

Phenomenology and Technology

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As a distinctive philosophical tradition, phenomenology was founded by Husserl and then developed further – into the domain of technology – by Husserl’s most original and important student, Heidegger. Let us begin with this standard view and then develop and refine it as our needs require and space allows.

The watchword of Husserlian phenomenology is: “To the things themselves!” According to Heidegger, phenomenology – a word derived from the Greek *phainomenon* (“what shows itself from itself”) and *logos* (understood as a “making manifest” of the way things hang together) – requires “letting what shows itself from itself be seen in the very way in which it shows itself from itself.”¹ For both Husserl and Heidegger, phenomenology seeks to describe the way things show themselves to consciousness – or, better, *Dasein*, our mere “being-here” – when we do not distort matters with theoretical interpretations drawn from outside the experience of these phenomena themselves.² Phenomenology’s ideal (virtually regulative, but sometimes achievable) is thus a type of *pure description*, the pursuit of which requires phenomenologists to struggle vigilantly against our usual tendency to force the square peg of recalcitrant experience into the round hole of ready-made conceptual categories. For, in so far as the concepts we use to make sense of our experience remain uninterrogated as to their own built-in interpretive biases, we tend not even to notice when inappropriate conceptual projections lead us to a distorted or inadequate apprehension of the phenomena at issue. The phenomenologist must thus be a “radical beginner,” as Husserl liked to say, because phenomenology seeks to neutralize our pervasive but unnoticed conceptual biases by critically inspecting and carefully reconstructing our conceptual toolkit – a process meant to help us understand what our philosophical concepts conceal as well as what they reveal.

Phenomenology’s methods remain widely applicable, but it was not developed in order to describe just any phenomena. Phenomenology is primarily concerned with phenomena that remain “hidden in plain sight” because they are either (1) masked by the distortions of inappropriate theories (as Othello, viewing his wife through the lenses of Iago’s jealousy, sees only a demon in Desdemona) or else (2) concealed by their very immediacy (like the feel of the clothing on our bodies), ubiquity (like water to the fish or, increasingly, technology to us), or obviousness (like Poe’s eponymous purloined letter). The “first law of phenomenology,” the “law of proximity” (drawn from Gestalt psychology),

states that, paradoxically, what is closest to us in our everyday worldly endeavors remains furthest from us in terms of our ability to take it up explicitly and understand it critically. Phenomenology's fundamental concern is thus to uncover, understand and, when necessary, contest and seek to transcend the underlying principles of vision and division which – like lenses we see through but do not see – tacitly inform and frequently distort our basic sense of ourselves and our worlds.

By understanding phenomenology in this way, we can trace the path leading from its roots in Kant and Hegel to its branches in Husserlian and Heideggerian critiques of technology. Kant's *Critique of Pure Reason* famously distinguishes the faculty of *intuition*, which passively receives sensory information, from the faculty of *understanding*, which actively organizes that sensory data into the stable form of conscious "mental representations."³ According to Kant's *discursivity thesis*, the faculties of intuition and understanding work together subconsciously to generate the world of experience.⁴ The understanding, employing its twelve basic cognitive categories (to data already shaped by the two "pure forms of intuition," the proto-categories of space and time), spontaneously sorts and organizes the manifold content of intuition, thereby bestowing the form of stable mental representations on to the stream of sensory data. This continuous combination of intuition and understanding (or *receptive spontaneity*) happens beneath the level of conscious experience, so I simply seem to perceive, for instance, a blue-and-gold book before me, unaware that this stable representation is already the product of my mind's subconscious conceptual organization of the manifold flux of sensation into the form of *this* substance with *these* particular properties.

Husserl thought that Kant's view – that there are only twelve categories tacitly organizing the spatio-temporal deliverances of intuition – faced an insurmountable problem. Recall the example of the book lying before me. For Kant, the mind subconsciously employs a combination of the twelve basic categories in order to arrive at the representational judgment that, of all the multifarious substances with similar properties, this one is a blue-and-gold-colored book, and not a blue-and-gold journal (or, for that matter, just an empty dust-jacket or even a hologram). Where, however, do I get the general idea of "blueness," of "gold," or of a "book"? Husserl did not think such ideas could be explained solely through a combinational application of Kant's twelve categories. (In this, Husserl effectively revives an objection Aristotle's empiricism had raised against Plato's proto-rationalistic theory of *ideas*: How can an idea pre-exist the entire class of entities that instantiate that idea?) Instead, in one of his distinctive theoretical innovations (but one which has proved problematic for Husserlian approaches to the phenomenology of technology, as we shall see), Husserl postulates the existence of an *eidetic intuition*, that is, a capacity to receive the very idea of something (that is, to experience *what* something is) along with other sensory information about it. From a Kantian perspective, however, Husserl thereby seems to blur the boundaries between intuition and understanding. For, on Husserl's view, the contours of my experience of the world do not just reflect the fixed conceptual structures that my mind has already tacitly supplied to the world. Rather, my experience of the world gives me categories (via eidetic intuitions) that the fixed structure of my mind did not first give to the world. Whether that seems like good phenomenology or else a "pre-critical" (or even "mystical") move depends on how rigidly Kant has shaped one's philosophical intuitions.⁵

Kant believed, further, that the cognitive categories subconsciously organizing the sensory manifold into stable representations were simply part of the fixed structure of the human mind.⁶ From the beginning, however, Hegel rejected Kant's view that the categories by which the mind makes sense of the world were fixed for all time. Instead, Hegel's *Phenomenology of Spirit* sought to capture the inner, "dialectical" logic responsible for the historical emergence of humanity's progressively more satisfying cognitive categories. We could thus say that the phenomenological tradition really begins with Hegel's *Phenomenology*. For, in the *Phenomenology* – originally titled "The Science of the Experience of Consciousness" – Hegel attempts to supplement and historically ground Kant's discursivity thesis (which holds that the conceptual scaffolding of our minds tacitly constitutes the limits of our world) by attending to the actual experience of first-personal awareness, which Kant ignored in his logical analysis of the categorial structures conditioning experience beneath the level of conscious awareness. Hegel argued that by carefully describing the structure of first-personal conscious experience we can come to understand not just the emergence of our particular form of self-consciousness (which Kant treated ahistorically) but also the necessary path of consciousness's historical unfolding and even its final political destiny.

The first philosopher to call himself a "phenomenologist," Husserl, independently reinitiated Hegel's "scientific" attempt to describe the structure of first-personal experience. Yet some of Hegel's most radical insights – into not just (1) the incompleteness of Kant's categories (their failure to account for the experience of first personal awareness) but also (2) the historicity of experience (the fact that humanity's basic sense of reality changes with time), (3) the ineliminable absence at the heart of self-consciousness (the fact that consciousness cannot be conscious of itself and of the world simultaneously) and (4) the idea that the historical destiny of humanity is determined by the nature of our understanding of the relation between our selves and the world (such that our fundamental sense of ourselves changes history and vice versa) – did not jointly re-enter the phenomenological tradition until Heidegger, who brought them powerfully together in his historical understanding of the phenomenon of technology.

Indeed, the essential difference between Husserlian and Heideggerian phenomenology is nowhere more perspicuous than in the phenomenology of technology; for Husserlians and Heideggerians give subtly but importantly different answers to the question of whether and in what sense technology has an essence. Not surprisingly, their views originally converged. The later Husserl (of *The Crisis of the European Sciences*) and the early Heidegger (of *Being and Time*) both thought that the positive development of the empirical sciences, in which each science presupposes an understanding of the essence of *what* it studies and then generates empirical results on the basis of that understanding, effectively buries the philosophically crucial prior question of the adequacy of each science's original, guiding understanding of the essence of the class of objects it studies.⁷ Both thus thought that phenomenology, by providing a clarified grasp of these essential foundations guiding each scientific discipline, would allow philosophy to regain its throne as the queen of the sciences. As I have shown in detail elsewhere, however, the later Heidegger outgrew this politically disastrous view, refining it in a way that brought it closer to Hegel's insight into historicity (coming to recognize the historically dynamic nature of our understanding of essences) but in a way that rejected Hegel's teleological understanding of historical progress.

To simplify a complicated story, the mature Heidegger came to the view that the positive sciences are guided not by a historically immutable understanding of the being of all entities, a "fundamental ontology" (or understanding of "the meaning of being in general") that phenomenologists needed only recover in order to set the sciences aright (and so unify the broader cultural understanding the sciences guide). The later Heidegger continued to believe that an understanding of the being of entities implicitly guides all the various knowledge domains. (Heidegger believes this because he maintains a form of ontological holism: Everything is, so changing our basic conception of *isness* eventually changes our conception of everything. As we saw at the beginning, moreover, phenomenology is fundamentally committed to the Kantian insight that our conceptions of things structure their very intelligibility, shaping the way things reveal and conceal themselves.) But Heidegger came to think that this guiding understanding of being changed with time, arguing that this "history of being" derives at the most fundamental conceptual level from a historically variable understanding of the being of entities which has an *ontotheological* structure. Our current sciences are thus guided implicitly by the same ontotheology that increasingly shapes our entire historical constellation of intelligibility.

This implicitly Nietzschean, "technological" ontotheology understands the being of entities as eternally recurring will-to-power, that is, mere forces coming together and breaking apart with no end beyond the self-perpetuating accumulation of those underlying forces. (When philosophers of biology proclaim that life is a self-replicating system, for instance, they seem to confirm Heidegger's insight.) In Heidegger's view, this technological ontotheology is leading us increasingly to understand, and so treat, all entities, including ourselves, as intrinsically meaningless "resources," mere *Bestand*. As this historical transformation of beings into intrinsically meaningless resources becomes more pervasive, it increasingly eludes our critical gaze. Indeed, we late-moderns come to treat even ourselves in the nihilistic terms that underlie our technological refashioning of the world: No longer as modern subjects seeking to master an objective world, but merely as one more intrinsically meaningless resource to be optimized, ordered and enhanced with maximal efficiency, whether cosmetically, psychopharmacologically, genetically, or even cybernetically.⁸

I mentioned that Husserl's phenomenological method developed in part to help afford phenomenologists with an eidetic intuition of the essence of a phenomenon.⁹ Ironically, however, Husserlian phenomenologists have tended to avoid the difficult question of the essence of technological phenomena.¹⁰ Owing to this omission, Husserlian phenomenology tends to join forces with the other contemporary "anti-essentialist" approaches to technology found in the sociology of science and in social constructivism (Latour, Pinch and Bijker, and the like). Such anti-essentialists tend to focus their critical analyses on the social normativity embedded within particular technological devices (rather than on the broader effects of technology *per se*). They might reveal, for example, the way red-light cameras reinforce a normative social order marked by the efficiency and immediacy of brute obedience to the law rather than the neo-enlightenment project that would seek to educate citizens about the rationality of traffic laws, for example, in order to secure their autonomous consent to such laws. Such analyses might note that red-light cameras accept the permanent alienation of subjects from the law and so reinforce that "panopticism" which reifies the carceral surveillance

society Foucault warned against, but they will tend (because of their prior commitment to anti-essentialism) to be extremely cautious about following Foucault by extrapolating from such interlocking technological trends back to an underlying historical "episteme" or broader framework of "power-knowledge." Here Foucault himself, however, was following Heidegger. Indeed, Foucault's revealing analyses of contemporary "biopower" applied and developed Heidegger's critique of our "technological" understanding of being, which increasingly reduces all entities to the status of intrinsically meaningless resources to be efficiently ordered and optimized for further ordering.

Nice examples of such technological "enframing" can be found in the ubiquitous phenomenon of television's laugh-track and, even more poignantly, in the similar but less noticeable technology of "room tone," in which different types of "silence" (actually different kinds of low-level background noise) are recorded and stored for use in making the audio component of film and television recording seem less artificial.¹¹ Still, Heidegger was concerned less with the normativity embedded in particular technological devices than with the ontohistorical trend toward increasing *technologization*, that is, with the disturbing and increasingly global phenomenon (manifest with particular clarity in exemplary technologies such as the autobahn and the Internet, and so rightly called "technological") by which entities are transformed into intrinsically meaningless resources standing by for optimization. The ultimate goal of Heidegger's phenomenology of technology is thus to help us become aware of these nihilistic ontotheological lenses implicitly structuring our basic sense of ourselves and our world so that we can contest and transcend them.¹²

Notes

1. Heidegger, M. (1962). *Being and Time*. Trans. J. Macquarrie and E. Robinson (New York: Harper & Row, p. 58; see also E. Husserl (1969). *Formal and Transcendental Logic*. Trans. D. Cairns (The Hague: Martinus Nijhoff), p. 234: "experienced being 'is there,' and is there *as what* it is, with the whole content and mode of being that experience itself, by the performance going on in its intentionality, attributes to it." See also Inwood, M. (1999). *A Heidegger Dictionary* (Oxford: Blackwell), pp. 159–60; and Moran, D. (2000). *An Introduction to Phenomenology* (London: Routledge), p. 6.
2. Radicalizing Husserl's project, Heidegger argued that Husserl's understanding of consciousness as an immanent sphere of intentionality was itself an example of a theoretical model inappropriate to the phenomenon it seeks to describe. Seeking to eradicate Husserl's residual Cartesianism, Heidegger proposes his notion of *Dasein* or "being-here" – i.e., the making-intelligible of the place in which one finds oneself – as a maximally neutral description of the phenomenon that Husserl's "consciousness" seeks to describe.
3. "Mental representation" is a doubly dubious concept phenomenologically, because I do not typically experience *representations* at all, let alone as taking place *in* my "mind," as if consciousness were some sort of container for representations of a world exterior to consciousness. As Husserl already recognized, "experience is not an opening through which a world, existing prior to all experience, shines into a room of consciousness; it is not a mere taking of something alien to consciousness into consciousness" (*Formal And Transcendental Logic*, p. 232). Heidegger sharpens Husserl's point, writing that "the perceiving of what is known is not a process of returning with one's booty to the cabinet of consciousness after one has gone out and grasped it" (*Being and Time*, p. 89).

4. See Allison, H. (1983). *Kant's Transcendental Idealism: An Interpretation and Defense* (New Haven, Conn.: Yale University Press), pp. 65–8.
5. In more contemporary terms, Husserl's eidetic intuition seems to resuscitate a belief in what orthodox Kantians – who subscribe to a scheme/content dualism by treating sensory "intuition" and conceptual "understanding" as dichotomous – would call a *myth of the given*. But the neat dichotomies assumed by the orthodox Kantian view, long challenged by phenomenologists, are now under siege from numerous quarters, including the holism and neo-pragmatism of Davidson and Putnam, the neo-Kantianism of McDowell, and the neo-Hegelianism of Brandom. I develop some of the important ethico-political implications of this fundamental ontological disagreement in Iain Thomson. "Environmental Philosophy," in H. L. Dreyfus and M. A. Wrathall (eds) (2006), *A Companion to Phenomenology and Existentialism* (Oxford: Blackwell).
6. In other words, Kant's categories look like the type of "hard-wired" conceptual structures that, if they possess a discernible neurophysiological correlate, a future neuroscientist should in principle (or even in practice – say, with a time machine and suitably advanced brain imaging technology) be able to uncover them in any conscious human being from any point in history.
7. See Husserl, E. (1970). *The Crisis of the European Sciences and Transcendental Phenomenology*. Trans. D. Carr (Evanston, Ill.: Northwestern University Press), pp. 46–53. This is a late Husserlian work, and clearly shows the influence of Husserl's critical reading of Heidegger's *Being and Time*, as argued in Ihde, D. (1987). *Instrumental Realism: Interface between Philosophy of Science and Philosophy of Technology* (Bloomington, Ind.: Indiana University Press).
8. Heidegger is deeply worried that within our current technological constellation of intelligibility, the post-Nietzschean epoch of enframing, it is increasingly becoming the case that: "Only what is calculable in advance counts as being." For our technological understanding of being produces a "calculative thinking" which quantifies all qualitative relations, reducing entities to bivalent, programmable "information," digitized data ready to enter into what Jean Baudrillard aptly describes as "a state of pure circulation" on the Internet. See Heidegger, M. (1998). "Traditional Language and Technological Language." Trans. W. T. Gregory, *Journal of Philosophical Research*, 23: 136, 139; Heidegger, M. (1966). *Discourse on Thinking*. Trans. J. Anderson and E. Freund (New York: Harper & Row), p. 46; and Baudrillard, J. (1993). *The Transparency of Evil: Essays on Extreme Phenomena*. Trans. J. Benedict (London: Verso), p. 4. See also Dreyfus's important (2003) monograph, *On the Internet* (London/New York: Routledge).
9. Among other phenomenological reductions, Husserl taught his students to practice an "eidetic reduction" in order to help them learn to discern the eidetic intuitions mentioned earlier. See also Moran, *Introduction to Phenomenology*, pp. 134–6.
10. The point is perhaps best-illustrated with an anecdote. I vividly recall Don Ihde, the leading Husserlian phenomenologist of technology, performing Husserlian "phenomenological variations" in which he compared (1) a technologically advanced virtual fish-tank I discovered in the lobby of our Tokyo hotel (the simulacra was so realistic that several days passed before I noticed that the fish-tank was a fake, although we all walked by it numerous times on our way in and out of the hotel – a nice illustration of the "hiding in plain sight" predicted by phenomenology's law of proximity, which technology reinforces by bringing the distant near and so distancing the near from us) with (2) a real fish-tank Ihde encountered in a restaurant soon after I pointed out the fake one to him. Ihde sought in this way to identify the essential structures common to the idea of fish-tank as such, isolating these structures from the contingent properties instantiated in the technological simulacrum and the random fish-tank. In his obvious mastery of this Husserlian task, Ihde

showed a real knack for discerning patterns instantiated across the minutiae of concrete differences between technologies (and, not surprisingly, Ihde's work has been extremely insightful about the way advances in technological instrumentation drive conceptual revolutions, and not simply the reverse). Yet this very strength, this knack for discerning shared patterns across concrete differences, seemed to come with a weakness as well, for it left the Husserlian without any non-question-begging means of approaching the much larger and more abstract question of the essence of technology as such. (Even if it were not an untenably enormous task, one could not gather together all the different technological devices in order to examine them phenomenologically without some prior criterion for what makes all and only these devices *technological* in the first place.) A Heideggerian, by contrast, would abandon the systematic and scientific pretensions of Husserlian phenomenology and instead accept the unavoidable hermeneutic circularity involved in the attempt to distinguish the technological from the non-technological phenomenologically. (On the Heideggerian approach, the ordinary fish-tank looks like a typically modern artifact, an instance of the human subject's control over an objective world, whereas the technological fish-tank appears as a late-modern technological object, an instance of our reduction of all entities to intrinsically meaningless resources increasingly caught up in an endless cycle of efficient optimization.) Heidegger thus suggests that we should understand the emergence of "technology" in terms of its more than two millennia history, as an eventual eclipse of *poiesis*, bring into being, by one of its species, *techne*, a making which imposes a pre-given form on matter without regard for its intrinsic potentialities. The difference can be starkly illustrated by comparing the woodworking artisan, who decides what to make out of a piece of wood by closely studying it in order to discern its intrinsic potentialities, with the contemporary furniture mill, which reduces all the different wood to sawdust, pastes it back together as particle board, and then ships it to mass suppliers for use in a maximal variety of building applications. That human beings now treat each other like such particle board is, for Heidegger, technology's "greatest danger." For more on this point, see "Understanding Technology Ontotheologically; or, The Danger and the Promise of Heidegger, an American Perspective," in J. K. B. Olsen, E. Selinger and S. Riis (eds), *New Waves in the Philosophy of Technology* (New York: Palgrave Macmillan, 2008).

11. On this enframing of silence, see Baudrillard, J. (2006). *Cool Memories V*. Trans. C. Turner (Cambridge: Polity Press), p. 29: "First victim of the screen: silence. No living silence on television ever again, but minutes of artificial silence, of dead silence, stocked like spare parts or replacement organs, for the needs of the program." Another important philosopher of technology who, along with such French thinkers as Foucault, Baudrillard, de Certeau, and Lyotard, applies and so revealingly develops Heidegger's critique of technologization is Albert Borgmann; see his (1997) *Technology and the Character of Contemporary Life: A Philosophical Inquiry* (Chicago, Ill.: University of Chicago Press).
12. For a much more careful development of the arguments summarized here, see Thomson, I. (2005). *Heidegger on Ontotheology: Technology and the Politics of Education* (New York: Cambridge University Press).

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