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THE DIGITAL AND THE SOUTH: QUESTIONINGS VOL. 2

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THE DIGITAL AND THE SOUTH: QUESTIONINGS VOL. 2
O DIGITAL E O SUL: TENSIONAMENTOS VOL. 2
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PROJECT

COSMOPLATFORMIZATION:
DIGITAL PLATFORMS FROM THE GLOBAL SOUTH
COSMOPLATAFORMIZAÇÃO:
PLATAFORMAS DIGITAIS A PARTIR DO SUL GLOBAL

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Abstract

This article aims to challenge the concept of platformization based on dynamics specific to the Global South, considering the different ways of understanding technics in various cultural contexts, cosmotechnics, or ancestral technologies. Those aspects result from territorialized knowledge forming networks of networks when interacting with digital platforms. This process (a byproduct of digital platforms) involves many dynamics, such as data infrastructure, markets, and governance. To problematize and expand on the concept, we present examples of traditional peoples and their practices, supported by a narrative literature review, to contemplate a sympoietic practice and thus inspire other ways of thinking about platformization. This procedure led us to a proposal we call cosmoplatformization, which we hope can be included in future research. Keeping the theme of the digital and the South in mind, this text addresses particular technological appropriations that lead to technopolitical actions and an exercise in thinking about the digital experience and its theorization.

Keywords: Digital Platforms, Cosmotechnics, Technics, Global South, Platformization

1   Introduction

Digital platforms have become relevant places for discussions on digital technologies, both in the specialized fields of science and civil society, particularly over the last decade. The influence these informative architectures have had on the various sectors of society and everyday life has led to a wide range of studies on the widespread impact these technologies have on political expressions, economic arrangements, forms of sociability, and the dynamics of culture change and survival. At the heart of these discussions is platformization, a term that describes a shift to digital platforms. With no real clear and comprehensive definition, the objective concept of digital platforms (including the characterization of their process) is often subject to the field in which they are studied, and approaches are often restricted to their sociotechnical, market, and economic aspects (De Reuver et al., 2018; Hein et al., 2020; Bonina et al., 2021). Poell, Nieborg, and van Dijck (2019) revisit and explain these concepts to contextualize the platformization process. According to researchers, four disciplinary areas contribute to understanding digital platforms.

The first disciplinary area is Software Studies, which focuses on platforms' technical and infrastructural aspects. Here, platform operators provide a minimum technological base to facilitate other operations (Plantin et al., 2018). The second area looks at digital platforms from an economic perspective, presenting them as a new business model capable of operating in multilateral markets (McIntyre & Srinivasan, 2017). This model optimizes business activities by allowing them to interact with different audiences on different fronts. The third area is Critical Political Economy, where digital platforms relate to recent changes in power structures, surveillance practices, and data-based governance models. Works and authors in this area seek to understand the consequences these technological changes have on the meanings of work (Fuchs, 2017), the forms of capital accumulation (Haucap & Heimeshoff, 2014; Srnicek, 2017), and what their role is in the development of new forms of imperialism (Jin, 2013).

As Poell, Nieborg, and van Dijck (2019) point out, all the previous areas define and analyze platforms and platformization primarily "in institutional terms", relating them to "data infrastructures, markets, and forms of governance" (Poell et al., 2019, p. 5). These authors draw attention to a scarcity of analyses about how digital platforms transform cultural practices and how they could transform "platforms as particular socio-technical constructs" (Poell et al., 2019, p. 5). These analyses could be included in a fourth area of investigation, Cultural Studies (not always using the term digital platforms), which would use theories in the field of culture to present critical perspectives to describe fundamental transformations precipitated by these technologies. That would provide comprehensive literature (Burgess et al., 2017; Baym, 2015; Duffy, 2016) and research addressing topics ranging from subjectivity, gender, and sexuality to labor relations. Poell, Nieborg, and van Dijck (2019) present their definition based on these four areas of understanding the meaning of digital platforms and other definitions presented in previous works (Rochet & Tirole, 2003; Langlois et al., 2009; Gillespie, 2017): "[...] we define platforms as (re-)programmable digital infrastructures that facilitate and shape personalised interactions among end-users and complementors, organised through systematic collection, algorithmic processing, monetisation, and circulation of data (p. 3)".

They go on to define its process:

Following research in software studies, business studies, and political economy, we therefore understand platformization as *the penetration of the infrastructures, economic processes, and governmental frameworks of platforms in different economic sectors and spheres of life*. And in the tradition of cultural studies, we conceive of this process as *the reorganisation of cultural practices and imaginations around platforms* (Poell et al., 2019, pp. 5-6, our emphasis).

Despite the crucial operational role of the definitions presented, they have a distinguishable instrumental side related to the idea of infrastructure. We understand this instrumentality to come from the instrumental and universal notion of technics (Hui, 2020) implicit in the definitions of digital platforms, which could precipitate different effects as a kind of resource or tool that would function universally despite the diversity of cultural contexts.

Thus, based on Yuk Hui's (2020) reflection on cosmotechnics, this article reflects on digital platforms and the platformization process to outline an expanded definition that is more in tune with the proposal of technodiversity. We contrast this definition and the notion of technics implicit in them — which Ingold (2010) would call a hylomorphic model — with a model whose primacy is the established connections and relations, to the detriment of their objective constitution. We consider digital platforms more than universal instruments or tools guided toward human actions and particular predetermined objectives. We assume platforms are based on relationships with local experiences in connection with other cosmotechnics. This complex process strains the limits of current definitions originating mainly from the Global North.

2   Cosmotechnics and the Critique of Modern Technology

The experiences we present in this article have challenged us to reflect on the constitution of platforms and platformization as a complex and plural process. It is subject to the quirks that come from interacting with different cosmotechnics or, as we call them, ancestral technologies, fruits of territorialized knowledge that form networks of networks due to this interaction. Different appropriations of digital platforms by different imaginaries and symbolic repertoires of the Global South would be at stake. In turn, how platformization operates depends on the understanding that a given people or cultural community has of techniques or how each community elaborates its productive dimension and material and symbolic articulation. This premise implies thinking not only about technology but also about the concepts of digital platforms and platformization, beyond the perspective of a means or instrument, as something consistent with the cosmic and moral dimensions. That is the reason we propose the term cosmoplatformization.

This theoretical proposal is inspired by the work of Chinese philosopher Yuk Hui and his concept of cosmotechnics, described as a "unification between the cosmic order and the moral order through technical activities" (Hui, 2016, p. 19). Hui starts by problematizing the concept of technics in the West, which, he argues, is based on a universalizing perspective, as if the modes of meaning and functioning were the same in different cultural contexts. In his book *The Question Concerning Technology in China*, Hui (2016) suggests that the discussion about technical activities, as well as their apparatus and processes, seeks to broaden perspectives to consider how these elements are intertwined with the complexity of the cultures in question, hence his proposal to think about their integration into the cosmic and moral dimensions. This perspective would open up possibilities for conceiving plural modes of existence of technology, a technodiversity (Hui, 2020), as each cultural universe would relate to technology differently. In this sense, "all non-European cultures should systematize their own cosmotechnics and the histories of these cosmotechnics" (Hui, 2020, p. 42, our translation). Also seeking to overcome the Kantian antinomy about the anthropological universality of technology, Hui summarizes his orientation based on the following statement: "Technics is not anthropologically universal; technologies in different cultures are affected by the cosmological understandings of these cultures, and have autonomy only within a certain cosmological setting — technics are always *cosmotechnics* (Hui, 2016, p. 19)".

Hui (2016) seeks to resume the discussion on the modern separation between technics and nature, reaffirming the organicity between both. In this sense, as a key to understanding the concept of cosmotechnics, he uses the philosophy of technology from Gilbert Simondon (2012), notable for revisiting the *Gestalt* principle of figure and ground to describe the inseparable relationship between human beings and the outside world. Tim Ingold (2011) is another essential author who addresses this articulation. His idea of sentient ecology can be understood as an ecology "mediated and operated according to the affective relations between human beings and their environments" (Hui, 2016, p. 25). The notion of cosmotechnics thus allows us to evaluate how digital platforms intersect with specific cultures, their verbal-sound-visual modes of operation, and symbolic universes, giving rise to various possibilities of platformization or various possible platformizations.

This notion then leads to the existence of "different technicities" (Hui, 2016, p. 18) or "technological futures under the conception of different cosmotechnics" (Hui, 2020, p. 39, our translation). The path toward the plurality of cosmotechnics does not deny technology and tradition but "to unmake and remake the categories that we have widely accepted as technics and technology" (Hui, 2016, p. 281). In line with this attempt to problematize the restricted concept of technics with which we operate (Hui, 2020), Ingold (2010) relates the four Aristotelian causes (material, formal, final, and efficient) to an objective-instrumental understanding that constituted our productive — *poietic* — relationship with the world. According to Ingold, this creative model, which he calls hylomorphic, has taken root in Western thought. It created an imbalance: a productive model that is too anthropocentric, objective, and teleological, applied to a world without vitality, occupied and appropriated by man as his unlimited raw material. Ingold proposes an "ontology that assigns primacy to processes of formation as against their final products, and to flows and transformations of materials as against states of matter" (Ingold, 2010, p. 2-3).

For Ingold, the world is made up of things and not objects. Drawing on Heidegger, he states that the object stands "before us as a *fait accompli*, presenting its congealed, outer surfaces to our inspection" (Ingold, 2010, p. 4). The thing, in turn, is constituted by a "gathering of the threads of life […] a 'going on', or better, a place where several goings on become entwined" (Ingold, 2010, p. 4). He suggests the thing is co-created as a "*parliament of lines*": "we participate […] in the thing' thinging in a worlding world" (Ingold, 2010, p. 4).

> [...] the thing has the character not of an externally bounded entity, set over and against the world, but of a knot whose constituent threads, far from being contained within it, trail beyond, only to become caught with other threads in other knots. Or in a word, things *leak*, forever discharging through the surfaces that form temporarily around them (Ingold, 2010, p. 4).

He illustrates this statement using a tree as an example, whose character as a tree cannot be dissociated from its reactions to wind currents, from the exchange of nutrients with the soil or with the animals and microorganisms that inhabit it, and of an actual building, whose foundations are embedded in the soil, which is battered by the climate and susceptible to visits from birds, rodents, fungi, in addition to human visitors. Therefore, we can create all sorts of artifacts (material or immaterial) in the controlled environments of our laboratories, factories, design studios, etc. Once released into the world, these objects become things, joining the flow of a world in motion, giving them a life of their own: they can, therefore, assume other applications and meanings within the social imaginary in which they are housed. This foray allows us to think of cosmotechnics as cosmopolitics and, consequently, understand the contradictory and conflicting developments perpetrated by digital platforms and the process of platformization in different contexts and by the framework of technodiversity.

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3   The *Making With* of the Global South

Before we continue, we shall clarify two critical issues as a prelude to what we refer to as an exercise in cosmotechnics: thinking about another concept (or concepts) of platformization. The first is the Global South, which began to take shape in the 1990s, especially in the writings of Boaventura de Souza Santos (2018). In his seminal text, *Pensando desde o Sul e com o Sul* (in English, Thinking from and with the South), Santos stated that this expression referred to "peripheral and semi-peripheral regions and countries of the modern world system, which were called the Third World after the Second World War" (Souza Santos, 2018, p. 650, our translation). When presenting this same text, Maria Paula Meneses states that this thought is characterized as the moment of the return of the humiliated and subordinate. "And this return is not only epistemic, it is also ontological. Theorizing politically and epistemically the heterogeneity that makes up the Global South is at the basis of the Epistemologies of the South" (Souza Santos, 2018, p. 27, our translation).

The fundamental perspective of the Global South highlights the importance of a return of the "subordinate" (Sousa Santos, 2018) beyond epistemology. Thus, the shift in thought would be more radical, putting pressure, at least initially, on the epistemic shift in how the world is understood and knowledge is produced toward an ontological shift. This operation would mean taking "absolutely seriously what [...] the indigenous and all the other 'minor' peoples of the planet say, the extranational minorities that still resist total dissolution by the modernizing blender of the West", as Eduardo Viveiros de Castro urged us in the preface of the book *A queda do céu* (in English, The Fall of the Sky), an account of the Yanomami ways of life as told by the shaman Davi Kopenawa (Kopenawa & Albert, 2015, p. 15, our translation). This path is, by the way, precisely the path that Yuk Hui envisions for the development of his concept of cosmotechnics.

> With my limited knowledge of Latin America, I hope this work will spark curiosity that leads to questions such as: what does an Amazonian, Inca, or Mayan cosmotechnics mean? [...] To do so, we need to rearticulate the question of technology and challenge the ontological and epistemological assumptions of modern technologies, be they social media or artificial intelligence (Hui, 2020, p. 13, our translation).

In this sense, we use the idea of the Global South in this text as a starting point based on the ontological turn, which resumes the place of nature in the production of knowledge and adds technology to this equation.

The second question concerns networked social movements experienced in Brazil in June 2013. The event that took over the Brazilian streets was part of a wave of indignation and hope (Castells, 2015) that began in mid-2009 with the Arab Spring protests in Europe and the United States before they reached Brazil. These experiences led to an activist's use of digital technologies for collective speaking, as Di Felice (2017) explains when characterizing net activism. For Di Felice, net-activism is a complex web of interactions that allow for collaborative actions resulting from exchanging information between humans, connection devices, and data. This approach already advances the proposal of sympoietic (something done together, like *making with*), which admits the coexistence of possible worlds on the planet. This is the key to understanding digital platforms from the cosmotechnics of the Global South.

Donna Haraway (2016) uses the term sympoiesis to refer to systems of collective production that have no self-defined spatial or temporal boundaries, in which information and control are distributed among the components: "poiesis is symchthonic, sympoietic, always partnered all the way down, with no starting and subsequently interacting 'units'" (Haraway, 2016, p. 33). Based on previous experiences in net activism, the Global South inspires us to think about the *making with* from a myriad of uses and appropriations and, ultimately, to tension and expand the understanding of digital platforms and platformization concepts.

4   Ancestral Technologies and Networks of Networks

When reporting on the experience of the Free Territories, Free Technologies project[1] by Intervozes – Coletivo Brasil de Comunicação, researcher Tâmara Terso (2023) warns of the importance of thinking about digital activism beyond the examples in the Global North. She reminds us that "there were other exciting ways of doing digital activism that dialogue a lot with our local reality, with our reality as Brazilian people, and with the reality of the traditional territories of black and indigenous peoples" (Terso, 2023, p. 64, our translation). When mapping the Internet, information technologies, communication, and socio-environmental justice in *quilombos* and rural communities in the northeast region of Brazil, the researchers found the difficulty in accessing the Internet quite interesting: 28% of participants had no access at all, and 71% of those that did have access only used smartphones.

However, this lack of full Internet access, with a quality signal and adequate devices, mainly occurs in remote communities characterized by what Di Felice (2019) calls the connection of all things, referring to the indigenous complex and connective way of living. The connective ambiance of the original cosmologies contributes to an essential point observed by the Intervozes' researchers: how technologies were understood by the people interviewed. The researchers realized that digital technology mixes with other technologies that have historically been present in the territory, such as soil management, care through traditional medicine, sharing experiences in circles, mysticism, creole drums, and *rodas de coco* (a dance from northeast Brazil). "All these technologies are named, are typified by mother-of-saint Beth of Oxum [...] as ancestral technologies" (Terso, 2023, p. 80, our translation). This notion of ancestral technologies is in parallel with what we understand as digital technologies in the framework proposed by Hui (2016): technology as poiesis, which creates worlds or possibilities of worlds from what it allows to reveal or bring to light, from the relationships that it will enable us to know and establish with the world and things themselves.

This possibility is quite evident in some experiences, such as TV Quilombo[2], a multiplatform production group created in 2017 by youths from Quilombo Rampa in the interior of the state of Maranhão, Brazil. Of particular interest is the equipment they made, such as a cardboard camera, a twig microphone, a bamboo drone, and a bamboo tripod, all made from materials found locally. Raimundo José, one of the project creators, uses the exact words as mother-of-saint Beth of Oxum when defining communication production strategies.

> We built a tripod out of bamboo, which is a native plant here in the community and is easily found in the forest. We didn't have a microphone, so we made one out of twigs. So, any twig or piece of wood was a microphone for us. And then we just kept innovating based on what we call "ancestral technology", which is the technology that has always existed in the community (José & Guimarães, 2023, p. 229, our translation).

This is a glimpse of a sympoietic know-how — an example of *making with* the land — with the knowledge of the land and its relationships. The TV Quilombo experience is part of what Tâmara Terso refers to as networks of networks: "territorial networks that expand through digital networks" (2023, p. 85, our translation). Another example of networks ofnetworks can be seen with the Rede Wayuri de Comunicadores Indígenas, an Indigenous communicators network formed in 2017, based in the city of São Gabriel da Cachoeira. The network is made up of members from 23 ethnic groups from the Alto Rio Negro indigenous territory in the northwest of the state of Amazonas (Ferraz & Melo, 2024). The production of audio bulletins in several local languages, such as Baniwa, Iantu, Tukano, and Yanomami, plays a central role in the productive routine of this collective. Some of the communicators have Internet access in their communities, while others must travel along the Negro River and its affluents to get connected in another community.

In this context, territorial networks woven from other technologies are fundamental: boat and river. "In these situations, they use their canoes and boats to go to neighboring communities, getting information through oral communication if other means are unavailable" (Ferraz & Melo, 2024, p. 196-197, our translation). Thus, the group articulates networks of networks by integrating digital production: 1) with the analog radio broadcast system and antenna transmission in three municipalities, 2) with streaming transmission on digital platforms such as Spotify, and 3) with remote territories where there is no radio transmission or Internet access, taking flash drives on boats and playing them on radio trees or using content downloaded onto players and other devices that appropriate digital platforms in a way it was not intended to.

Tarcízio Silva (2024) also provides a relevant contribution to further our reflection on platforms and platformization. Silva proposes the concept of algorithmic racism — the attempt to perpetuate a social technology of segregation that dates back to the transatlantic slave trade in the Brazilian colonial period. He argues that "the record or erasure of inventions and technologies is a sociopolitical and historical process employed to privilege Eurocentric conceptions of scientific progress for centuries" (Silva, 2024, p. 143). Although it does not cite Hui directly, this argument seems to have the hallmarks of technodiversity. It offers support for understanding the processes by which the universality of technology is established. Silva goes a step further by stating that this erasure of technodiversity is even more hostile to Afro-diasporic populations in environments fashioned by white supremacy in countries like Brazil. This oppression has generated what Rayvon Fouché called "black vernacular technological creativity" (2006, as cited in Silva, 2024, p. 143), how African-American inventors have adapted, reinvented, or created technologies for their specific realities despite being constantly underestimated or having their authorship erased.

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We can find evidence of this form of cosmotechnical resistance in the cases presented above and in those highlighted by Silva in his research. Another example is PretaLab[3], a digital platform created in 2017 to connect black women who work or intend to work with digital technology. It offers training, organizes networks of professionals, connects people in the job market, and promotes all levels of study. The laboratory seems to be aligned with technodiversity as it combines digital and analog technologies with specific knowledge about programming, building information architectures, and a know-how of resistance and resilience forged from the *quilombo* model (Souto, 2021). A cosmoplatform built by and for the black community aims to create a collective existence as an alternative to the structural conditions left behind by enslavement. This kind of joint effort, gathering several goings on — social, economic, historical, political, and technological — in a sympoietic way (Haraway, 2016), allows solutions and initiatives such as PretaLab to emerge. Its format, as well as that of the other examples cited, suggests an expanded notion of technology as this know-how integrated into a cosmology, territoriality, and a mode of existence from which it is not separated, along the lines proposed by Yuk Hui (2020) with the concept of cosmotechnics, culminating in this architecture of networks of networks.

5   Final Considerations

The cases mentioned in this text are somewhat asymmetrical among themselves (and even more so when compared to the experiences of the Global North). They seem to engender a localized idea of a platform linked to the territory and its historicity. Convergent in some points yet divergent and original in others, this perspective represents the conceptual limits of the current definitions and understanding of platformization in recent years. We believe that this small sample represents an invitation to move forward with *making with*, based on ancestral technologies and networks of networks, towards an expanded concept of platforms from the Global South.

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3 Website available at: https://www.pretalab.com/.

Digital platforms, created in their technocratic shells, are also subject to the flow of the world. Their globalizing informative architectures are locally determined, their data centers occupy defined territories, the raw materials used to manufacture hardware (from microchips to retina screens and lithium batteries) are extracted from the soil of countries located in the Global South, the protocols that today allow connections and disconnections between different technological gadgets are determined by political and economic disputes that are also localized, and their architectures are inhabited by diverse entities with epistemologies that are similar to and dissonant with the hylomorphic model. Therefore, a comprehensive definition of digital platforms and the platformization process must take into account a space that is not instrumental and objectifying but a thing in the sense attributed by Ingold concerning the flows that cross these architectures, their ecology, or rather, the ecosystem that constitutes them and they constitute.

The main objective of this trajectory was to challenge the single meaning of platform and platformization ideas and then think about them in the plural, in an original way, about the idea of technology perpetrated from the experiences of the Global North and the colonialism of knowledge performed by the Internet giants. To this end, without offering a definitive concept, we propose to consider platforms as spaces of connective articulation, hybrid architectural and ecological formation, constituted and inhabited by myriad entities that sympoietically compose a common, a community, according to their cosmology. Similarly, more than the simple dissemination of forms of social organization engendered by the logic of collection, processing, monetization, and circulation of data on digital platforms, the process of platformization must be understood as the "thinging" of platforms. These architectures are formed out of contact with other cosmologies, cosmotechnics, and other networks of networks.

Ultimately, we think of cosmoplatformization as a name that can group reports and experiments related to other ways of thinking and producing research on this topic, including publications in diverse fields of knowledge production. The concept of cosmoplatformization can be relevant to various fields of knowledge, especially from how Yuk Hui points to the power of technology and how it constitutes new worlds. Therefore, this is an introductory glance within the limited length of a scientific article at a proposal configured as a research program to be worked on in future reflections and writings.

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