

Ortega and Heidegger: The Question of Technology in Times of AI¹

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Abstract: This paper offers a comparative reading of José Ortega y Gasset's and Martin Heidegger's philosophies of technology within the context of modernity's crisis and its impact on 20th-century thought. While Ortega views technology as a creative and existential extension of the human being, Heidegger problematizes it as a mode of revealing that, in modernity, reduces beings to mere utility. The study also connects their perspectives with Shoshana Zuboff's contemporary critique of surveillance capitalism, highlighting how today's digital technologies transform individuals into predictable data objects, marking a dangerous shift away from the humanistic ideals both philosophers sought to defend.

Keywords: Heidegger, Ortega, Zuboff, surveillance capitalism

The Context of Modernity

Reinhart Koselleck argues in *Futures Past. On the semantics of historical time* what characterizes Modernity is the experience of a new kind of time (*Neuzeit*).² The new time shortens the space of experience and expands the horizon of expectation through the introduction of the notion of the "future" as a time of "acceleration" driven by Progress.

The role of technology has become a topic of controversy in 20th-century thought as well as in our time. Certain philosophical schools, such as

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² Reinhart Koselleck, *Futures Past: On the Semantics of Historical Time* (New York: Columbia University Press, 2004), 11.

the Frankfurt School, approached technology in a negative light.³ Modernity is realized in its own historical time, a time characterized by faith in the natural and progressive correlation between technology and morality. However, the end of World War II brought two failures to light: technology had become an instrument of social alienation, and technology without humanism was condemned to its own destruction. Technology and humanism had to work in harmony, since one was not a necessary consequence of the other.

The logic of acceleration and progress finds today its most radical expression in digital technologies and artificial intelligence. The hypothesis of this paper starts with two questions: Is the historical consistency of human beings rooted in technology? Does the human being interpret itself through technology? Numerous studies have addressed the nature of technology from a philosophical standpoint. However, one of the first philosophers to become consciously aware of the pressing need to articulate a “philosophy of technology” was the Spanish thinker José Ortega y Gasset,⁴ who, in 1933, gave a course at the Summer University of Santander titled *Meditación de la técnica* (*Meditation on Technology*).

This paper seeks to explore Ortega’s and Heidegger’s perspectives on technology and to offer a comparative reading of their philosophies. Establishing a dialogue between these two thinkers may enrich the implications that technology holds for our lives in the 21st century, particularly at a time of full expansion of AI and lack of legitimacy in our current democracies.

Contemporary Technology and Surveillance Capitalism

Shoshana Zuboff, in *The Age of Surveillance Capitalism*, published in 2019, expands the problem by warning of a contemporary mutation in the use of technology. Zuboff explains in her book that today’s digital economy creates a market where our personal experiences—everything we do when we use platforms like Google Maps, WhatsApp, and others—are sold as raw material capable of predicting future behavioral patterns. From the

³ For a more in-depth analysis of the context of technology at the beginning of the 20th century based on the thinking of Hans Blumenberg and Ortega, see Esmeralda Balaguer García, “La técnica como forma de estar bien en el mundo: consideraciones en Ortega y Blumenberg,” in *Isegoría. Revista de filosofía moral y política*, 68, (2023).

⁴ In the introduction of *Meditación de la técnica*, the researcher Zamora and Diéguez agree with the idea Ortega was a pioneer in a philosophy of technology. They said that it is a philosophy of technology that is less disenchanting with the current world than that of Heidegger: Javier Zamora Bonilla and Antonio Diéguez, “Ortega, filósofo de la técnica”, in José Ortega y Gasset, *Meditación de la técnica. Ensimismamiento y alteración*, (Madrid: Biblioteca Nueva, 2015), 12–13.

beginning, in the first chapter, Zuboff explains what she understands by “surveillance capitalism”:

Surveillance capitalism unilaterally claims human experience as free raw material for translation into behavioral data. Although some of these data are applied to product or service improvement, the rest are declared as a proprietary behavioral surplus, fed into advanced manufacturing processes known as “machine intelligence,” and fabricated into prediction products that anticipate what you will do now, soon, and later. Finally, these prediction products are traded in a new kind of marketplace for behavioral predictions that I call behavioral futures markets. Surveillance capitalists have grown immensely wealthy from these trading operations, for many companies are eager to lay bets on our future behavior.⁵

In this new paradigm, artificial intelligence and algorithms are no longer tools in service of human well-being—as Ortega proposed with his idea of “supernature,” nor devices of revealing being according to Heidegger’s thought—but instead become mechanisms of extraction and control that turn the individual into a calculable and predictable object: “surveillance capitalism feeds on every aspect of every human’s experience.”⁶

According to Zuboff, big companies such as Google, the pioneer in surveillance capitalism, Facebook, Microsoft and Apple, use people’s intimate knowledge in the digital market as a raw material for taking benefit. This new power in surveillance capitalism it is called by Zuboff as “instrumentarianism.”

Instrumentarian power knows and shapes human behavior toward others’ ends. Instead of armaments and armies, it works its will through the automated medium of an increasingly ubiquitous computational architecture of “smart” networked devices, things, and spaces ... Just as industrial capitalism was driven to the continuous intensification of the means of production, so surveillance capitalists and their market players are now locked into the continuous intensification of the means

⁵ Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York, PublicAffairs, 2019), 14.

⁶ *Ibid.*

of behavioral modification and the gathering might of instrumentarian power.⁷

Zuboff says that surveillance capitalism cannot be connected with a specific technology because it uses many, from platforms to algorithms. The application of algorithms in the predictive analysis of collected data serves to better understand and generalize in the creation of future products. Google's algorithms select and order search results and Facebook's select and order the content of its "News" section. Since the information is digital and its volume is enormous, it is difficult to discern its meaning. However, the "intelligent algorithm" can monitor parts of the body to gather more complex information, such as emotional information.

The most important question we should ask is: do algorithms have an ideology? Algorithms guide us toward consuming certain types of online content and targeted advertising. This data operates as an extra used to predict aspects such as personality, ideology, or sexual orientation, allowing the production of goods designed for individuals with specific character traits, beliefs, emotions, or orientations. Zuboff wonders: "What happens to my will to will myself into the first person when the surrounding market cosmos disguises itself as my mirror, shape-shifting according to what it has decided I feel or felt or will feel: ignoring, goading, chiding, cheering, or punishing me?"⁸

If digital systems commodify our inner life, the question of whether freedom of thought can survive in algorithmic environments is not merely ethical or political, but ontological. It concerns the very possibility of thinking as a human act in an age when thought itself has become a resource. For that reason, Zuboff argues that this extreme instrumental logic represents a dangerous drift from the Enlightenment project, where technology no longer saves effort or humanizes existence neither, but instead privatizes experience and reduces the human being to manipulable "behavior." To understand how such a technological configuration became possible, we must return to two decisive philosophical interpretations of technology: Ortega and Heidegger.

Comparative Perspective on Technology: Approximations in Ortega and Heidegger

Ortega and Heidegger understood the emergence of modern technology as a defining element of the human condition. Heidegger gave

⁷ *Ibid.*

⁸ *Ibid.*, 185.

technology ontological priority over science, but not historical priority; Ortega, on the other hand, thought about technology from an ontological and historical perspective. For that reason, he argued that the purpose of science was not knowledge, but rather to make technology possible.

In Darmstadt, Germany, a colloquium on architecture took place in 1951 to think about a new possible Europe configuration after World War II and also to reconstruct its values and *humanitas*. Ortega and Heidegger met there. They were invited to give a lecture on the same subject: technology. Heidegger gave the lecture *Bauen, Wohnen, Denken*, while Ortega, *Der Mythos des Menschen hinter der Technik*. Both philosophers wrote about this meeting: Ortega in some articles he published in 1952 in the newspaper *La Nación* of Buenos Aires and Heidegger in a text he wrote after the death of the Spanish philosopher in 1955 called “Begegnungen mit Ortega”. The contact with the philosophy of Heidegger and also Dilthey’s from 1930 stimulated him to insert his philosophy within a more academic tradition of thought.

In the course of 1933 Ortega conceived technology as a specific and constitutive feature of human beings, since it constantly opens up new possibilities for them to realize their life project. In the development of technology, human beings become more human, according to Ortega. Technology is rooted in each person’s life. “Technology is the effort we make to save effort,”⁹ Ortega states as a first definition in the 1933 course.

We save effort and life-time through technical creation, which allows us to have time to “enter within ourselves” and reconfigure future action. Ortega explains that this technical impulse in humans arises to “create” a new world. *Technik ist creatio ex aliquo*.¹⁰ This aspiration to create another world arises because human beings live in an original world we agree to call “nature,” but to which they do not belong. The natural environment is insufficient for human beings, according to Ortega, which is why they invent a “supernature” through technology—one capable of meeting their spiritual and intellectual needs. In this sense, Ortega understands technology as an existential necessity for adapting the environment to the individual and transforming the circumstance into a more habitable space for human development.

Ortega’s main ideas about technology can be summarized in four fundamental characteristics:¹¹ (1) Technology is an orthopedic device. In “*Der*

⁹ José Ortega y Gasset, “Meditación de la técnica”, in *Obras Completas*, vol. V, (Madrid: Taurus/Fundación Ortega y Gasset, 2004-2010), 566.

¹⁰ José Ortega y Gasset, “El mito del hombre allende la técnica”, in *Obras Completas*, vol. VI, (Madrid: Taurus/Fundación Ortega y Gasset, 2004-2010), 812.

¹¹ It is possible to find a more detailed discussion of these ideas in Esmeralda Balaguer García, *Los límites de decir: Razón histórica y lenguaje en el último Ortega*, (Madrid: Tecnos, 2023), 87-94.

Mythus des Menschen hinter der Technik," Ortega says that, from a natural point of view, human beings are sick animals that survive by chance, since nature is insufficient for them. Human beings want not just to be in the world but to be well. For this reason, they create a supernature with the help of technology. Technology is constituted as the reform that man imposes on nature to satisfy his spiritual needs. (2) However, since human beings are historical beings according to Ortega, technology is the result of man's *poietic* and creative impulse and consequently it is also a historical phenomenon. Human beings would not have survived without that orthopedic device that is technology (*Homo sapiens* as *Homo faber* in its earliest form). (3) He devotes effort to create and then execute a plan of action that allows him to ensure the satisfaction of basic and superfluous needs. Furthermore, technology allows him to achieve that satisfaction with minimal effort in the future and offers him new possibilities. Let us think, for example, not only of the need to make fire, but also of the need to create a device with which we can always make fire without having to return to the primitive stage, such as the manufacture of a lighter. Technification is shown to be the process by which human beings relieve themselves of tasks that now require their effort only once. The need to save effort is closely linked to man's fantastic ability to project himself into the future. Technical invention arises from the imaginative capacity that human beings have and find in moments of self-absorption. This is the "when" of technology. Human beings seek moments of inner reflection to form possible representations of the world and forge ideas about reality. These allow them to plan their future actions in the circumstances and continue building their supernatural nature. (4) Ortega says that if we are able to save time, we will have time to invent a life. However, the invention of life, its ideation, is pre-technical. Human beings invent it because, unlike animals that live in a state of constant agitation, they are capable of self-absorption as well as forming representations of the world around them and devising a different one. For Ortega, moments of self-absorption allow humans to imagine possible future life projects for the realization of their authentic selves.¹² This time saved by technology facilitates the invention of his own life. Technology is creation. That creation not only transforms the outside world, but also necessarily transforms human beings themselves through self-construction. Ultimately, the primary mission of technology is to give humans the freedom to be themselves, to invent and narrate their lives, according to Ortega.

According to this, Ortega would understand AI as the historical supernature of our time. For him, AI would be a creative impulse to imagine

¹² José Ortega y Gasset, "El mito del hombre allende la técnica", in *Obras Completas*, vol. VI, (Madrid: Taurus/Fundación Ortega y Gasset, 2004-2010), 815.

ourselves at the height of our time. Now, it is worth asking whether we are faced with a technology that jeopardizes what Ortega considers its vital aspect, namely: does AI free up time for the invention of life?

Heidegger also engaged deeply with modern questions about technology in his major work *Die Frage nach der Technik* (1953). Although this paper draws primarily on Heidegger's later reflections on technology, it is important to acknowledge the continuity between his early and later thoughts. Heidegger's analysis of technology does not constitute a rupture with the fundamental ontology of *Being and Time*, but rather a deepening of its central insights. In *Being and Time*, Heidegger shows that the primary way in which *Dasein* encounters beings is not through detached theoretical contemplation but through practical involvement. Beings initially and for the most part appear as *Zuhandenes*—ready-at-hand—within a meaningful context of use. The later critique of modern technology must be understood as continuous with Heidegger's earlier phenomenology of everyday worldhood.

For Heidegger, technology is not only about means, instruments, or machines: the instrumental view is not the "true" one. Heidegger does not reject use or utility as such. On the contrary, in *Being and Time* he shows that *Dasein*'s primary way of encountering beings is through practical involvement: beings appear as *ready-at-hand* (*zuhanden*) within a meaningful context of purposes. Human existence is essentially anticipatory and project-oriented, and therefore always involves making use of things. Based on the analysis of the Greek concept of *poiesis*, Heidegger considers that technology is a way of unveiling or revealing the real that was hidden.¹³ For Heidegger, technology is the mechanism that enables the discovery of *Dasein*. In this sense, technology is, on the one hand, an art of unveiling or revealing, and on the other, an art of production and a form of knowledge that recognizes the skill of bringing a being into presence:

Bringing-forth brings hither out of concealment forth into unconcealment. Bringing-forth comes to pass only insofar as something concealed comes into unconcealment. This coming rests and moves freely within what we call revealing [*das Entbergen*]. The Greeks have the word *aletheia* for revealing. The Romans translate this with *veritas*. We say "truth" and usually understand it as the correctness of an idea.¹⁴

¹³ Martin Heidegger, *The Question Concerning Technology and Other Essays* (New York and London: Garland Publishing, 1977), 11–12.

¹⁴ *Ibid.*, 13.

The unveiling of modern technology consists of provoking nature so that everything in it appears ready for exploitation. In other words, for Heidegger, technology makes us see reality as a set of resources to be used at our convenience, as consumer goods.

What is interesting about Heidegger, in my opinion, is that he does not invite us to understand technology as an ontological problem, as a way of approaching the world and revealing the real that it has reserves. For Heidegger, the danger of technology was not in the technological products themselves, but in their very essence, in the way they unveil reality. For that, in Heidegger, technology represents a lower form of truth when compared with *Phrónesis* or *Sophia*. Although technology is a mode of revealing truth, Heidegger names the essence of modern technology *enframing* (*Ge-stell*), a mode of revealing in which beings appear as *standing-reserve* (*Bestand*) and believes that modern technology has reduced beings to terms of utility or market value. Modern technology leads us to establish a relationship of disposition and domination with the world around us and with nature in particular. In the age of artificial intelligence, this logic is intensified. Algorithmic systems transform human behavior into data, rendering individuals predictable and administrable.

Heidegger points out that the real danger of modern technology is that the technological understanding of Being becomes exclusive. Technology only reveals Being to us in a limited and exclusive way, that is, preventing us from seeing that the essence of technology is a specific way of unveiling reality as opposed to other possible, the non-provocative ways. Heidegger was able to warn that the great danger lay in understanding everything as a technical problem that pulled human beings away from the earth and uprooted him.

Despite this more negative or pessimistic conception of technology, Heidegger also points to the possibility of salvation in the essence of technology: we cannot limit ourselves to see technology in its instrumental aspect but must discover what it is that unfolds its essence in technology. The essence of technology belongs to the constellation of truth. If we understand this, we would have a free relationship with technology in which we use it without being completely dependent on it. Art, for example, could show us that the technical way of seeing reality is neither the only one possible, nor the most original or authentic. That way we could prevent the provocative mode of unveiling from dominating. In fact, at the core of his reflections, Heidegger considered World Wars to be a consequence of the state of abandonment of Being.

In 1952, a year after the Darmstadt conference, Ortega wrote a few pages based on that colloquium. Ortega claimed that in their respective

lectures, both had said exactly the opposite:¹⁵ Heidegger asserts that “to build” (*bauen*) is “to dwell” (*wohnen*); one builds in order to dwell as a means to an end, but this end—dwelling—precedes building. Because man already dwells he builds so that his dwelling may become a contemplation of universe, an opening up to it. All this work dedicated to the Universe is, ultimately, thinking, meditating, *dichten*. Hence the title of the lecture *Bauen, Wohnen, Denken*.

Ortega, on the other hand, explained that each animal species finds space to inhabit on Earth, what biologists call a habitat. The fact that humans live anywhere means that they lack a proper habitat, a space where they can simply live. Indeed, the Earth is originally uninhabitable for humans. That is why they build, “supernature”. Since they can build anywhere on the planet—and in each place with a different type of construction—they are capable of inhabiting everywhere. Human beings are not attached to any particular space and are, strictly speaking, heterogeneous to all spaces. Only technology, only building—*bauen*—assimilates space to man and humanizes it.

It is worth pointing out the most notable difference between them. Heidegger emphasizes human beings’ familiarity with the world and argues that modern technology separates their access to Being, from a deeper way of revealing reality. However, Ortega insists that circumstances are strange and hostile to us, we are thrown into it, and therefore technology opens up unlimited possibilities for us to rework our circumstances and have time to devote ourselves to the task of our self-creation. For the Spanish philosopher, technology humanizes us. For Heidegger, ultimately, Modernity would finally reveal itself under the mask of technological nihilism. Ortega’s analysis is fundamentally anthropological and sociological, which is why technology is a constitutive part of human beings, but Heidegger avoids this approach. It is important to clarify this: Heidegger does not reject technology, nor does he propose eliminating it from human life; he simply wants human beings to have a free relationship with the essence of technology. For example, before asking ourselves what to do, we should ask ourselves how we should think, since thinking is already a genuine form of doing.

Considering the contemporary challenges posed by artificial intelligence and surveillance capitalism, this paper has shown how Ortega y Gasset’s historical and vital understanding of technology and Heidegger’s ontological critique of enframing offer complementary insights into the technological condition of our time. While Ortega highlights technology’s

¹⁵ José Ortega y Gasset, “En torno al ‘Coloquio de Darmstadt’, 1951,” in *Obras Completas*, vol. VI, (Madrid: Taurus/Fundación Ortega y Gasset, 2004-2010), 805.

role in shaping human life projects, Heidegger reveals the danger of reducing beings and, ultimately, ourselves to calculable standing-reserve.

From Zuboff's perspective, AI becomes the epitome of a kind of technology which, far from pointing to the Humanitas that both philosophers wanted to recover after the catastrophe of war, now points toward a political economy of power based on the capture of human behavior. In this sense, the digital economy embodies the culmination of instrumental reason that both philosophers sought to critique. Technology, instead of opening a horizon for being, becomes an opaque system of governance. Zuboff's work compels us to rethink the ethical and ontological dimensions of technology today: how can we reclaim a space for freedom, for genuine thought, for creating our life and for revealing reality within a technological order that constantly anticipates the shapes of our behavior?

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