marxist tradition and phenomenological approaches to technology. His reflection on power is inspired by the late Foucault’s thoughts. He affirms that political power and the cultural appropriation of technology are closely connected. According to Feenberg, the current technological milieu of our society is profoundly problematic. He states that industrial society “orients technological development toward disempowering workers and the massification of the public” (Feenberg 2005, p. 53). Due to these circumstances, the autonomy of the owner or his representative “reproduce the conditions of their own supremacy at each iteration of the technologies they command” (ibid.). This situation ultimately results in technocracy, when “technology and management spread to every sector of social life” (Feenberg 2005, p. 55).
- Another version of this technophobic approach is the one sustained by Neil Postman. Postman, in his book *Technopoly: the surrender of culture to technology* (Postman 1993), argues that human culture can be divided in three periods with respect to technology: the tool-using, the technocratic and the technopolistic. In the last period, the technopoly, the logic of industrial production will control not just economic thought, as it was in the technocratical time, but cultural and philosophical thought as well.
- However, these points of view are problematic because human beings cannot be understood in isolation from technology, just as technology cannot be understood in isolation from humanity. Technology helps to shape what it means to be human, they are fused in a manner which makes it impossible to understand one without reference to the other. This does not mean, of course, that all kind of involvement of technology in human life are equally pleasant. Instead, it does mean that the paradigm of oppression and resistance might not be the most appropriate paradigm if we want to investigate the relationship between human beings and technologies. The emerging technologies reshape the relationship between human beings and the world (De Preester 2010). Don Ihde refers to our technological environment as a “technosphere” in which

we find ourselves and which involves all dimensions of our relations: “This environment has become so comfortable to us that we can hardly imagine our lives outside these cocoons” (Ihde 1973, pp. 13-14). The term ecosystem should be replaced with *technosystem* because it more correctly describes the texturing “cocoon” in which most of us now live.

We are nowadays citizens of two spaces, the biosphere and the infosphere. Infosphere is a neologism made using the words information and sphere, coined by Sheppard in 1971, and employed by Luciano Floridi to denote the whole informational environment constituted by all informational entities (thus including informational agents as well), their properties, interactions, processes and mutual relations. In this sense the natural world is being absorbed into the virtual in a great ontological twist and reversal. Rather than the virtual becoming actual, the actual is becoming virtualized.

Floridi maintains that we are living through an informational turn (Floridi 2014) or fourth revolution, following the scientific revolutions of Copernicus, Darwin and Freud, in which the unification of technology and human beings is defined *inforgs*: informational embodied organisms, embedded in an informational environment. In the infosphere, boundaries between online and offline environments merge, so that we live in a manner termed *onlife* (Floridi 2015). To put it dramatically, the infosphere is progressively absorbing any other space. In the onlife world, artifacts have ceased to be mere machines simply operating according to human instructions. They can change states in autonomous ways and can do so by digging into the exponentially growing wealth of data, that currently are increasingly available, accessible and processable (Bibri 2015).

In our time, with the advent of new technological innovations, the rate of information production has rapidly accelerated. The emergence of social media has made this a global phenomenon where hundreds of millions of people are publishing information on a wide range of social media. It seems very difficult to make decision and to act in this kind of situation. Then, it is very familiar the situation of Information Overload, or infobesity or infoxication. We are not good in dealing with all the data and the info that are communicated to us. We have a paradoxical problem of agency in the face of the changes: we at the same time create the problem and are unable when it comes to solving it.

Technologies mediate the world in such a way that the perception of self, world and environment changes. While technology transforms our experience of our lifeworld, it simultaneously reveals the world in a transformed manner. Therefore, it is necessary to consider human-technology relationships in its complexity and mutual correspondence or constitution. As Thompson (Thompson 2006, p. 116) remarks, technologies mediate both perception (through amplification and reduction) and interpretation (through concealing and revealing). Technologies necessarily provide agents with value-laden access to the world, and, more important, remake the agents and the world in the process. Postphenomenology describes the relation between human beings and world as being changed or at least influenced by technologies and technological artifacts. The term “postphenomenology” is Don Ihde’s (1990; 2009) variant of Husserlian phenomenology purged of its transcendental and essentialist tendencies and injected with American pragmatism. Don Ihde recognizes the legacy of phenomenology but takes distance from its perspective. Ihde defines postphenomenology as “a nonfoundational and nontranscendental phenomenology which makes variational theory its most important methodological strategy” (Ihde 2015, p.vii). It is a “particular mode of science-technology interpretation” and that “its arrival coincides with a late-twentieth- to twenty-first-century radical shift in science-technology analysis” (Ihde 2015, p.viii).

Postphenomenology places its philosophical and cultural context in the continental philosophy developed at the beginning of the 20th century, more precisely in the phenomenological

2. The reciprocal human-technology interrelationship

movement. Don Ihde (1990) has called the special relations between human beings and such artifacts with the expressions “embodiment relations”, since such artifacts seem to become part of our embodiment. This perspective is influenced by Merleau-Ponty. Already in 1990, Don Ihde argued that in Merleau-Ponty’s thought, and especially his phenomenology of the perceiving body, there is an implicit “latent phenomenology of instrumentation” (Ihde 1990, p. 40), specifically, a theory of the process by which the body runs both a technical exteriorization of its functions and an incorporation of technical tools. In Ihde’s words, in an embodiment relation “I take the technologies into my experiencing in a particular way by way of perceiving through such technologies and through the reflexive transformation of my perceptual and body sense” (Ihde 1990, p. 72). For Ihde artifacts mediate perception: the experience of one’s environment through an artifact. These intentional human-technology relations transforms our perceptions of the world and ourselves. Hence, embodied artifacts change our relation to the world, sometimes even profoundly. The microscope, for example, has forever changed the way we understand our world. These artifacts are not normally perceived as objects in one’s environment, but instead are used as means through which the environment is experienced and acted on.

Postphenomenology is influenced by some of the central themes of American pragmatism: anti-foundationalism, mediation, materiality, concreteness, practice, and the enlargement of meanings. Inspired by the rise of science and technology studies (STS) in the 1980s and 1990s, Peter-Paul Verbeek (Verbeek, 2005, 2011) has embraced what Achterhuis (Achterhuis 2001) calls the “empirical turn”. His characterization of postphenomenology emphasizes its bottom-up empirical turn away from top-down “classical” approaches to philosophy of technology that tended to privilege abstract theoretical concerns over serious consideration of artifacts. Postphenomenology adapts several aspects of pragmatism. Don Ihde and Peter-Paul Verbeek (Ihde 1990; Verbeek 2003) have criticized classical phenomenology for being too subject-centered and have argued that it overlooks the mediating role that technology plays in human-world interactions. Postphenomenology shifts the constitutive element of subject and object to the middle: neither subject nor object are primary or self-sufficient. Practitioners of postphenomenology address issues such as “scientific and medical imaging, computer interface, virtual reality, traffic safety, robotics, educational technologies, sustainable design, wearable computing, and bodily implants” (Rosenberger, Verbeek, 2015, p. 2).

Postphenomenology remains experiential, but not *subjectivistic*. This inter-relation ontology is well-matched with an experiential version of the interaction between a living organism and its environment (Dewey’s notion), as a human experiential interaction with a lifeworld. The postphenomenology perspective conceptualizes the role of the emerging technological environments in human existence and it remarks the transformative dimension of technical artifacts on human experience (Borgmann 1984).

Don Ihde, Evan Selinger, and Peter-Paul Verbeek effort is revolving around the concepts of technical mediation and relational ontology. For Verbeek (Verbeek, 2005) the mediating role of things takes place in this middle and relates to the very ontological status of subjectivity and objectivity:

Things are not neutral intermediaries between humans and world, but mediators: they actively mediate this relation. (...) Mediation does not simply take place between a subject and an object, but rather co-shapes subjectivity and objectivity. [...] Humans and the world they experience are the products of technological mediation. (Verbeek 2005, p. 114)

According to Verbeek (Verbeek 2011) proper engagement involves neither rejecting technology nor embracing it enthusiastically but asking which technologically mediated

subjects we want to be, as a preference, a question of value, about the good life. This is a method not oriented to humans or to technology alone, but to “human–technology associations”.

The postphenomenological approach is grounded on an empirical turn that culminates in the concept of the non-neutrality of technologies. Postphenomenology investigates the complexity of a technologically environment and its impacts on the body, self/identity and environment itself. The “penetration” of lived experience by technology is a common denominator in the ontologies of time, mobile places, and fluid spaces and the intensifying collapse of time and space. Technologies, therefore, mediate any authenticity or naturalness alleged of the human body, its experience and its various “relational” manifestations with others. Technologies simultaneously form the lifeworld and mediate the embodied (and discursive) human experiences of that world (Gouch, 1999; Rickinson, 2001).

Rather than starting with a subject and object correlate, postphenomenologists start with the relations themselves. There are various ways in which technologies help to shape relations between human beings and the world: embodiment relations, hermeneutic relations, alterity relations, and background relations (Rosenberger, Verbeek, 2015, p. 13). Embodiment relations are those in which a user’s experience is reshaped through a device. Peter-Paul Verbeek introduced cyborg relations as a radical variant of embodied relations in which “technologies actually merge with the human body” (Verbeek 2011, p. 144). Hermeneutic relations, such as looking at and interpreting a wristwatch, are those in which “the user experiences a transformed encounter with the world via the direct experience and interpretation of the technology itself” (Rosenberger, Verbeek, 2015, p. 17). According to Don Ihde, hermeneutic relations are a specific kind of technologically mediated I-world relations in which the technology must be “read” and “interpreted” to access the world (Ihde, 1990). Alterity relations are those in which we relate to technical devices in ways that are like to the ways in which we relate to other humans. iPhone users, for example, tend to relate to Siri as a quasi-other. Finally, background relations with appliances such as refrigerators and air conditioners make up our environmental context.

Postphenomenology’s approach is crucial because it holds on to an asymmetrical approach to humans and nonhumans. According to Don Ihde, the background of asymmetrical relation between human beings and technological systems or artifacts is based on intentionality. Ihde has contributed to this debate by declaring how humans maintain an exclusive and nontechnically reproducible stance in the world. He maintains that even when humans and technology co-construct one another, such reciprocity always contains an ineliminable asymmetrical dimension. Specifically, he insists, only human agency has intentionality. However, this does not mean that it would imply an *a priori* separation of subject and object. It sees subjectivities and objectivities as the outcomes of processes of mediation. Without separating subjects and objects, it keeps up a distinction between them. As Ihde (1979, p. 4) states: “human-machine relations are existential relations in which our fate and destiny are implicated, but which are subject to the very ambiguity found in all existential relations.” If it is true that our use of technologies has changed the way we interact with the world and each other, then it would be interesting to closely examine the argument explained. The *phubbing* phenomenon is a test case that shows how the feature of these connections remains ambiguous.

Jesper Aagaard presents a postphenomenology study on digital mediation and attention. Aagaard (2015) borrowed the term *wall-window* from Wellner (2011). He wants to demonstrate how digital devices *open* their user up to a nonlocal level of social interaction while at the same time producing obstacles to the local level of potential exchanges. The *wall-window* metaphor suggests that digital technologies create an imaginary *wall-window* between you and person/object you

3. The “Phubbing” Phenomenon

engage with, dislocating your attention to a virtual space, while still allowing you to be bodily engaged in the physical space. Aagaard suggests that the screen works as a portal through which the users enter in another realm. Thus, the digital mediation makes one both absent and present at the same time. This is the same situation of the phenomenon known as *phubbing*.

Phubbing is a combination of the words phone and snubbing. To be phubbed is “to be snubbed by someone using their mobile when in your company” (Roberts and David 2016, p. 134).

Phubbing is a state of altered relations and it is the practice of ignoring one’s companion or companions in order to pay attention to one’s phone or another mobile device. Phubbing phenomenon addresses how we communicate and relate with others. It shows a paradox: we are physically present but we are absent, occupied with our smartphones. Phubbing is the state of being present absent. Present absence can be observed when people are physically present but effectively absent because their focus is set somewhere else (MacCormick, Dery, & Kolb 2012).

Meredith David and James Roberts (2017) demonstrate the harmful effects of phubbing.

Being phubbed is an experience of being ignored. It is a threat to human interaction because it determines social exclusion (Lee, Jaehoon, and L. J. Shrum 2012). It appears that the use of mobiles is contagious, because the phubbed individuals turn to social media to gain attention and to restore his/her sense of inclusion.

It is helpful to compare phubbing with the concept of idle talk developed by Martin Heidegger. Heidegger observes that idle talk is the possibility of understanding everything without previously making the thing one’s own. It forces *Dasein* within its inauthentic existence. In a similar way, phubbing discourages any new inquiry and any disputation, it suppresses them and holds them back. Both idle talk and phubbing share the characteristics of superficiality, gossiping, wide publicity.

Nevertheless, what is even more peculiar of phubbing is the fact that the screen has replaced the human face. New technologies are interactive as they maintain a certain dialogue with the human being. Don Ihde (1990) defines new technologies as “quasi-otherness”. He explains (1990, p. 100) that technological otherness is a quasi-otherness, stronger than mere objectness but weaker than the otherness found within the animal kingdom or the human one. The construct of quasi-other is located mid-way between inanimate objects and living beings.

Quasi-otherness is that quality in objects which positions the human and the object in a human-like relation. If technology is a quasi-other, the screen is a quasi-face (Wellner 2014).

The screen is a subset of a face. It shares a few elements with the human face.

Following Levinas, if interaction with others is based on face, what kind of interaction phubbing phenomenon aims to? In Levinas’ thought, things, technologies included, are faceless. The face is uniquely reserved for human beings. Moreover, the face demands an ethical response, the screen not. Screen-face serves to display certain human functions, henceforth it is not designed to be ethical (Verbeek 2009). Turkle (2012) argues that because people in interpersonal social situations, particularly young people, are distracted by their phones, they will pay insufficient attention to one another, creating increasingly shallow relationships. It seems that people have become so accustomed to technologies that it is a new way of being alone together. We have lost the skills of conversation and replaced it with connection through text and social media.

Social media connections, as in the phubbing phenomenon, lack communication. According to Jean Baudrillard (1981), we can affirm that social media creates a world of simulation, because when we post a text online, we generate what Baudrillard named a *simulacrum* of conversation, a *simulacrum* in evidence. In this world of simulation, you can be *other* than you are in the physical world because the signifiers of your identity— avatars, profile picture, cover picture, etc.—do not necessarily match your physicality. Cyberspace, for Baudrillard, is a realm of shining surfaces where the meanings float and can be joined to virtually any signified.

Consequently, meanings ultimately mean nothing. Simulation is production—the production of increasingly self-referential sign systems that are reality or, to use Baudrillard's term, the real is hyperreal. Hyperreal denotes more than real, it is a special kind of social reality in which reality is created and simulated on the surface. In the hyperreality, the difference between reality and imaginary collapses. How to understand this situation and how to distinguish between the virtual experiences and the physical one is a crucial question to pose. The ambiguity between these options has the potential to create a placeless location, more real than physical world itself.

In 1976, the humanistic geographer Edward Relph wrote *Place and Placelessness*. In this book, he argued that places were becoming placeless. He gives many reasons for this – mass production or an increasingly mobile world. One of the supposed major causes of placelessness is increased mobility. This mobility has led some to go as far as to declare the “end of geography”. The vanishing of a sense of place is interlaced with the lack of values of identity, relations and history. Therefore, it is not just that places have become standardized, but, likely, our relationship to the environment and to the others become distanced and disconnected. In a dystopic perspective, Leroi-Gourhan figures out a human race living in a prone position. Their only ability is to push buttons (Leroi-Gourham 1964).

Marc Augé (2008) formulates the neologism “non-place” to address to spaces with a similar purpose (transport, commerce, leisure), and to characterize the relations between individuals and these spaces. Non-places are non-relational and unhistorical. They create an anonymous and solitary identity: the customer. According to Augé, the concept of non-space is part of the category of Supermodernity. Supermodernity is characterized by excess, a charged surplus in the three domains of philosophical and anthropological cornerstone: time, space, the individual. One of the characteristics of excess with regard to Supermodernity concerns space. It produces non-places: spaces which are not themselves anthropological places and which do not integrate the earlier places.

Mankind has a world, while animal has an environment. Man, as opposed to other animals, has no specific habitat, but a specific perception of space. Man is bound by nature to shape his own *oikos*: he is world-forming, a technological being. In the near future, environments will be probably of interconnected sensor networks of sensors, managed using artificial intelligence and analyzed by big data-enabled automation systems. Smart Environments promise a hyper-personalized kind of environment. However, the communication among people has reached an unprecedented intensity and scale, but it has inaugurated a kind of loneliness not known before, in which the collective, historical community rooted in the traditional heritage disappears. It is necessary to rediscover the importance of place for both individuals and cultures, especially because contemporary society was seeing a surge in placelessness.

REFERENCES

- Aagaard, J. (2015). Drawn to distraction: A qualitative study of off-task use of educational technology. *Computers & Education*, 87, 90–97. <https://doi.org/10.1016/j.compedu.2015.03.010>;
- Augé, M. (2008), *Non-Places: An Introduction to Supermodernity*. London, London: Verso;
- Aydin, C., & González W. M. & Verbeek, P.-P., (2019), Technological Environmentality: Conceptualizing Technology as a Mediating Milieu. *Philosophy and technology*, 32(2), 321–338. <https://doi.org/10.1007/s13347-018-0309-3>;
- Baudrillard, J. (1981) Requiem for the Media. *For a Critique of the Political Economy of the Sign* (pp. 164-184). New York: Telos Press Publishing;
- Borgmann, A. (1984), *Technology and the Character of Contemporary Life*. Chicago / London: University of Chicago Press;
- Brey, P. (2000). Technology and Embodiment in Ihde and Merleau-Ponty. *Metaphysics*,

- Epistemology and Technology (Research in Philosophy and Technology*, vol.19 pp. 45-58, Elsevier/JAI Press;
- Bibri S. E. (2015), *The shaping of ambient intelligence and the Internet of Things*, Paris: Atlantis Press;
- Castells M. (2003), *The Internet Galaxy*, London: Clarendon Press.
- De Preester, H. (2010). Postphenomenology, Embodiment and Technics. *Hum Stud* 33, 339-345. <https://doi.org/10.1007/s10746-010-9144-y>;
- Dusek, V. (2006). *Philosophy of Technology: An Introduction*. London: Blackwell;
- Feenberg, A. (1999), *Questioning technology*, New York: Routledge;
- Feenberg, A. (2005), Critical Theory of Technology: An Overview. *Tailoring Biotechnologies* 1(1): 47-64;
- Floridi L. (2014), *The fourth revolution: how the infosphere is reshaping human reality*, Oxford: Oxford University Press;
- Floridi L. (2015), *The Onlife Manifesto. Being Human in a Hyperconnected Era*, London: Springer;
- Hayles, N. K. (2012), *How we think: digital media and contemporary technogenesis*. London: University of Chicago Press;
- Han B.C., (2017) *In the swarm. Digital prospects*, Boston: MIT Press;
- Hoq K. M. (2014) Information Overload: Causes, Consequences and Remedies: A Study. *Philosophy and Progress*, Vols. LV-LVI (1-2), 50-68. <https://doi.org/10.3329/pp.v55i1-2.26390>;
- Ihde, D. (1990) *Technology and the Lifeworld: From Garden to Earth*, Indianapolis: Indiana University Press;
- Ihde, D. (2008) Introduction: Postphenomenological Research. *Hum Stud* 31. 1-9. <https://doi.org/10.1007/s10746-007-9077-2>;
- Ihde, D. (2009). *Postphenomenology and technoscience: The Peking university lectures*. Albany: State University of New York Press;
- Ihde D., (2010) *Embodied Technics*, Automatic Press/VI;
- Jasanoff S., Kim, H. (2015), *Dreamscapes of Modernity. Sociotechnical Imaginaries and the Fabrication of Power*. Chicago: The University of Chicago Press;
- Kalthoff, H., & Roehl, T. (2011). Interobjectivity and interactivity: Material objects and discourse in class. *Human Studies*, 34, 451-469. <https://doi.org/10.1007/s10746-011-9204-y>;
- Kaplan D.M., (2009). What Things still don't Do. *Human Studies*, 32, 229-24. <https://doi.org/10.1007/s10746-009-9116-2>;
- Kiran, A. H., & Verbeek, P.-P. (2010). Trusting ourselves to technology. *Knowledge, Technology & Policy*, 23(3-4), 409-427. <https://doi.org/10.1007/s12130-010-9123-7>;
- Leroi-Gourhan A., (1964). *Le geste et la parole*, Paris: Albin Michel ;
- Merleau-Ponty, M., (1962). *Phenomenology of Perception*, London: Routledge;
- Postman, N., (1993). *Technopoly: the Surrender of Culture to Technology*, New York: Vintage Books;
- Turkle, S. (2012). *Alone Together: Why We Expect More From Technology and Less From Each Other*. New York, NY: Basic Books;
- Van Den Eede, Y. (2011). In between us: on the transparency and opacity of technological mediation. *Foundations of Science*, 16(2/3). 139-159. <https://doi.org/10.1007/s10699-010-9190-y>;
- Verbeek P.-P., (2005). *What things do: philosophical reflections on technology, agency, and design*, University Park: Pennsylvania University State Press;
- Verbeek P.-P., (2011). *Moralizing Technology. Understanding and Designing the Morality of Things*, Chicago: The University of Chicago Press;
- Verbeek, P.-P., (2003). Material Hermeneutics. *Techné: Research in Philosophy and Technology* 6 (3), 181-184. <https://doi.org/10.5840/techne20036325>
- Verbeek, P.-P., (2008). Disclosing Visions of Technology. *Techné: Research in Philosophy and Technology* 12 (1), 85-89. <https://doi.org/10.5840/techne200812116>;
- Verbeek, P.-P., & Vermaas P. E. (2012). Technological Artifacts. In: Jan Kyrre Berg Olsen Friis,

Stig Andur Pedersen & Vincent F. Hendricks (Eds.), *A Companion to the Philosophy of Technology*, (165-171) Wiley-Blackwell.

Wylie J., (2003) *Landscape, performance and dwelling. A Glastonbury case study*, Cloke P (Eds.) Country Visions, Harlow: Pearson.