Recension
Fragment the future. Essays on Technodiversity

Recensión
Fragmentar el futuro. Ensayos sobre tecnodiversidad

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Introduction

In his 1953 manuscript, The Question of Technique, Martin Heidegger (1997) introduced the concept of Gestell –commonly translated into English as “framework,” “frame,” “location,” or “apparatus”– to refer to the essence of modern technique. Heidegger perceived that, unlike the Greek conception of techné, which possesses a poietic character that allows to produce something, modern technique operates in the opposite sense: it imposes –hence the “emplacement”– a horizon of understanding or an order that makes the true unveiling of being impossible.

Heidegger criticizes this concept of technique because it implies a relation of domination with nature by converting it only into a natural resource, into a “reserve”. In this sense, everything produced by modern technique is framed within this inauthentic way of relating to the world, which, according to the German author, implies danger.

Three quarters of a century after Heidegger’s reflection on technology, contemporary technology followed the same course as the Gestell. Given its complete ubiquity, technology has established itself as the primary mode of relating to everything around us, from our personal and affective relationships, to everything that happens in the fields of economics, politics, art and culture itself in general.

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Although no human aspect has ever escaped technology, in the current context it is not only the universal anthropological character of technology, but also the monotechnological logic it imposes. The world, with all its diversity, seems to be leaning towards a standardization of the modes of technological relations. Facebook, for example, may host millions of different relationships, but they are always framed within the affordances of its platform, which, in turn, is the product of a Western logic that values technology in terms of progress, efficiency and utility.

This is the problem faced by philosopher Yuk Hui in Fragmenting the Future. Essays on techno-diversity. This book brings four essays together (originally published in the e-flux journal) as well as three of his lectures, where Hui presents some of the topics emerging from his concepts of cosmo-technics and techno-diversity, in addition to his critique of monotechnological culture. Hui's intention, as he states in the introduction to his book, is to try to reframe the Gestell from an approach that is capable of recognizing the multiplicity of cosmologies based on the technological relations that emerge in the periphery of the West, but at the same time separating himself from other movements, such as those of multiculturalism or the naivé postcolonial critiques, which, in his opinion, do not solve this problem. Hui presents his project in the form of an antinomy:

**Thesis:** technology is an anthropological universal; it can be understood as externalization of memory and liberation of organs, as anthropologists and philosophers of technology have formulated it.

**Antithesis:** technology is not an anthropological universal; it is enabled and constrained by particular cosmologies that go beyond functionality or utility. Consequently, there is no single technology, but multiple cosmologies (Hui, 2020, p. 11).

One of the determining factors in human evolution has been the invention and use of tools; from carved stones that our evolutionary ancestors used as hunting tools during the Pleistocene, to the recent development of quantum computing. For Hui, this phenomenon has been interpreted in the 20th century by disciplines such as philosophy, anthropology and history as an anthropological universal, as is explicit in the thought of Heidegger, but also in that of the French paleontologist André Leroi-Gourhan, who considered technology as an extension of the organs and an externalization of memory; or that of Joseph Needham, who compared the technological developments of the West and the East in terms of greater or lesser progress.

Hui asserts that his intention is not to challenge the universality of technology, but rather to propose new ways of approaching it that are not necessarily seen from the Western perspective, which implies a disconnection of technology from the reality on which it is based, especially when, behind this desire for universalization, the effects of colonialism can be seen, the effects of colonialism, modernization and globalization, which lead to a monotechnological culture where “modern technology becomes the main productive force and
largely determines the relationship between humans and non-humans, human beings and the cosmos, nature and culture” (Hui, 2020, p. 12).

This mono-technological culture, deeply imbricated in current military and capital dynamics, arbitrarily draws a timeline—a synchronization—that is presented as totalizing, which gives the illusion that all technology is used in the same way by all its users.

To combat this dominant impetus of synchronization and to re-frame the Gestell, Hui proposes a fragmentation that “frees us from the linear historical temporality defined by the sequence pre-modernity-modernity-postmodernity-apocalypse” (Hui, 2020, p. 13). This fragmentation, as Hui himself warned in Recursivity and contingency (2019), does not refer to the fragmentation associated with postmodern thought, which has as its referent a Eurocentric universalism and a temporal synchronization that seems to lead us towards the dystopia of the present, but to trying to identify and situate technology in relation to the particular conditions of its ontogenesis. Yuk Hui's wager is that, if this sequence is broken, it would be possible to liberate technology as a tool of capital in order to convert it into a true tool of decolonization that would make it possible to recognize and preserve techno-diversity.

Fragmentation implies speaking of technology as cosmo-technics, a concept he had already advanced in his book The question concerning technology in China (2016), that is, as a “unification of the orders of cosmos and morality through technical activities for the purpose of suggesting that technology must be situated in a broader reality that makes it possible while constraining it” (Hui, 2020, p. 12). Likewise, to speak of cosmo-technics implies acknowledging the radical diversity that exists among its “values, epistemologies and modes of existence” (Hui, 2020, p. 95), not only to the standardized production of the same technology in different regions or countries, which is only distinguished by its brand or subtle characteristics.

These are, broadly speaking, the underlying arguments in this collection of writings. In the first instance, Hui deploys a critique against the interpretation of the collapse of the West as a global apocalypse, a product of synchronistic thinking. The first of his essays demonstrates the hegemonic Western view that interpreted the September 9 attacks in New York as the defeat of the Enlightenment project.

According to Peter Thiel, a philosopher by training and one of the most relevant figures in Silicon Valley, the progressive and liberal ideals of the Enlightenment made the West a vulnerable place. This stance, which has as its concern the decline of Western civilization, reappears in the other essays, for example, when Hui refers to an article published by Henry Kissinger in The Atlantic in 2018, where he also assures a failure of the enlightened project, but in this case because of the imposition of modern technology and its historically unusual massive data processing capabilities.
Concern about the failure of the Western enlightenment project has led to neo-reactionary movements such as Dark Enlightenment, which rejects the current democratic model; or accelerationism, particularly in its most conservative version, which postulates that the only way to escape from capitalism is to accelerate its contradictions in order to overcome it. These positions do not escape from a vision of culture in mono-technological terms, since they assume that there is only one way of relating to technology, which homogeneously encompasses all societies equally.

If people talk about accelerating the collapse of capitalism in order to arrive at a new order, it is because it is claimed that techno-capitalism has had the same effects throughout the world, when it is evident that while some countries boast of their technological progress and the economic gains of technology, other countries suffer the symbolic and material consequences of these effects (for example, the electronic garbage dumps in Africa).

The concept of cosmo-technics that the author proposes as a mode of fragmentation comes from the Kantian concept of cosmo-politics. For Hui, Kant perceives a necessary relationship between nature and nature. The only way to arrive at a perpetual peace as a political model is through the production of a universal history of the human species, and this production demands a progress of reason which, in turn, is presented as the telos of nature; however, the author warns that this vision is universalistic and does not give way to the emergence of techno-diversity. For this reason, Hui resorts to the ontological turn in anthropology –which he associates with authors such as Bruno Latour, Tim Ingold or Philippe Descola–, which refers to the recognition of multi-natures that are specific to each location or region.

According to Hui, cosmology “is central to anthropologists' concept of ‘nature’ and ‘ontology’, as such ‘nature’ is defined according to different ‘ecologies of relations' in which different constellations of relations can be observed [...] These multi-ontologies are expressed as multi-natures” (Hui, 2020, p. 56). Each culture has its own mode of technical poiesis, and its own epistemes and epistemologies, which have been veiled under the cloak of mono-technological culture.

However, the recognition of multi-ontologies or multi-natures is only the first step, one that other disciplines such as post-colonialism have already partially taken. It is also a matter of seeking forms of solidarity that do not remain merely abstract and universal, as in the case of the perpetual peace enunciated by Kant. Instead, it is necessary to look for concrete solidarities that respond to situated problems, as has happened in the context of the pandemic:

True co-immunity is not abstract solidarity, but starts from a concrete solidarity whose co-immunity should serve as the basis for the next wave of globalization (if there is one). Since the beginning of this pandemic, there have been numerous acts of genuine solidarity, in situations where it is of utmost importance who will do our shopping if we cannot go to the
supermarket, who will give us a mask if we need to get close to the hospital, who will offer life-saving respirators, and so on. There are also solidarities between medical communities that share information with a view to vaccine development (Hui, 2020, p. 103).

Hui takes up these ideas from the philosophy of Gilbert Simondon, who speaks of technical objects in their degrees of abstraction and concreteness. Abstract technical objects “are detachable and mobile [...]. Concrete technical objects are those that are grounded (perhaps literally) in the human and natural worlds, between which they act as a mediator” (Hui, 2020, p. 103). Under this logic, Hui considers that the way to escape the totalizing abstraction of the Gestell is by fostering concrete techno-diversities. If mono-technological voracious capitalism results in the climate crisis and the exploitation of natural resources, techno-diversity represents, exactly, the alternative of introducing different ways of relating to technology outside the techno-capitalist Gestell.

Hui also wonders about the role that machines have or will have in this world and its ecology. Rather than trying to follow the organicist posture that has been so much raised in technology –where it is a question of equating, in the manner of cybernetics, technological systems with natural or biological systems–, the author affirms that it is not a question of introducing the machine to ecology, but of configuring an ecology of machines, which would imply appealing also to the importance of techno-diversity in this world.

The foundation of ecology is diversities, since only on the basis of bio-diversities (the variety and variability of genes, species and ecosystems) is it possible to conceptualize the ecological system. To discuss the ecology of machines, we need a concept analogous to biodiversity: techno-diversity. Biodiversity is in turn a correlate of techno-diversity, since without techno-diversity we will only witness the disappearance of species at the hands of a homogeneous rationality (Hui, 2020, p. 130).

Hui uses as an example the use of pesticides, which, although efficient in the short term, later significantly affects natural ecosystems; however, before the introduction of pesticides, there were various ways of dealing with pests, which were more sustainable and responded to the biological diversity of each region.

The author warns that this reiterated emphasis on the local does not imply a return to ethnocentrism or nationalism, which are based on the model of identity politics that we have seen spread over the last decades, but rather “the ability to reflect on the technological evolution of the local and to avoid retreating into some form of traditionalism, so that multiple localities can be in a position to invent their own technological thinking and futures” (Hui, 2020, p. 131). Thus, it is not a matter of linking technical production to some ethnic tradition located in a delimited territory, but of discovering the different iterations of technique in contexts not colonized by the Gestell and its ideologies. As a good student of Gilbert Simondon, Hui avoids speaking of the human being as dominant or dominated by technology, particularly when technique is used as an instrument of power, that is, as a technocratic tool.
The book concludes with an essay on the limits of artificial intelligence in the current context. It is commonly thought that intelligent systems, such as computers and their algorithms, have already surpassed the capabilities of humans and, therefore, the latter will be replaced by machines eventually. Hui criticizes this position that perceives intelligence only as information processing and mentions that, instead, it is necessary to include in it the non-rational ways of relating to the world (as is the case with art and religion). Artificial intelligence offers the possibility of building a non-diversity that allows us to think and understand the world differently, but this will only be possible to the extent that technodiversity opens the way to this relationship.

Fragmenting the Future. Essays on techno-diversity offer a vision that circumvents the pessimism-optimism dichotomy with respect to the colloquial discourses with which technology is conceived in the present: it is neither the evil of all evils nor the expected salvation. According to Simondon, it is the human being who must act as a support for machines and their organization. For this reason, Hui repeatedly stresses the need to find new types of non-standardized relationships in machines that allow us to inhabit a future world which escapes from the mono-technological *Gestell* which capitalism and persistent colonialism impose on us in the present.

REFERENCES


