

Javier Echeverría's Perspective: from Technoscience to Technopersons

La perspectiva de Javier Echeverría: de la tecnociencia a las tecnopersonas

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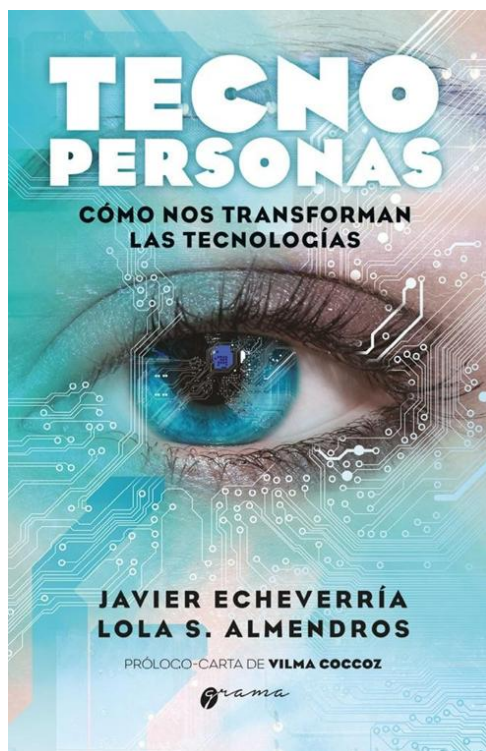
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It is well-established that the Basque philosopher Javier Echeverría is one of the leading figures of contemporary Epistemology. In the 1990s, in our academic circles, his book *Introducción a la Metodología de la ciencia* was an innovative study material in the Epistemology courses when the positivist and neopositivist approaches sparked debate with Popperian epistemology, excluding authors such as Kuhn or Feyerabend from the area of interest in Argentina. In my opinion, it was the first time, in this book, that the grouping of several epistemologies of the twentieth century saw the light under the name “Inherited Conception”.

Although it was not Echeverría who created it, he was the one who elucidated its characteristics in order to better understand why other epistemologists had distanced themselves from neopositivism. The terms “scientism” and “proletarianization of science” express key points of critique with regard to the assumptions of inherited conception, especially in the defense of the thesis of value neutrality of science, which introduces, as an epistemological theme, the need to debate scientific policies.

In later books, he delves deeper into this concept and, since then, he has argued that the great challenge of contemporary epistemology is to help theorize about the actions of scientists and technologists, given that the processes of scientific-technological change are reflected in economic, legal and social changes. In those years of the resurgence of neoliberalism, the thesis of neutrality of science and the endorsement



of the depoliticization of scientists in the face of the negative effects of the scientific-technological development, Echeverría denounces this attitude as “the ostrich policy”, which consists in sticking our heads in the ground and not getting involved in issues of technoscientific practice.

For Echeverría, technosciences are not only hybrid, scientific and technological but also economic, legal, political, advertising and, at times, military practices. They involve not only scientists and engineers, but also other types of agents, who contribute different cultures, interests, goals and value systems. In the following years, his philosophical production was devoted to thematizing the perverse consequences of the innovations caused by the intrusion of the digital world. These topics are found in the following essays: *Telépolis* (Anagrama Essay Prize, 1995), *Los señores del aire: Telépolis y el Tercer Entorno* (National Essay Prize, 2000), *Ciencia del bien y el mal* (2007), *La luz de la luciérnaga. Diálogos de Innovación Social*, along with Ander Gurrutxaga, 2012, among others. In May 2016, we had the pleasure of welcoming Javier Echeverría to Universidad Nacional de Lanús, when he participated in the IV International Congress of Epistemology and Methodology “*Tradiciones y rupturas: El escenario argentino e iberoamericano*”, with a lecture titled “*Epistemología y axiología de la tecnociencia: conoci-*

miento e innovación”, which was later published in the book *Modulaciones Epistemológicas IV: Tradiciones y Rupturas*, Ambrosini C., Mombrú, A., Mendez, P., compilers, Remedios de Escalada, EDUNLa, 2017.

For Echeverría, technoscience is, then, “know-how”. As opposed to the ideal of neutral science, with its strict separation between facts and values, his approach pursues conceptual tools to elucidate the modes of technoscientific production that characterize this new phase of knowledge production. Being unaware of this complex network of valuations in tensions and disputes implies disregarding elements to judge scientific activity as a form of social production. This shows the presence of “axiological crises” that afflict scientists, which are practical rather than epistemic, in the ethical-political sense, meaning that there are no doubts about the theoretical basis of the theories on which scientists work, but rather about the benefit of these theories for individuals, the environment, or the societies they are a part of.

Another source of discrepancies and discussions is the profitability and the social and economic impact of applying scientific knowledge. Moreover, in 2017, we met Javier Echeverría at a Congress at Universidad de Salamanca, where he presented his book *El Arte de Innovar: Naturalezas, Lenguajes, Sociedades*. Madrid: Plaza y Valdés Publishers, 2017. In this personal meeting, he gave us a copy of this publication, so that it could be available for our students and professors at UNLa. This is why we can find a review of this book, written by Dr. Hugo Alazraqui, in the 2018 issue of the journal *Perspectivas Metodológicas*. Here, he reexamines topics already addressed at the end of the 1990s when, as he himself recounts, he supported the thesis that it is not only people who innovate through science, culture, and language, thus upholding the concepts of “technolanguages” and “technopersons”. Nature also innovates, as there are innovations in the macrocosmos, the mesocosmos and the nanocosmos, which are completely alien to the human interventions but leading to great social changes.

Two years before the outbreak of the COVID-19 pandemic caused by the SARS-CoV-2 virus, Echeverría, in this work, provides categories of analysis that are suitable for theorizing about this event that devastated humanity, irreversibly changing our way of life. He prophetically anticipated the events, seen in the light of what would later happen to the world, affirming that the philosophy of innovation can contribute to reestablishing a leading place to face the great problems that affect societies. This idea is aimed at developing an axiology of pluralistic science, which I also consider skeptical, as, Echeverría argues that innovation processes are strongly destructive, despite the optimistic images associated with them. He proposes that we devote ourselves to this topic because, contrary to the reductionist image hegemonically installed by the media and even by the Oslo Manual, innovation in itself is not good and may engender disvalues. In this naturalized conception of innovation, anthropocentrism is displaced by

a superior approach, given that it is possible to speak of innovations without including human participation. Thus, we can see that Echeverría proposes to question and reject the optimistic and well-intentioned images associated with technological innovations, which is consistent with his previous works and finds its continuity in the publications of recent years.

Given these previous insights, it is evident that Echeverría's prolific and award-winning work achieves a new milestone in the book *Tecnopersonas*, written in collaboration with Lola Almendros, a philosopher and researcher at the Institute of Philosophy of the Spanish Scientific Research Council ("CSIC", as per its Spanish acronym). This edition, printed in Buenos Aires, also demonstrates the commitment to Latin America and the intellectual and emotional connection with our American countries. Unlike the Spanish edition, published by *Tea Ediciones* in 2020, this edition begins its index with a foreword by the psychoanalyst Vilma Cocoz, in which she addresses a Latin American reader in the first person, as an exile from the Argentine dictatorship who came into contact with Echeverría at the Faculty of Zorroaga in Donostia, during the recovery of Euskera, the Basque language, when Franco's regime was already in its death throes.

It highlights Echeverría's perspectivist attitude as that of someone imbued with the Leibnizian spirit, while also highlighting a certain degree of affiliation between the 18th and 21st centuries, two centuries that were immersed in the spirit of innovation, where the present is seen as a response to the challenges of the time.

In the introduction, the authors refer to ludic categories when inviting readers to organize their reading following different rules, as, ultimately, "there are no rules for the game", after stating in the previous sentence, "We invite you to play with us". At this point, we can recall that Javier Echeverría published an essay *Sobre el juego* in 1980, where he admits that the germinal ideas of his thoughts date back to 1971, when there was still no talk of the impact of video games and the intrusion of the digital world into the ludic space. In this essay, he admits that ludic categories are suitable for characterizing the contemporary world, on condition that one does not fall into monistic and totalitarian understanding, since there is no universal game. On the contrary, he proposes to conceive thought as a "roll of the dice". Nor is it a question of confronting the idea that there is a Lord of the Game "whose current name is 'scientific theory'" (page 373), by opposing another unifying theory that would incur in the same totalizing attitude. In this sense, Echeverría highlights the impossibility of giving a superior theory for understanding the ludic phenomenon and, at the same time, the impossibility of ascribing meaning to the term "anarchist" as a way of labeling its position regarding the game. These precedents allow us to place the proposal of this new edition, continuing with the stances already assumed by Echeverría with regard to the characterization of the techno-scientific society, in which we are also involved already as technopersons, where the same ludic attitude is evidenced under the idea that the virtue of the player is revealed in the ability to find a new combination, a harmony that is always different from those already known.

Formally, this book has a first part that explores traditional ideas about the concept of "person" in its economic, legal, and political dimensions. It then establishes a connection with the technological world, especially technoscience, to initially approach the proposal of addressing the concept of "technopersons" and its relevance.

Similarly to the playful effect in Cortázar's *Rayuela*, the ludic charm permeates the organization of themes and, in this sense, the authors propose following different reading orders. A first proposal to enter the game is to link the concept of "technopersons" to power relationships, in the domains of "the Lords of the Air," who restore new forms of voluntary servitude. Along this journey the hypothesis of the malign techno-genius (Chapter 4) emerges, where methodical doubt is applied to technoeexistences and technoworlds, given the need to reflect on the modes of domination imposed on the third environment (E3) at times when the achievements of democracies yield to the onslaught of intensified forms of neo-feudalism. In this point, the authors express that the Preamble of the Universal Declaration of Human Rights of 1948 states that its principles apply to UN Member States. In the third environment, there are no States or territories, there are networks. This mutation of power requires the formulation of a new political and legal agenda at an international level, which commits the Lords of the Air to respect the rules of a game conducive to achieving "an egalitarian and humanistic society" (p. 167).

In light of this proposal, the authors highlight Amartya Sen's positive contribution to thinking about the technological transformation of individuals, where they emphasize two concepts: "space of capabilities" and "functioning space", considering that both are related to values. Unlike Sen, who applies these

concepts to individuals, this book proposes to apply them to the concept of technopersons, which also includes collective technopersons, such as technoscientific companies. The merit of this approach lies in the fact that it manages to overcome the limitations of the rationality approach oriented to the maximization of results, as here the rationality of actions is oriented to the preservation of values. At this point, we add Arrow's impossibility theorem as well as other developments, which demonstrate that the notion of "social preferences" in the model of strategic rationality, inherent in the Theory of Games, is problematic and the concept of "general will" may be incoherent in this model, where homogeneous decision-making entities are presupposed. However, the problem becomes complicated when, despite having common interests, decision-makers are heterogeneous entities, as is the case of a pluralistic society. Given that, in most cases, the success of the action depends on the actions of both the actor and others, the problem of the maximization of utilities is revealed as a conflict among different maximizations, thus rendering the basic model inadequate. In view of these limitations, Sen's approach proves superior and enables the analysis of the collective actions involved in technoscience; it does not prevent individual or collective agents from having different values, while still maintaining a common axiological core. The first part of this book is completed in Chapters 6 and 7 with the treatment of mutations in *physis*, from the Greeks to this new understanding of technonature, where technogenes, cyborgs and technobodies demand a superior approach of transhumanisms. This challenge is taken up by the authors when they propose new categories within "technohumanism" where technolife and technodeath are central categories in this new conception of the human. Without losing sight of the fact that the central interest of this book is to thematize the scope of the category "technoperson", the last chapter of this first part proposes to distinguish different types of technopersons: humans, robots, technocrowds, technocommunities and technosubjects, each with their specific characteristics, could be grouped as distinct inhabitants of the third environment.

As denatured entities, technopersons do not adhere to gender dictates. In these analyses, they propose to break the dichotomies between the masculine and the feminine, including with this cancellation, the rejection of the superiority of the masculine over the feminine. They assert that this initiative confronts the Lords of the Air, who are essentially consolidated Technopatriarchies (p. 280). Although the concept of person has been historically gendered, here refers to the concept of mask and, given this characteristic note, they justify axiological pluralism by including human and non-human technopersons that inhabit the third environment, admitting that there is no underlying mode of being but, on the contrary, there are "ways of doing". The differences between technopersons are not ontological but axiological: they indicate different modes of being in the world. This first part concludes with the proposal of nine intervention measures against the absolute powers of the Lords of the Cloud in the third environment, as a form of resistance or non-submission, with the warning that these nine points are subject to the opinion of others, and to public, open, and collective debate, taking into account that "the third environment is too important not to be prudent when acting" (p. 282).

In the *History of Ideas*, the term "voluntary servitude" is attributed to Étienne de La Boétie. In these nine proposals for courses of social action, the authors seem to coincide with La Boétie in that servitude is not an unavoidable destiny. Recognizing "servitude" as insurmountable, as a nature impossible to disenchant and resist, is equivalent to relinquishing the use of freedom and thereby rejecting ethics and politics. Alongside this implicit recognition, the central virtue of the Aristotelian politician, *phrónesis*, the intellectual virtue translated as "prudence," is summoned here, a virtue that must accompany decision-making. Here again, the pessimistic and skeptical tone found in relation to the ability to innovate is evidenced. Closer to Montaigne than to his friend La Boétie, who holds an optimistic position regarding the possibility of altering the prevailing order, the author of *Ensayos* asserts that it may be irresponsible to encourage the spirit of rebellion. Montaigne's stance on the authority of laws seems to stem from a pragmatic position that warns about a balance between costs and benefits, since any alteration of the existing order might harm rather than benefit social life, especially for the oppressed, when a new order reinstates new forms of tyranny.

In the second part of this book, the authors present the reader with five experiments in language and communication, which are affected by the new uses of the third environment.

- Experiment 1: What a Tweet is like
- Experiment 2: What Can Be Done with a Tweet
- Experiment 3: Technospace and Technotime: Off-line life
- Experiment 4: Post-truth and Transparency in the Computerized Society
- Experiment 5: Technopower and Politics

The book concludes with an Appendix on Viruses and Technoviruses to present the virus causing COVID-19 as a technovirus, as it can be categorized as a technoperson inhabiting the third environment and may not be categorized in its ontological dimension but rather in its axiological dimension, because it has become not only a biopolitical problem, but a public health problem as well. Once the pandemic was declared in March 2020, it transitioned from being a virus to being an infodemic, giving rise to an infodemic, that is to say, a cyberpandemic that mainly produced emotional effects, leading to all kinds of theories as to its origin and health effects in social networks. With regard to the States, it generated a type of "state of war" with consequences that have yet to be fully evaluated. The technovirus does not have a defined identity. Paraphrasing Ortega y Gasset, they affirm that "the virus is the virus and its circumstances" (p. 364), it contaminates minds. The war against the common enemy translates into a war of antivirus patents. The authors conclude this chapter with a wishful expression: "May our mental and emotional immune system be strengthened for a future coexistence with the infodemic, beyond the pandemic!" (p. 366).

In this book, the authors engage in a dialogue with Heidegger, Ortega y Gasset, and Castells, for whom they feel indebted for several of their concepts; with contemporaries such as Amartya Sen, Bauman, Elster, Wittgenstein, but also with Aristotle, Plato, Kant and with themselves by reformulating ideas that, in an anticipatory way, in the case of Echeverría, can be found in the germinal ideas since the 1970s, with which he maintains a coherence worthy of a mathematician and it must be in this sense that the affiliation with Leibniz is powerfully manifested.

The anticipation of the concept "technopersons" may be found in these other contributions by Javier Echeverría within the framework of activities with the Universidad Nacional de Lanús.

Echeverría, J. (2018). Epistemología y axiología de la tecnociencia: Tecno-mundos y tecno-personas. En C. Ambrosini, A. Mombrú, y P. Méndez (Eds.), *Modulaciones epistemológicas IV: Tradiciones y rupturas* (pp. 65–78). EDUNLa.

The video recording of Javier Echeverría's lecture, "Epistemología y axiología de la tecnociencia: conocimiento e innovación", delivered at the IV International Congress of Epistemology and Methodology (Tradiciones y rupturas: el escenario argentino e iberoamericano), held at the Universidad Nacional de Lanús (Argentina) on May 12–13, 2016, is available at: **YouTube Recording of the Lecture**. A later conversation with Javier Echeverría, recorded on May 12, 2020, can be accessed at: **Conversation with Javier Echeverría (2020)**.

Bibliography

Alazraqui, H. (2018). Reseña de *El arte de innovar. Naturalezas, lenguajes y sociedades*, de J. Echeverría. *Perspectivas Metodológicas*. <http://revistas.unla.edu.ar/epistemologia/article/view/2066>

Domènech, A. (1989). *De la ética a la política: La relevancia ético-política de los teoremas de imposibilidad*. Grijalbo.

Echeverría, J. (1999). *Sobre el juego*. Destino.

Echeverría, J., & Sáez Rueda, L. (2020). *Tecnopersonas: Cómo las tecnologías nos transforman*. Trea.

La Boétie, É. de. (2010). *El discurso de la servidumbre voluntaria* (D. Tatián, Trad.). Las Cuarenta. (Obra original publicada en 1576)

Montaigne, M. de. (2011). *Ensayos*. Losada.

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