

Postphenomenological investigations of technological experience

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Abstract Technology is inextricably woven into the social and cultural fabric of different cultures. Tool use technologies, created and used by our pre-sapiens relatives, preceded us by more than a million years. There are no human cultures that are pre-technological. All humans have a material culture with complexly patterned praxes involving artifacts; we have only recently begun to appreciate the completely of even what may be called technologically mediated cultures. Technologies either magnify or amplify human experiences and can change the ways we live. This non-neutral, transformative power of humans enhanced by technologies is essential feature of the human–technology relations. Technologies are the extension of our bodies. The technological form of life is part and parcel of culture, just as culture in the human sense inevitably implies technologies. Every technology, as a word, has a signifier and a meaning. The signifier can be seen as the hardware of the technology, while the meaning can be conceived of as the uses and the functions that the technology performs. However, a technology, like many words, tends to be ambiguous, that is its meaning is mutable. As a consequence, in order to make sense, a technology calls for a cultural context where to be embedded. In this essay, I will demonstrate how this relationship can be articulated and their main theoretical implications for the study of new technologies give rise to ethics.

Keywords Body · Cognitive · Culture · Ihde · Philosophy of technology · Posthuman · Hermeneutics · Mediation · Postphenomenology · Technologies

1 Introduction

Philosophy of technology promises the possibility of an understanding of technology that may be important not only to public policy but also in helping to conceptualize intellectual approaches to the study of technology and, indeed, to shaping new fields of knowledge and research. Philosophy of technology may also have a role to play in relation not only to structuring a largely disparate and inchoate field but also more directly in teaching and learning about technology (Peters et al. 2008).

Evan Selinger and Berg Olsen in their Preface of the book *Philosophy of Technology: 5 Questions (Automatic Press/VIP, 2007)* argue practitioners of the philosophy of technology defend their research by appealing to both instrumental and intrinsic justifications—that is, they emphasize how their analyses clarify what it means to be human and portray alternative visions of how humans and non-humans can relate to each other.

Whereas Robert Scharff in his *Philosophy of Technology* (Scharff 2005) argues that until the late twentieth century, technology was not a widely attractive philosophical topic. Even today, certainly in North America and to a somewhat lesser extent in the UK, Scandinavia, and the rest of Continental Europe, the philosophy of technology is still typically regarded as either a small and not especially prestigious area of specialization or an interest most appropriately handled in an institute or program outside of philosophy, “the reasons for this situations are partly historical.”

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In 1877, Ernst Kapp¹ formulates a philosophy of technology in which technology is the extension of human body. Kapp was deeply inspired by the philosophy of Hegel and regarded technique as a projection of human organs. Kapp has pointed tools are the extension of human body. But, why did humans make a fist axe? Because their hands were too weak in order to chop the wood. Why did people come up with the idea of a spear? Because their arms were too short and their legs were too slow in order to catch a running animal. Why did people invent lenses? That was because their eyes were not capable of seeing very small things, or things that were very far away. Likewise, all technical artifacts such as laptop and pen can be explained to be extensions of human body.

Kapp's theory of extension of human body seems quite plausible. But as technologies get more complex, it is more difficult to see in what sense they are extensions of our human bodies. Instruments tell the inadequacies of human body.

On the issues of “philosophy of technologies,”² German philosopher Martin Heidegger's “Being and Time” and Friedrich Dessauer's “Philosophie der Technik” were also both published in 1927. David Nye, a historian of technology notes that there are very few references to technology in the late nineteenth century, with “inventions” and “applied arts” being more common until after the First World War.

Technological artifacts should be thought of as man-made imitations and improvements of human organs and extension of human body (see Brey 2000; De Vries 2005). The underlying idea is that people have limited capacities: We have limited visual powers, limited muscular strength, and limited resources for storing information. These limitations have led humans to attempt to improve their natural capacities by means of artifacts such as cranes, lenses.

As we are increasingly using new technologies to change ourselves beyond therapy and in accordance with our own desires, understanding the challenges of human enhancement has become one of the most urgent topics of the current age. Gordijn and Chadwick (2009) volume contributes to such an understanding by critically examining the pros and cons of our growing ability to shape human nature through technological advancements. Human embodiment is presupposed in and by our technologies, particularly those related to the production of knowledge, including scientific instrumentation, communication technologies, and the new

forms of virtual reality, simulation, and modeling devices, all of which are discussed in detail in Ihde (2002) “Bodies in Technology” and Irrgang (2009) “Der Leib des Menschen. Grundriss einer phänomenologisch-hermeneutischen Anthropologie (The Body of Humans. Phenomenological hermeneutics of anthropology).”

2 Culture of cognitive embodiment

Mind, Andy Clarks (2008) argues, it is increasingly fashionable to assert, is an intrinsically embodied and environmentally embedded phenomenon. But there is a potential tension between two strands of thought prominent in this recent literature. “One of those strands depicts the body as special, and the fine details of a creature's embodiment as a major constraint on the nature of its mind: a kind of new-wave body-centrism. The other depicts the body as just one element in a kind of equal-partners dance between brain, body, and world, with the nature of the mind fixed by the overall balance thus achieved: a kind of extended functionalism (now with an even broader canvas for multiple realizability than ever before).” (Clark 2007, 2008) displays the tension, scouts the space of possible responses, and ends by attempting to specify what the body actually needs to be, given its complex role in these recent debates. Clark displays the tension between the role of body, embodiment, and embodied cognitive sciences.

Don Ihde argues that although many philosophers, not only phenomenologists, have noted that we always experience the world from an unstated but reflexively locatable perspective, this becomes particularly interesting in simulation technologies (Ihde 2004b). Ihde illustrates the example with R. D. Laing's *The Divided Self* (1965) which describes two points of view often noted when persons describe how they experience an environment: the “embodied” and the “disembodied” positions. Don Ihde has developed this distinction more fully in his *Bodies in Technology*, noting that only in the embodied position does one have the full, multidimensional and multistable perceptual awareness of an experience (Ihde 2002).

Robert Pepperell in “The Human and the Posthuman” reflects on the fortunes of the term “posthuman” since it first came to prominence in the 1990s, and what it might mean to us now. From computer science and science fiction arose the ideas about the enhancement, and even replacement, of humans with technology-based systems. Looking at the intellectual landscape today, Robert Pepperell says, we can see where some of those ideas remain influential and where some now appear misjudged. Pepperell argues that in fact two quite distinct conceptions of posthumanism emerged in this period. One conception held that technology offered a way of overcoming human frailties and

¹ Ernst Kapp published his work “Grundlinien einer Philosophie der Technik: Zur Entstehungsgeschichte der Kultur aus neuen Gesichtspunkten [Fundamentals of a philosophy of technology: the genesis of culture from a new perspective] in 1877.

² American philosopher, John Dewey, saw technologies and technological thinking as an instrumental means for social improvement and the dissemination of democracy.

eventually supplanting us with a superior species. Another, which Pepperell defends, sees posthumanism as symptomatic of a radical shift in our understanding about what it is to be human in the first place (Pepperell 2007).

On the other hand, Bronwyn Parry (2007) in “Interrogating Posthumanism: Historical and contemporary adventures in the enhancement, legibility, and knowability of human bodies” adopts a sceptical approach to some dominant theorizations of the post-human (such as Fukuyama’s) which posit that current technoscientific developments have generated an ontological and temporal breach between an apparently, pre-existing historically consistent “natural” humanity and humanism, and a new “unnatural”, indeed “uncanny”—and some would argue, superior—form of constructed humanity.

Bronwyn Parry paper aims to reveal the entirely unnuanced nature of this kind of thinking through a critical evaluation of three developments that are said to be key signifiers of posthumanism: (a) “Enhancement of the body through technology”; (b) increased use of technology (such as gene sequencing) to make bodies more “legible”; (c) the use of other forms of technology (such as computers and information processing) to make this information available in ways that allow the body to become ever more “intelligible” thus allowing us to “know” ourselves (Parry 2007).

Sean Kelly (2000) in his review of *Andy Clark’s Being There* comments that the central claim is that mainstream cognitive scientists should, like their more revolutionary colleagues, learn to substitute for the “the disembodied, atemporal intellectualist vision of mind...the image of mind as a controller of embodied action” (p. 7).

Andy Clark perceptively argues that recent years have seen an explosion of work, both in philosophy and across the many sub-disciplines of Cognitive Science that is now typically glossed as belonging to the investigation of the mind as “embodied and environmentally embedded” (Clark 2008). The phrase “mind as embodied and embedded” seems to have been coined by John Haugeland in a similarly titled paper that was circulating widely in the early 1990s and that later appeared as Haugeland’s *Having Thought* (1998). There, Haugeland writes that:

If we are to understand mind as the locus of intelligence, we cannot follow Descartes in regarding it as separable in principle from the body and the world...Broader approaches, freed of that prejudicial commitment, can look again at perception and action, at skillful involvement with public equipment and social organization, and see not principled separation but all sorts of close coupling and functional unity...Mind, therefore, is not incidentally but intimately embodied And intimately embedded in its world (Haugeland 1998, p. 236–237).

3 Postphenomenological investigations of posthumanistic embodiment

Don Ihde (2008) in his talk “Of which human are we post?” argues that Francis Bacon, at the onset of modernity, in his *Novum Organum*, worried about the onset of a new era and expressed his concerns with his four idols. Ihde wants to express philosophical concerns about the now postmodern era with four new idols, each one relating to “posthuman” imaginings. Ihde new idols are: the idol of Paradise; the idol of Intelligent Design; the idol of the Cyborg; and the idol of Prediction. In each case, Ihde examines the technofantasies and existentiality related to the new idols (Ihde 2008).

Ihde (2006) in his paper on *Technofantasies and embodiment* argues that movies like the *Matrix* trilogy play upon fantasy in a technological context and relate to the human sense of embodiment. Ihde argues that contemporary technologies are used to explain some of effects and implications for “mind” and embodiment in the film *Matrix*. Ihde points out to an important fact that we have to experience the embodiment where we live, rather to “plug-in” into a technofantasies world. “We do not need technofantasy to be technologically embodied.” (Ihde 2006, p. 166) As Merleau-Ponty argues, “The world is not what I think, but what I live through. I am open to the world, I have no doubt that I am in communication with it, but I do not possess it; it is inexhaustible...” (PP. Xvi-xvii, Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. from French by Colin Smith, Routledge, 1962). Both, Ihde (2006) and Irrgang (2009) are pleading for developing new skills and imaginations to be creative through new technologies.

Technologies do become embodied, but never totally in fully transparent ways. That is how they give us the powers and possibilities we would not otherwise have. But the price of this power entails a subtle and graded sense that while we use and even partially embody our technologies, we also ultimately remain the contingent humans we are. The very ability to step into a multiplicity of our technologies—and thus to also step out of them—is the existential indicator of this constraint for even the best simulation. It is also the point which calls for our constant need for critique (Ihde 2003, 2004a, b).

Postphenomenology, as contends, substitutes embodiment for subjectivity (my version of postphenomenology is a *postsubjectivist phenomenology*, which is based in *materiality of technologies*). Postphenomenology as suggested by (Ihde 2009) is an attempt to overcome modernist epistemology with its Cartesian “subject/object” and “internal/external” splits. But, as a point of departure from the phenomenological tradition, it draws explicit inspiration from early strands of American pragmatism. Bodies

cannot be transcendental; they are existential (Merleau-Ponty). Ihde argues that with Merleau-Ponty, one could see that subjectivity is not something limited to being inside the box, “Truth does not “inhabit” only “the inner man,” or more accurately, there is no inner man, and in the world, and only in the world does he know himself.” (PP xi) More radically, “...even the phantoms of “internal experience” are possible only as things borrowed from external experience. Therefore consciousness has no private life...” (PP. 27) Yet, “consciousness” remains in Merleau-Ponty’s vocabulary and thus carries with it the echo of “subjectivity” (Ihde 2009).

Historically, postphenomenology is formed as a revised, but thoroughly phenomenological approach to technologies and material culture by Don Ihde. Classical phenomenology—first with Husserl, but including most post-Husserlians, except Heidegger—dealt little with technologies. Suggestive hints emerged from Husserl’s analysis of writing and from Merleau-Ponty’s take on prosthetic technologies. In the case of Heidegger, while he was clearly one of the forefathers of twentieth century philosophy of technology, his work remained primarily focused upon technology-in-general in contrast to the next generation of philosophers of technology. Postphenomenology takes on a concentrated focus upon human-technology relations. But it does so with rigorous scrutiny of particular technologies, rather than technology-in-general as in the earlier twentieth century thinkers, including Heidegger. Yet, once philosophy of technology reached its late twentieth century state, it had become obvious that *praxis* oriented philosophies were better suited than analytic approaches to detailing the effects of technological transformation (Ihde 2009).

While Husserl was influenced by James’s non-representationalism, postphenomenology finds Dewey’s ecological ontology to be more descriptively apt than Husserlian philosophy-of-consciousness cast intentionality. Thus, postphenomenology can be characterized as a synthesis of both phenomenology and pragmatism. It is an attempt to understand “being-in-the world” without reposing upon the prejudices that have become synonymous with modernist epistemology and its subjectivistic outcomes (Ihde 2009).

On the other hand, postphenomenology (Ihde 2009) can be characterized as a form of analysis that retains core tactical methods and emphases that were first elaborated by Husserl and Merleau-Ponty. For example, *variational analysis*, particularly taken in a radically concrete or empirical form, remains central to descriptive practice. However, the result of such analyses has also led to a transformation of the earlier notions of “essences”—which, in their Husserlian guise, retained vestiges of ideality and reductionism and which proved incapable of

accounting for *multistable phenomena* (Ihde 2009). Likewise, the primacy of bodily action, including embodied perception, and other forms of praxis, remains central to postphenomenological inquiry. Indeed, for the postphenomenologist, embodied considerations can often account for the variations and multistabilities of gender and cultural difference, including a cultural hermeneutics (Ihde 2009).

Postphenomenology continues the phenomenological tradition of relationalistic *ontology* (Ihde 2009). In the case of technologies, for example, humans may “invent” technologies, but in use, all technologies also “re-invent” humans. Co-constitution is recognized in a relational ontology. But, such relational ontologies are not unique to phenomenology—they are part of the family of pragmatic [organism/environment] and actor network [humans and non-humans] ontologies as well.

Peter-Paul Verbeek in his critical essay on “Beyond the Human Eye: Technological Mediation and Posthuman Visions” (Verbeek 2007) gives the paramount description about the human vision of technologically mediated life-world by elaborating three approaches “modern,” “post-modern,” and “posthuman” to the questions as What does this imply for “the human condition”—the state of being of people living in this technological culture? What kind of subject emerges from these technological mediations? And how do the visual arts help to produce and understand these subjects? These approaches have strongly differing, Verbeek says, analyses of the relations between human beings, mediating technologies, and reality. Indeed, Verbeek argues that contemporary forms of art take us to the limits of what can be called “human”. After having helped us to exercise mediated visions, we might be entering a period in which art helps us to exercise posthuman vision (Verbeek 2007).

Verbeek (2005, 2007) radicalizes Don Ihde’s phenomenological approach of technology and offers a valuable framework for the new relations with new technologies. However, in their analysis, Ihde and Verbeek understand technological mediation as the role technology plays in the relation between human beings and their world. Human beings can have several relationships with technological artifacts. Technologies can be “embodied” by their users, making it possible that a relationship comes about between humans and their world, and also technological artifacts are “incorporated” here, as it were: They become extensions of the human body (See Fig. 1).

The Extension of the Human Senses (EHS) research group specializes in developing alternative methods for human-machine interaction as applied to device control and human performance augmentation. The Extension of the Human Senses group (EHS) focuses on developing alternative human-machine interfaces by replacing traditional interfaces (keyboards, mice, joysticks, and



Fig. 1 Flight demonstration using EMG Bio-sleeve. Extension of the Human Senses. The primary research objective of the Extension of the Human Senses group is to research and develop novel algorithms for modeling and pattern recognition in dynamic non-stationary environments. The work encompasses all stages of using neuro-electric signals for augmentation including: data acquisition, sensor development, signals processing, modeling, pattern recognition, interface development, and experimentation. Courtesy: image above: flight demonstration using EMG bio-sleeve. Extension of the human senses (Courtesy: NASA Ames Research Center). http://www.nasa.gov/centers/ames/research/technology-onepaggers/human_senses.html

microphones) with bio-electric control and augmentation technologies.

Don Ihde claims that with the replacement of the “subject” by embodiment, one changes the body/mind problem in early modern philosophy into a body/body problem. Merleau-Ponty in his works drew his distinction between the “objectively” constituted body, the mechanical and third-person constituted body of the Cartesian sciences, and the *corps vecu* or lived body as experiencing body. This is the body-in-action, outside itself already in a world. Living my body is simultaneously and yet experientially being both inside and outside (Ihde 2003).

Ihde (1993, 2009) suggests a postphenomenology that is not centered on the subject, but on embodiment. With the notion of “embodiment,” he problematizes the ongoing interrelation between the active and perceiving body (or thing) and its environment of action (or use).

Bodies are not transcendental. Bodies can be characterized as gendered and cultured. This insight, I would claim, is fully phenomenological. Ihde comments that for Foucault, the body is the social body, the body politic, the malleable and disciplined body. I agree with Don Ihde that embodiments (Being bodies) suggest many of the states which concern those worried about subjects and being centered. Bodies cannot help but be “centered” in some deep sense—so long as they are living. The very materiality of situated embodiment carries with it many such significations. But Foucault’s body, Ihde says, also assumes a perspective which is quite different from the Merleau-

Pontian one (One clue to this de-perspectival shift occurs with the body of the condemned in *Discipline and Punish*). Ihde comments that the condemned victim is dismembered, and the perspective from which this is described is that of a “third person”—we are back to another side of Descartes’ camera. Bodily, actional, being directed into a world retains a locus. But this locus is interrelational, both with an environing material world and is situated within the world of cultural–social meanings (Ihde 2003).

4 Ethical implications of posthumanism

In his book *Bodies in Technology*, Ihde (2002) addresses two aspects of a *body* as “body one” and “body two”; the lived body under the sign of Merleau-Ponty and the cultural body under the sign of Foucault. Postphenomenologically (Ihde 2003, 2009), both the aspect of a body must be united. The strategy of structuralism, post-structuralism, and semiotics is to attempt to dissolve body one into body two. “Everything is socially constructed.” There are two problems with this: First, I deny that body one can ever be absorbed into the cultural, it is the necessary condition for being a body and is describable along the lines of *corps vecu*. But, equally, body one is situated within and permeated with body two, the cultural significations which we all experience. Postphenomenology is not centered on the subject but on embodiment. Embodiment is both actional-perceptual and culturally endowed (Ihde 2003). The body is not only cultured, it is gendered, Ihde says. We can see that several phenomenologically trained feminists have been particularly good at dealing with the gendered body—Iris Young, Susan Bordo, Carol Bigwood (Ihde 2003). Besides going beyond Merleau-Ponty regarding gendered embodiment, phenomenologically trained feminists have also been able to capture the double sense of sensory and social dimensions of embodiment. They locate the experience of being embodied with the motile, actional embodiment of the Merleau-Pontian notion, with the cultural–social experience of being seen by another as experienced also by oneself.

It is important to note that from *Technics and Praxis* (1979) through *Technology and the Lifeworld* (1990), Don Ihde version of an embodied intentionality was one which examined the placement and role of our use of, interaction with, and subsequent mutual constitution of our technologically textured world and embodied being. I agree with Ihde that what remains phenomenological is the interrelationality of embodied being in a concrete and material world. If I “make” technologies, they, in turn, make me (Ihde 2003). What is different about this postphenomenology or postsubjectivist phenomenology, in a nuanced change from classical phenomenology, is the thematizing

of materiality, particularly in the form of instruments and devices by which we make “worlds” available to us which were previously unexperienced and unperceived. Instruments are the means by which unspoken things “speak” and unseen things become “visible.”

German phenomenologist philosopher of technology Bernhard Irrgang in his fascinating book *Posthumanes Menschsein?: Künstliche Intelligenz, Cyberspace, Roboter, Cyborgs und Designer-Menschen: Anthropologie des künstlichen Menschen im 21. Jahrhundert* (Franz Steiner Verlag, 2005) argues for a new ethics of posthumanity. Irrgang *Posthumanes Menschsein* is a thorough anthropological investigation of posthumanism. Irrgang discusses all technological developments which take us beyond humanity, like technological simulations of experience, expert systems, artificial intelligence, robots, implants and prostheses, designer-babies and cyborgs. Verbeek (2007, 2009) and Irrgang (2005) investigate the boundaries between the human and the technological, and between the human and the posthuman. Irrgang draws from a variety of philosophical traditions, both continental and analytical, and also connects to the literary tradition. Both Irrgang and Verbeek move away from science-fiction-style utopias of a world inhabited by transhuman beings, and elaborates the thesis that rather than trying to replace humanity, we should try to cooperate with the posthuman entities we are to create.

However, before *Posthumanes Menschsein* (Posthuman Bodily Existence) Bernhard Irrgang in his 1997 book “Forschungsethik, Gentechnik und neue Biotechnologie” (Research Ethics, Gene technology and new biotechnology) cautioned us about the ethical perspectives of technologically oriented research. In this book, Irrgang unfolds his project of developing an ethics of science and [technology studies] which pays special attention to the issues involved in applied ethics. Irrgang explores in great detail the ramifications of genetic engineering in its application to plants, animals, and microorganisms. The main goal of his work is to interpret the ethics of science from an act-theoretical perspective and, beyond the extensive look at the issue of ethical application, to lay stress on the central importance of empirical knowledge (See Hildt’s review of Irrgang’s *Forschungsethik* in *Medicine, Health Care and Philosophy*, pp. 210–211, 1999)

(Nagataki and Hirose 2007) in their paper argue that Andy Clark points out there are two different methods within the trend to set importance on the body in cognitive science. The first is called “simple embodiment,” which treats features of the body and its interaction with the environment as constraints upon a theory of inner organization and processing. The second, which is called “radical embodiment,” goes much further and treats such facts as profoundly altering the subject matter and theoretical

framework of cognitive science. They comment that Clark (1999) writes: “the distinction between the simple and the radical forms is, however, not absolute, and many (perhaps most) good research programs end up containing elements of both” (p. 348). But most researchers who apparently take the radical form criticize the view which appoints inner organization and processing made by explicit inner representations as the leading part of cognition.

Coolen (2001) in his interesting conference paper “Becoming a Cyborg as one of the ends of Disembodied Man” (published in the Ruth Chadwick, Lucas Inrona & A. Marturano, *Proceedings of the 2001 Conference on Computer Ethics, Philosophical Enquiries: IT & the Body*, Lancaster University, 2001) comments that the cyborg serves already for some time as a metaphor for a new self-concept of man. Not only is the word itself a contamination of “cybernetic” and “organism,” what is designated by it is a contamination too in a different sense: A cyborg is a bastard originating from nature and technology. To put it more precisely: The cyborg is the actual technological realization of man as an autonomous subject, by struggling out of the grasp of any form of a given naturalness in life, be it with respect to the external things around him or the qualities he has himself. The postmodern assertion that people have narrative identities is matched by the posthuman claim that these identities are very well able to lead their ›lives‹ in non-natural constructs. Coolen is critical of posthumanism and its vision, as he argues: Within that framework, the technology of implanting devices into the body is just a next step in the further self-realization of man as an eccentric living being. It is a line of thought I find attractive and would like to go on exploring. But, of course, this will never lead to a standpoint from which one in the future can look back upon us as beings which have been outstripped by our technical artefacts. Perhaps, scientists and philosophers should better refrain from wanting to take a posthuman or superhuman point of view.

Elsewhere, Don Ihde in *Imaging Technologies: A Technoscience Revolution* (Ihde 2007) is critical of “posthuman fantasies” argues that “instruments, technologies,” are essential and necessary for the production of the scientific knowledge now emerging from the “new astronomy”—but Ihde is correct, in doing that we are not leaving the “human embodiment” behind. “Are we now in the realm of the “posthuman” as some have proclaimed” Ihde says “strong no.” Rather, Ihde says, we now have, with the new imaging technologies, a different kind of human–technology knowledge relation, a relation which Ihde is calling as *hermeneutic*. There remains a reflexive reference to human embodiment and perception, but it is differently located. Ihde is calling for a technological transformation of a phenomenon of “readable image.” Ihde argues “What the new imaging technologies does is to produce for embodied

observers, a new way of bringing close something that is both spatially and perceptually distant.”

Embodiment, *being a body*, is a constant within postphenomenology. But since bodies are actively perceptual and culturally historically constituted, postphenomenology must take account of the variations and possibilities of diverse embodiment. Thus, issues of different cultures, gender, politics, and ethics are included in postphenomenological analyses. Variational analyses provide the methodological style of this approach. With technologies, there are multiple ways in which any single technology may be related to users and multiple ways in which each technology is culturally embedded. By focussing the postphenomenological perspective of body, in the essay, I have tried to describe the human–technology relations, to discover various structural features of human vision in the technologically mediated lifeworld, which is centered upon the ways we are bodily engaged with technologies in the concrete praxis.

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