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WHAT PLACE DOES NATURE OCCUPY IN HENRI LEFEBVRE'S THEORY OF THE PRODUCTION OF SPACE? A FEW THOUGHTS

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Abstract

It is of particular note how, over recent decades, the theory of the production of space, drawn up in the 1970s by Henri Lefebvre, has become one of the leading approaches to urban studies. Although his contributions are still applied today in manifold interpretations in both the Global North and South, there are nonetheless a myriad of interrelated themes to Lefebvrian theorization that deserve greater attention. In this paper, I propose to problematize the relationship between the theory of the production of space and ecology under the assumption that within Lefebvre's theory there is a concept of nature, which is fundamental to understanding the politics of spatial policy and therefore, enables the politicization of nature and ecology to be perceived. The hypothesis I develop in this article is a first approach to the subject of Nature in the works of Lefebvre, seeking to link the threads which connect the discussion on the Theory of the Production of Space, and the conception of nature related to that theory.

Keywords

Nature; Production of Space; Ecology; Revolution; Henri Lefebvre.

ARTIGOS AMBIENTE, GESTÃO E DESENVOLVIMENTO

QUAL O LUGAR DA NATUREZA NA TEORIA DA PRODUÇÃO DO ESPAÇO DE HENRI LEFEBVRE? ALGUMAS REFLEXÕES

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Resumo

É notório como a teoria da produção do espaço elaborada na década de 1970 por Henri Lefebvre se tornou uma das principais abordagens sobre os estudos urbanos nas últimas décadas. Embora as contribuições dadas por ele vigorem até hoje em múltiplas interpretações no Norte e no Sul global, há uma miríade de temas inter-relacionados à teorização lefebvriana que merecem atenção maior. A proposta deste artigo é problematizar a relação entre a teoria da produção do espaço e a ecologia, com base na hipótese de que há na referida teoria um conceito de natureza que é fundamental para a compreensão da política do espaço e que, portanto, possibilita a apreensão de uma politização da natureza e da ecologia. Este artigo consiste em uma primeira aproximação do tema da natureza na obra de Lefebvre, buscando tecer os fios que ligam a discussão da teoria da produção do espaço e a conceituação de natureza.

Palavras-chave

Natureza; Produção do Espaço; Ecologia; Revolução; Henri Lefebvre.

WHAT PLACE DOES NATURE OCCUPY IN HENRI LEFEBVRE'S THEORY OF THE PRODUCTION OF SPACE? A FEW THOUGHTS¹

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Introduction

[...] we have before us, here and now, a whole. It is both the condition for production and the product of action itself, the place for mankind and the object of its pleasure: the Earth.

Henri Lefebvre, Introdução à modernidade (1969 [1962]), p. 156).²

Over recent decades, nature has been elevated to becoming a central theme of political, economic and social discussion. It would be no exaggeration to state that, today, any debate that leaves aside the issue of nature will not be taken seriously in terms of problematizing the present and the future. Indeed, the debates that address the question of ecology, despite being varied and based on different philosophical positions and political projects, are based on a common or, at least, shared problem: the future of humanity and the Earth.

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^{2.} For direct citations, the English version was used of LEFEBVRE, H. *Introduction to Modernity.* London-New York: Verso, 1995, p.133. Translation: John Moore.

The analyzes have varied, from a perspective linked to Marxism, to postmodernism, to poststructuralism, and to political ecology.³ With regard to Marxism, in addition to the classic book by Schmidt (1983 [1962]), one of the pioneering works was that of the Italian Marxist geographer Massimo Quaini, who addressed this issue in the early 1970s. He stated that Marx "denounced the spoliation of nature before a modern bourgeois ecological conscience was born", and that Marx knew how to "critically capture and historically frame these phenomena and the ecological contradictions of capitalism"⁴ (QUAINI, 1979 [1974], p. 138).

A revived literature produced over the past thirty years in the field of Marxism has drawn attention to the way in which nature has been positioned within the scope of capitalist production, of capital accumulation, and toward the contradictions situated in this process, with a centrality based on the relationship of mankind with nature and ecological crises (FOSTER, 2005 [2000]; FOSTER; CLARK, 2020; FRASER, 2021; HARVEY, 2016; 2018 [1996]; 2020; MOORE, 2016; 2021; 2022; SAITO, 2021; SMITH, 2007; 2020; WALLIS, 2009).

In the human and social sciences, concern for the concept of space has been accompanied, albeit without the equivalent level of detail and depth, by a concern regarding the concept of nature. Throughout the vast literature that has been produced, especially in geography, it is nothing new to encounter a defense surrounding the dialectics of the natural and the social. This is due to the fact that, according to Neil Smith (2007, p. 17), "we are currently living through a period in which the core socio-economic relationship with nature is being dramatically transformed", which makes the relationship of capital with nature a dangerous and potentially fatal contradiction (HARVEY, 2016).

With respect to the contributions of Marxist thought when considering ecology and nature, it is only recently that the work of Henri Lefebvre has become the subject of debate, although it is nonetheless rarely investigated (FOSTER et al., 2020; NAPOLETANO et al., 2022a; 2022b; 2022c). This subject, so strongly associated with studies that regard space as an explanatory key element of the modern world, has left Lefebvre's contribution in an uncomfortable position. This signifies that

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^{3.} I believe that Marques (2019) produced a fine synthesis of the theoretical-methodological perspectives for studies regarding the relationship between nature and society. MARQUES, M. I. Natureza e sociedade [Nature and society]. In: CARLOS, A. F. A.; CRUZ, R. de C. O. (org.). *A necessidade da geografia* [The need for geography]. São Paulo: Context, 2019. p. 175-190.

^{4.} For direct citations, the English version was used of QUAINI, M. *Marxism and Geography*. Totowa, New Jersey: Barnes and Noble Books. 1982, p. 136.

the manner in which his conceptualization of space, and even his theory of the production of space, have advanced in the social sciences has led to an interpretation of nature that fails to delve deeper into what Lefebvre wished to express.

It is exactly toward this direction that this article seeks to contribute: to problematize the relationship between the theory of the production of space and ecology. Thus, its main objective is to demonstrate how the concept of nature has been accommodated in the theory of the production of space, in order to address, on the one hand, the relationship between nature and space, and how these concepts appear interconnected and dialectically connected in Lefebvre's theorization, and, on the other, how the theme of ecology was already emerging with a certain level of interest in Lefebvre's interviews, interventions and writings when addressing the subject of space and its production. Although ecology appears in a non-systematic manner, it is revealed within Lefebvre's theoretical arsenal as subordinate to the theorization of space.

It is argued herein that, in the theory of the production of space, there is a concept of nature, which is fundamental to understanding the politics of space and that, therefore, enables the politicization of nature and ecology to be perceived. The hypothesis developed in this article consists of a preliminary approach to the subject of nature in Lefebvre's work, seeking to link the threads that bond the discussion on the theory of the production of space and the condition of nature to which it is linked. Thus, an effort is undertaken to delve deeper into his work, thereby drawing a relevant contribution into the center of the discussion in order to understand contemporary ecology. The objective that guided the writing of this text was, therefore, to answer the question: What place does nature occupy in Henri Lefebvre's theory of the production of space?

To close this introduction, it should be emphasized that the reflections developed herein constitute approaches anchored in a more specific academic field – in this case, Geography. This most certainly imposes limitations, given the vast quantities of writing that have dialogued with and been inspired by the work of Henri Lefebvre in various fields of knowledge. However, it should also be noted that, despite this, the effort undertaken here does not attempt to become tied to disciplinary demarcations and limits, given that, in addition to the field of Geography, the theory of the production of space has influenced other fields associated with urban studies in general, such as urban planning, sociology, architecture and urbanism. Furthermore, due to the profundity of the subject in hand, thereby requiring a detailed investigation, this article stands as a contribution toward the debate and signals the need for further studies on the subject of nature in Lefebvre's work and its potential for analyzing the ecological crisis.

1. Nature and space in the theory of the production of space

Between the end of the 1960s and the mid-1970s, Lefebvre published a series of texts, books and articles on urbanism, the city, the urban problematic and the urbanization process. The explosion of the historic city, as he would later call it, and the implications of "neo-capitalism" in transforming the relations between countryside and city and rural and urban constituted the nerve center of these works around the "critical point" (LEFEBVRE, 1973b, 1999 [1972]; 2000 [1974]; 2008a; 2008b [1970]; 2008c [1973]).

In general terms, the extensive work of Lefebvre, "a contemporary, erudite polymath, and a multifaceted, and protagonistic testimony of the [...] short twentieth century" (MARTÍNEZ LOREA, 2018, p. 22), is not easy to understand (GOONEWARDENA, 2011). He produced "imperturbable work" on topics that the left had ignored (ANDERSON, 1985) and was active in French public and political life during the twentieth century (id., 2011), and according to José Paulo Netto (2015, n.p.), was "one of the Marxist authors who wrote and published the most". As "an indispensable author for understanding space and contemporary society" (LENCIONI, 2015, p. 76), his theoretical production is intertwined, regardless of not forming a closed system, according to his "autobiographical account" (LEFEBVRE, 1976b [1975], p. 197).

The pronounced diffusion and influence of Lefebvre's work over numerous authors is undeniable, as confirmed, for example, by the works of Harvey (2006; 2018; 2020), Gottdiener (2010), Schmid (2012), Marcuse (2011), Merrifield (2011), Stanek and Schmid (2011), Soja (1993, 2008), Brenner (2018), Swyngedouw (2001) and Goonewardena (2011) in the Anglo-Saxon and European worlds, as well as those of Martins (1996), Carlos (2017; 2019; 2020), Damiani (2012), Costa (2013), Costa, Costa and Monte-Mór (2015), Monte-Mór (2006), and Limonad (2003) in Brazil. However, the most evident attention in these contributions falls onto space, the city and the urban, 7 while nature, although not entirely ignored, appears more implicitly

^{5.} This, and all citations hereafter, which have never been published in English, have been translated by the author.

^{6.} For direct citations, the English version was used of LEFEBVRE, H. *State Space World – Selected Essays.* Minneapolis – London, University of Minnesota Press. 2009, p. 308. Translation: Gerald Moore, Neil Brenner, and Stuart Elden.

^{7.} It is also important to remember that a set of special editions of periodicals was dedicated to Lefebvre's thinking, such as *Rue Descartes* (2009), *Urban* (2011), *L'Homme et la Société* (2012), *Territórios* (2013) and *O dossiê Henri Lefebvre e a problemática urbana na GEOUSP [The Henri Lefebvre dossier and the urban problem in GEOUSP]* (SIMONI-SANTOS; CARLOS; ALVES, 2019). RUE Descartes. Droit de cité. Paris, No. 63, v. 1, 2009. URBAN. Espectos de Henri Lefebvre, Madrid, No. 2, 2011. L'HOMME ET LA SOCIETÈ. Henri Lefebvre: le pensée devenue monde. Paris, No. 185-186, 2012. TERRITÓRIOS. La vigencia

rather than explicitly. The exceptions in this debate are Smith (1998) and Janzen (2002), who were pioneers in addressing the theme of nature in Lefebvre's work, by problematizing it. Besides these, in the preface of an editorial published in an issue of the journal *Capitalism Nature Socialism*⁸ dedicated to Henri Lefebvre, Kipfer and Milgrom (2002) highlighted the potential of Lefebvrian theory when thinking about ecology. This subject has increasingly received attention over recent years, when ecology and the relationship of society and nature in Lefebvre has become the target of examination and evaluation (BUTLER, 2023; LIMONAD, 2021; NAPOLETANO et al., 2022a; 2022b; 2002c; SCOTT, 2019; PAIVA, 2019; PEREIRA, 2023). The reflections and analyzes developed throughout this text may therefore be added to these more recent studies.

Deemed by many to be Lefebvre's greatest work, it is in *La Production de l'espace* that his most complete formulation of the theorization of space, or rather, the production of space, may be observed. This book, published in 1974 (2000), had already been disclosed a few years earlier through other publications and in his interviews. In *La Révolution urbaine*, from 1970 (2008b), it is possible to come upon passages in which the theory was already being outlined, when it is stated, for example, that "[T]he production of space is not new in itself [...]. What is new is the global and total production of social space" (LEFEBVRE, 2008b, p. 140) 9

In La Production de l'espace we discover the formulations that enable an understanding of the way in which Lefebvre thought about nature in relation to space. These will be addressed below. It is important to mention however, before venturing further, that the concept of nature had already appeared in his writings of the 1930s, when his foray into dialectics and historical materialism took place (LEFEBVRE; GUTERMAN, 2018 [1938], p. 43; 45; 65; 77; LEFEBVRE, 1971 [1939], p. 125-129). Thus, it is necessary to resort to other works by the author in order to build both a coherent and explanatory description of what he understood as nature and the place it occupies in the theory of the production of space, even if the focus is on works published between the 1960s and 1980s.

In *Nature et conquêtes sur la nature*, the ninth prelude to his 1962 Introduction à la modernité, Lefebvre argued that the notion of nature had succumbed to scientism,

de Henri Lefebvre en la investigación socio-territorial, No. 29, 2013. SIMONI-SANTOS, C.; CARLOS, A. F. A.; ALVES, G. da A. O dossiê Henri Lefebvre e a problemática urbana na GEOUSP [The Henri Lefebvre dossier and the urban problem in GEOUSP]. *GEOUSP Espaço e Tempo* [Space and Time], v. 23, No. 3, p. 453-457, 2019.

^{8.} A scientific journal founded by James O'Connor (1930-2017), an influential Marxist theorist on the question of ecology.

^{9.} For direct citations, the English version was used of LEFEBVRE, H. *The Urban Revolution*. Minneapolis-London, University of Minnesota Press, 2003, p. 181. Translation: Robert Bononno.

naturalism, and technicism. However, in his view, it had not been exhausted. Considered from the perspective of dialectical reasoning, this may have been viewed as a double determination (contradiction): an "external world" ("pure" nature), a pre-objective and pre-subjective foundation, and an "internal world", knowledge, action. This double determination is dialectical, since movement is dialectical "in reality and in the consciousness of reality" (LEFEBVRE, 1969 [1962], p. 159).10 It is, therefore, praxis, which unites both nature and human beings, culture and nature. Through the mediation of labor, of technique, it is subordinate to human beings insofar as a "human nature" is created, humanized and appropriated. Alienation, in the face of this, and the dialectic of necessity and freedom are evident. Under capitalism, this alienation takes shape through a separation of the human world and the natural world by reinforcing the domination of human beings over nature. It is the movement of the totality, which encompasses it, as well as human beings and their history, the future, their knowledge, ideas, and ideologies; this totality is open, conflictive, mobile, contradictory, relating objectivity and subjectivity, reality and knowledge (id., n.d. [1955]).

What was important for Lefebvre is that, considering that the power of reason, of technique and of labor expands the domination of nature by an antinature, human beings become increasingly tied to it; this total separation is therefore impossible: "it is by antiphysis, or anti-nature, that man controls and returns to nature. From the basis of abstraction (logical and technological signs and forms) man emerges from nature, understands it, controls it and then reimmerses himself in it once more" (LEFEBVRE, 1969 [1962], p. 169). 11 Thus, nature, on the one hand, is the starting point for human beings in the search for dominion and control in a constant, conflicting struggle. On the other hand, however, it is the "original data", with its particularities and differences (manifested in everyday life and in the praxis through symbols, cultures, arts, etc.), with its creative movement, from where human beings emerge and that labor, technique and analytical abstraction are unable to sever the connection with the human. Indeed, "[T]herefore, man's control over nature is creative. [...] Of a 'human nature' – that is to say, a nature within man, appropriated, transformed. This nature of man and within man", in which is reflected, on one side, the "techniques of appropriation", and on the other "nature in itself" (id., ibid. p. 184).12 For the human powers to try as best they

^{10.} For direct citations, the English version was used of LEFEBVRE, H. (1995, p. 135).

^{11.} For direct citations, the English version was used of LEFEBVRE, H. (1995, p. 143).

^{12.} For direct citations, the English version was used of LEFEBVRE, H. (1995, p. 155).

may to disentangle themselves from nature, this complete separation will not take place. Just look, suggested Lefebvre, at our everyday life, in which the days and hours, the months and seasons of the year, youth and old age remain linked to the cyclical time of everyday life. This way of understanding nature was to permeate the author's theorization on the production of space.

Lefebvre's interest in the problematic of space (and time) dates back to the interwar period, when he came into close contact with the work of Descartes and Kant and the controversy between Clarke and Leibniz regarding Newton's theory of absolute space. Although this interest existed even before his production was dedicated to the subject, it was only in the 1960s that, indeed, space entered the scene in the context of his theoretical reflections, and thus became a crucial element for understanding his work. This interest resulted from the construction of a new city in the Atlantic Pyrenees (Lacq-Mourenx), which Lefebvre accompanied "in vivo, in statu nascendi" (LEFEBVRE, 1976b, p. 226, 1990 [1983]; 2000 [1974]).

Lefebvre's proposal on space aimed to break with the way this concept had been considered in the philosophical and scientific tradition. Space leaves the realm of pure abstraction, mathematical and philosophical, and enters the realm of social practice, praxis. Thus, a breaking point is established with the usual and commonplace way of conceptualizing space, as an empty data, with no content; space becomes conceptualized as a process, resulting from of an intersection of multiple movements and dynamics, ideologies, representations, classes, groups and individuals. It is, therefore, a political space, a *social production* specific to each mode of production. It is important to highlight this idea of production, and not just that of product, because it is precisely a *process* (production and product as inseparable) full of contradictions and conflicts (LEFEBVRE, 2000 [1974], p. 35; 43; 47; PEREIRA, 2020). In this argument, Lefebvre maintained that space constitutes "the mode of existence of social relations" and, as a result, reveals social contradictions, which are the contradictions of space (LEFEBVRE, ibid., p. 461).¹³

Through space, modernity, capitalism and neo-capitalism, everyday life, the State and revolution may all be explained. The theorization is based on the idea that dialectics would no longer be linked to temporality. In the view of Lefebvre, the modern world may ultimately be explained by space, by the dialectic of space, and by the contradictions of space: "This dialectised, conflictive space is where the reproduction of the relations of production is achieved. It is this space that produces reproduction, by introducing into it its multiple contradictions, whether or not

^{13.} For direct citations, the English version was used of LEFEBVRE, H. The Production of Space. Oxford UK: Blackwells, 1991, p. 401. Translated by Donald Nicholson-Smith.

these latter have sprung from historical time" (LEFEBVRE, 1973a, p. 19; emphasis in original). This signifies thinking about the world upon new bases – a return to the dialectic in which the city, the urban, the reproduction of the relationships of production become intelligible and, therefore, concrete, thereby moving away from abstraction. Here there is a theoretical and practical project, that is to say, a political and utopian project that points to the future and may be synthesized into the expression change life ("changer la vie") (PEREIRA, 2018).

It is within the scope of dialectical movements conceived on new bases that "[N]ature has become problematic" (LEFEBVRE, 1973a, p. 14). Nature was to be one of the initial subjects discussed by the author in his search to decipher the process of the production of space. This is because space is not discussed according to the Western philosophical tradition, as a Kantian a priori or a Newtonian absolute, but rather as an explanatory key of capitalist society due to the fact that it produces it in its own way, with its specificities, characteristics and contradictions. Thus, it is fruitless to talk about space: it is necessary to introduce it within the scope of the concept of production, since being political, it is socially produced, and because "spaces are *produced*" and "the 'raw material' from which they are produced is nature" (id., 2000 [1974], p. 102; emphasis in original). The idea of production, in this sense, beyond the economic sphere, encompasses a broad, extensive sense, in which the difference between human beings and nature emerges and the conceptualization of the production of space ultimately gains importance and scope.

Following Marx in the *1844 Manuscripts* and in *Capital* (MARX, 2004; 2013), Lefebvre relied on the concept of work as a mediation, which left many marks and consequences for his conception of nature and, therefore, of space. In his investigation of Marx's sociology, he emphasized:

Through his own work man controls nature and appropriates it in part. Work is not a natural activity; it is even "anti-natural" in two senses: as toil it requires effort and discipline, and it modifies nature both externally and internally. Work becomes a need. The senses develop and are refined in and through work. Needs change and become more sophisticated, as work modifies them by producing

^{14.} For direct citations, the English version was used of LEFEBVRE, H. *The Survival Of Capitalism – Reproduction of the Relations of Production.* New York: St. Martin's Press, 1973, p. 19. Translated by Frank Bryant.

^{15.} For direct citations, the English version was used of LEFEBVRE, H. (1973, p.14).

^{16.} For direct citations, the English version was used of LEFEBVRE, H. (1991, p. 19).

new goods or possessions. Thus man emerges from nature and yet remains unable to break away from it. Enjoyment is what reconciles man to his fundamental ties with nature (LEFEBVRE, 1968, p. 28).¹⁷

For Marx (2013, p. 255), "Labour is, in the first place, a process in which both man and Nature participate, and in which man of his own accord starts, regulates, and controls the material re-actions between himself and Nature". Therefore, "By thus acting on the external world and changing it, he at the same time changes his own nature" (id., ibid.). In his *Economic and Philosophical Manuscripts*, Marx developed the idea that nature is the source of primary objectivity, i.e., it is from where the human being comes, and that to which he is tied. Hence, "Man *lives* on nature—means that nature is his body, with which he must remain in continuous interchange if he is not to die" (MARX, 2004, p. 84; emphasis in original). This is why "[...] man's physical and spiritual life is linked to nature means simply that nature is linked to itself, for man is a part of nature" (id., ibid.). The work of Foster (2005 [2000]) and Saito (2021) revealed the importance of Marxian considerations in relation to nature, thereby considerably expanding Marx's analyzes surrounding the "metabolic rift" that would be at the heart of the relationship between society and nature in capitalism. Lefebvre was also very attentive to Marxian statements.

Based on this broader relationship between human beings and nature, in which one may not be understood without the other and in which both form a "dialectical unity, in other words, conflicting" (LEFEBVRE, 1983 [1980], p. 183), Lefebvre sought to develop a unitary theory of the production of space, which would link the physical, the mental and the social. He called this "knowledge" "spatio-logy" or "spacio-analysis" (id., 1976b, p. 252; 2000 [1974], p. 465; 2015, p. 441).²² Space, in this sense, is the result of human work, since it transforms both nature and itself at the same time. However, the space-product, i.e., socially produced, incorporates nature

^{17.} For direct citations, the English version was used of LEFEBVRE, H. *The Sociology of Marx*. New York: Columbia University Press, 1982, p. 41. Translated by Norbert Guterman.

^{18.} For direct citations, the English version was used of MARX, K. *Capital*. New York: Appleton & Co., 1889, p. 156.

^{19.} For direct citations, the English version was used of MARX, K. (1889, p. 157).

^{20.} For direct citations, the English version was used of MARX, K. *Economic and Philosophic Manuscripts of 1844*. Printed in the Union of Soviet Socialist Republics. Translation into English by Progress Publishers (1977, pp. 72-73).

^{21.} For direct citations, the English version was used of MARX, K. (1977, p.73)

^{22.} For direct citations, the English version was used of LEFEBVRE, H. The Worldwide and the Planetary (1973). *State Space World – Selected Essays*. Minneapolis – London, University of Minnesota Press. 2009, p. 196. Translated by Gerald Moore, Neil Brenner, and Stuart Elden.

as a productive force, and it is through these and the relationships of production that space becomes a central issue, displacing and subordinating nature onto a secondary plane (LEFEBVRE, 2000 [1974], p. 100). Thus, "[the] ultimate foundation, even where it is set aside, broken up, or localized, is nature; this is an irreducible fact, although nature is hard to define in this role as the absolute within - and at the root of – the relative" (id., ibid., p. 267).²³ This subordination, destruction or even death in nature concerns a continuous, problematic and contradictory distance from the "nature-space". There is a historical process in which, by the direct interference of human beings through the productive forces and relations of production and reproduction, the natural space, the earth, the air, the soil, matter and energy are incorporated into the social space to the degree with which human beings produce the world and themselves. This production surrounds ideologies, practices, representations, conflicts, contradictions. It is, in effect, selfproduction, since the transformation of the reality of the world by human beings also transforms it; it is a "self-production of human beings" (LEFEBVRE, 2016 [1986], p. 2). Nature, within this process, enters the level of representations and ideology, becoming an economic resource, a commodity, and enters the circuit of capital, in which exchange value progressively overlaps use value.

One of the implications of Lefebvre's proposal, that "(Social) space is a (social) product" (LEFEBVRE, 2000 [1974], p. 39; emphasis in original)²⁴ takes place within the scope of the question of nature. In the passage that follows, long but at the same time fundamental, he demonstrates, at least momentarily, how nature stands in relation to space.

The first implication is that (physical) natural space is disappearing. Granted, natural space was – and it remains – the common point of departure: the origin, and the original model, of the social process – perhaps even the basis of all 'originality'. Granted, too, that natural space has not vanished purely and simply from the scene. It is still the background of the picture; as decor, and more than decor, it persists everywhere, and every natural detail, every natural object is valued even more as it takes on symbolic weight (the most insignificant animal, trees, grass, and so on). As source and as resource, nature obsesses us, as do childhood and spontaneity, via the filter of memory. Everyone wants to protect and save nature; nobody wants to stand in the way of an attempt to retrieve its authenticity. Yet at the same time everything conspires to harm it. The fact is that natural space will soon be lost to view. Anyone so inclined may look over their

^{23.} For direct citations, the English version was used of LEFEBVRE, H. (1991, pp. 230-231).

^{24.} For direct citations, the English version was used of LEFEBVRE, H. (1991, p. 26).

shoulder and see it sinking below the horizon behind us. Nature is also becoming lost to *thought*. For what is nature? How can we form a picture of it as it was before the intervention of humans with their ravaging tools? Even the powerful myth of nature is being transformed into a mere fiction, a negative utopia: nature is now seen as merely the raw material out of which the productive forces of a variety of social systems have forged their particular spaces. True, nature is resistant, and infinite in its depth, it has been defeated, and now waits only for its ultimate voidance and destruction (LEFEBVRE, 2000 [1974], p. 39-40).²⁵

Nature is the basis, the starting point, the place of origin and creation, the original and primary data for the production of space. "The raw material of the production of space is not, as in the case of particular objects, a particular material: it is rather nature itself, nature transformed into a product [...]" (LEFEBVRE, 2000 [1974], p. 146; emphasis in original).²⁶ Therefore, space is historical, it has a history, and, throughout its course, the relationship between human beings and nature becomes transformed. Lefebvre addressed these transformations in a relational manner, indicating how his theoretical proposition implied the need for a demonstration, which, at various moments, led him to address historical examples of where his triad of spatial practices, representations of space and spaces of representation and the perceived, the conceived and the lived, is operationalized. However, if, on the one hand, nature becomes problematic and, in the course of capitalism and modernity, tends to disappear and become destroyed, on the other hand, it returns with a certain centrality within the scope of modern thought and capitalist society. We are facing an understanding of nature that does not only focus on its perspective of disappearance, of destruction, but also on survival and even production and reproduction. This is why it resists, despite being defeated. However, since human beings are unable to separate themselves completely from it, they remain enveloped in this "inorganic body", to use Marx's terms (2004), since the elements, things and objects present within and related to the production of space are also natural.

The ideas of "first nature" and "second nature" therefore refer to this transformation process of a given, original nature into one that is social and human, through work. These "two words", a "first nature" and then a "second nature", which Marx addressed in his youth, brought about a huge impact on Lefebvre, as he revealed in an interview in the early 1980s (LEFEBVRE, 1990 [1983], p. 68). What

^{25.} For direct citations, the English version was used of LEFEBVRE, H. (1991, pp. 30-31).

^{26.} For direct citations, the English version was used of LEFEBVRE, H. (1991, p. 123).

makes part of "second nature"? From what is it constituted? These questions are not so easy to answer. This concept encompasses a myriad of socially produced objects and works that characterize the human world. The "second nature" may be understood as everything that is the product of human work, evidently with several elements of the "first nature". The "second nature", Lefebvre stated, "retains some traces of the first, more acquired and produced as such" (id., 1983 [1980], p. 41).

It is to the machine, initially, that Lefebvre refers when speaking of the "second nature". It "vigorously evokes the second nature produced by social practice, the human world placed over the material cosmos". And he continues his argument, similar to that of *La Production de l'espace* (LEFEBVRE, 2000 [1974], p. 85-86): "Nature does not work; it produces and creates 'spontaneously'. The same is true of second nature, which has nothing to do with the philosophers' problem of 'human nature'". Hence, "the enigma shifts and the problematic is transferred from the initial nature (threatened by the destruction of techniques) to the second nature, the city, the urban, computers, robots, produced space, etc." (id., 1983 [1980], p. 41).

The city, therefore, is perhaps the most emblematic example of "second nature". Lefebvre (2000 [1974], p. 398)²⁷ was precise on this point, and stated that: "As a 'second nature', as a produced space, the town has also retained – and this even during its crisis – certain natural traits, notably the importance assigned to use". The production and organization of the city/town are not intelligible when this background is disregarded – the "first nature" –, which, in short, is the basis of reflections and praxis, and which is the relationship between human beings and nature.

In one of his most stimulating reflections on nature, Lefebvre (2008c [1973])²⁸ problematized and confronted both right-wing and left-wing criticism, so common in several of his texts. Nature ceased to be a poetic symbol, neglected into the background of reflection and criticism, still seen as a matter of knowledge and techniques by an ideology. Right-wing criticism reflected on it as a question "over the vanished beauty of the landscape, and over the purity and virginity of disappearing nature", in a kind of updated anachronism that led to a "great nostalgia for the past; to a complaint about lost nature", while the critique from the left "tries to understand the implications and consequences of the ravaging and destruction of nature", considered by Lefebvre as "a process of self-destruction in

^{27.} For direct citations, the English version was used of LEFEBVRE, H. (1991, p. 345).

^{28.} For direct citations, the English version was used of LEFEBVRE, H. *Reflections on the Politics of Space* [1970] in State Space World – Selected Essays. Minneapolis – London, University of Minnesota Press. (2009, p. 173). Translated by Gerald Moore, Neil Brenner, and Stuart Elden.

the sense that "man," who is born of nature, now turns against it, to eradicate it" (LEFEBVRE, 2008c [1973], p. 65-66).²⁹

Here, one of Lefebvre's ideas on nature is observed, which goes head-on with the way in which reflection was placed in the public debate. The politicization of nature becomes central to the debate on space within the scope of the capitalist mode of production. In addition to being "residue, as something that appears here and there, escaping rationally organized operations" (LEFEBVRE, 2008c [1973], p. 65)³⁰, the author stated that:

Now it is known that nature too is created, modeled, transformed, that it is to a large degree a product of action, that the face of the Earth itself (in other words, the landscape) is a human creation [œuvre]. Within a certain ideology, nature is today still understood as a simple matter of knowledge and as an object of technology, as an easily understood concept and as a technical problem. It is dominated and mastered. To the extent that it is dominated and mastered, it disappears. Now, suddenly, it is realized that in the process of being mastered, nature was ravaged and threatened with annihilation, which in turn threatened the human realm which, although still bound to nature, caused its annihilation. From this came the necessity of a strategy of intervention. Nature becomes politicized.

It is unsurprising that this debate appears in Lefebvre, given his critical view of the modern world and post-World War II capitalism. What is surprising however is that this reflection has been neglected for so long by its interpreters and commentators. Smith (2020) criticized him for understanding that, by arguing that nature would advance towards death, the French philosopher would be keeping a traditional thought intact in relation to nature. Thus, space would remain alive, and nature would be a passive element, closed to changes, dead: "The politics of nature is for Lefebvre the politics of miserable defeat", wrote Smith (ibid., p. 246). However, he missed the strategic emphasis that Lefebvre conferred by suggesting a "politicized nature", which, to a large extent, is "a product of action", only concentrating his criticism on a conception of "external nature" and disregarding the open totality and dialectic. "Politicized nature" emphasizes the need for a political strategy. Hence, Smith's misplaced - or, at the very least, incomplete - understanding of the role and place of nature in Lefebvre's theory. This may further be reinforced by the criticism of Feuerbach's conception of pure nature, found in Le Matérialisme dialectique (LEFEBVRE, 1971 [1939]) and recalled by

^{29.} For direct citations, the English version was used of LEFEBVRE, H. (2009, p. 174).

^{30.} For direct citations, the English version was used of LEFEBVRE, H. (2009, p. 173).

Schmidt (1983 [1962], p. 60-61, note 30),³¹ as well as the fact that Lefebvre himself criticized Jean-Paul Sartre for not giving nature a place in his philosophy, which resulted in considering it inert, dead (LEFEBVRE, 1967, p. 137-139). It seems to be clear at this point, as Pereira (2020, p. 126) points out, that, "although he concentrated on space, [Lefebvre] was not negligent in relation to nature", and that, therefore, a reading such as that of Neil Smith is, to say the least, "questionable and somewhat partial to Lefebvre's problematic space and nature".³²

Space and nature are related and associated through the mediation of work and social production, understood, therefore, in a broad sense, not just strictly economic. Lefebvre relies largely on Marx's "trinity formula": land, capital and labor. It is through the contradictory relations between these three terms that the production of space may be explained: land would be the element referring to "Mother Nature"; capital, the "God, Capital"; and labor, "The workers". Land involves agriculture, the soil, the subsoil and its resources, in addition to the topsoil, of the Nation-State, which is thereby linked to a territory, and to the political strategy (LEFEBVRE, 2000 [1974], p. 374-375). In this process, in the dialectical and contradictory relationship between these three terms, the destructive role of capitalism and the abstract space it produces is revealed (id., ibid., p. 375-376).

The situation of a "transgression of nature", a result of "the West", enabled the generalization of violence and the production of the world, which suggests, according to Lefebvre (2000 [1974]),³³ the production of a new space. "Space as locus of production, as product and production itself, is both the weapon and the sign of this struggle", in this attempt at the "transgression of nature", which is a "permanent aggression directed against life". The philosopher added that: "If it is to be carried through to the end – there is in any case no way of turning back – this gigantic task now calls for the immediate production or creation of something other than nature: a second, different or new nature, so to speak. This means the production of space, urban space, both as a product and as a work, in the sense in which art created works" (id., ibid., p. 130).³⁴ This challenge is set, and the following item explores the way in which autogestion and the revolution of space pass through the problematic of nature.

^{31.} Schmidt (1983, p. 60-61) wrote: "It is not only nature, as Lefebvre rightly asserts, that is always something already worked upon by man, but also the natural domains not yet incorporated into human production – the virgin forest or the Pacific atoll of which Lefebvre speaks – can only be visualized and conceived within the previously appropriated categories of nature".

^{32.} I suggest reading Napoletano et al. (2022c), who develops a more elaborate critical analysis of Neil Smith's interpretation of Lefebvre's concept of nature.

^{33.} For direct citations, the English version was used of LEFEBVRE, H. (1991, pp. 109).

^{34.} For direct citations, the English version was used of LEFEBVRE, H. (1991, pp. 109).

2. "Revolution of space", autogestion and nature

Associated with a conception of nature, which may not be dissociated from the human being, in which the production of space is placed as a central problem of the twentieth century, Lefebvre's work suggests that modifying the relationship between society and nature depends on a task that is far from easy: to think about the revolution.

Lefebvre's conception of revolution is important for understanding his conception of social space and, more broadly, of the production of space (PEREIRA, 2018; 2023). However, to what extent does this conception of revolution and the "revolution of space", more directly, have to do with the idea of nature? How do the concept of nature and the dialectical relationship between human beings and nature fit into the perspective of a "revolution of space"? These are broad issues and deserve further study. Here, we will outline some aspects that seem important to us in order to extend the scope of the debate on nature and space in Lefebvre.

In several of his writings, Lefebvre maintained that the space of neocapitalism, of modernity, needed to be criticized, and for that it would be necessary to build a theory on the production of space (LEFEBVRE, 1976a; 1976b [1975]; 2000 [1974]; 2008c; 2015). This theory, among the most varied concatenations, suggested that from the middle of the twentieth century, contradictions had no longer been expressed *in* space; now, the contradictions *of* space were fundamental. But for what? To build a project for society, to "change life" (*changer la vie!*).

In the context of the capitalist mode of production, the dynamics of the contradictions of space, and no longer the contradictions in space, took over the centrality of Lefebvre's questioning with regard to explaining social contradictions, given that in the twentieth century a new space had emerged, the planetary scale, the result of a new society and a new mode of production (LEFEBVRE, 1976a, p. 228; 1976b; 2015).

The contradictions of space pointed toward drawing up a theory and a practice that were not content with just describing things, nor even with creating a discourse on space. There was a need to understand how space is produced, how social relations are manifested, subject and object, abstract and concrete, body and mind, which thereby craves a (concrete) utopia and the need for a praxis: to produce a new space, which Lefebvre (2000 [1974]) called "differential space".

The central thesis of *La Production de l'espace* (the relationship between mode of production and space) reinforces the historical character of space. Hence, once produced, once created, based on the "raw material", the space may thus be transformed. It is dynamic, not static (LEFEBVRE, 1976a, p. 243); it is, therefore, a process (LEFEBVRE, 2000 [1974]), i.e., a dialectical movement. Hence, there is a need on the horizon for a transformation of space anchored in a new mode of production

that redefines social relations and the relations between human beings and nature. It is here that the point of connection is located, between what Lefebvre called the "revolution of space" and autogestion.

Lefebvre was an active participant in political debates during the twentieth century, as a member of the intellectual body of the French Communist Party (PCF) and, after his departure, in 1958, he went on to become a critic of official Marxism and the way in which it became immobilized, abandoning the concern, in fact, to create a society different from the capitalist society (LEFEBVRE, 1976a, 2000). State socialism, according to Lefebvre, was not able to produce a new space; indeed, the logic of the (quantitative) growth ideology remained as a beacon, leaving (qualitative) development in the background. For him, both in the context of capitalist and socialist countries, the State emerged on a world scale, giving rise to what he called the "mode of state production" (id., 2000 [1974], 2012). It was therefore necessary to confront the political power of the State, which was increasingly expressed on a world scale, as well as the power of capital; this would only be possible through utopian thinking and revolutionary praxis. To the question 'How does the theory of space relate to the revolutionary movement as it exists today?' (id., 2000 [1974], p. 482; 2015, p. 452), he replied:

[...] A revolution that does not produce a new space has not realized its full potential; indeed it has failed in: that it has not changed life itself, but has merely changed ideological superstructures, institutions or political apparatuses. A social transformation, to be truly revolutionary in character, must manifest a creative capacity in its effects on daily life, on language and on space – though its impact need not occur at the same rate, or with equal force, in each of these areas (LEFEBVRE, 2000 [1974], p. 66).³⁵

It was in the midst of the May 1968 student riots in France that Lefebvre was able to observe more clearly the role of workers in relation to the production of space. In addition to the general strike, in the same month, the workers (not only those from the factories) occupied the space, "The occupation of space as an offensive strategy of the working class" (LEFEBVRE, 2012, p. 149; 1976b, p. 103-104).³⁶ Here, Lefebvre observed that "the modern world presents a profoundly new phenomenon, the extension of the class struggle toward space" (id., 1976b, p. 104), and it is on this observation that we may base the idea that, if the class

^{35.} For direct citations, the English version was used of LEFEBVRE, H. (1991, p. 54).

^{36.} For direct citations, the English version was used of LEFEBVRE, H. *The State in the Modern World* [1975] in State Space World – Selected Essays. Minneapolis – London, University of Minnesota Press. (2009, p. 120). Translated by Gerald Moore, Neil Brenner, and Stuart Elden.

struggle may no longer be thought of without space and that this, in turn, was a political space, it was necessary to think of strategies in which a new space could be produced. Therefore, it is essential to understand that Lefebvre's proposal is a project, a political, theoretical and practical project that is anchored in a real, concrete problem of space (PEREIRA, 2018).

We need to remember that in Lefebvre's unitary theory the context of neocapitalism was that of the domain of "abstract space", the world of merchandise on a world scale. This "abstract space", of money and the political state, "is founded on the vast network of banks, business centers and major productive entities, as also on motorways, airports and information lattices. Within this space the town – once the forcing-house of accumulation, fountainhead of wealth and center of historical space – has disintegrated" (LEFEBVRE, 2000 [1974], p. 65-66; 1976b, p. 13)³⁷. This space belongs, therefore, to the power of the State and capital, a means of production and an instrument of control for social classes that seek to destroy what has been experienced. However, it is full of contradictions, and the emergence of a "differential space", in which the urban, the difference, the right to the city and all other rights are presented as being fully real, passes through the revolutionary process in which the sore point is the use and use value.

Among the contradictions of space is the question of the "environment" and, therefore, of nature (LEFEBVRE, 1973a, p. 19). Lefebvre argued that such contradictions indicate a solution that, first, pushes the issue of space to the forefront, carrying those others linked to it, and, second, proposes overcoming the capitalist mode of production. There is, therefore, a clear political direction in relation to space, which, by extension, encompasses what today may be considered a politics of nature, expressed by a "politicized nature", which, at its core, has the need to go beyond a thought which in itself is simply ecologist.

It appears, therefore, that, when he mentioned problems relating to the environment, Lefebvre was criticizing ecologists for not placing broader problems of space in the foreground, precisely because they incorporate ecological problems. Furthermore, this could cause a form of deviation "towards naturalism, or even biologism, which treats human space as an animal" (LEFEBVRE, 1976b, p. 20). This is why he argued that the concept of "environment" and ecology would be "equivocal", "ambiguous", "a mixture of science and ideology" (id., 2000 [1974], p. 425, 439).³⁸

^{37.} For direct citations, the English version was used of LEFEBVRE, H. (1991, p. 53).

^{38.} For direct citations, the English version was used of LEFEBVRE, H. (1991, p. 381).

We find a similar reflection in *La Révolution urbaine*, where Lefebvre developed the hypothesis of the "complete urbanization of society" and the urban problem on a world scale. In this work, he harshly criticized the concept of environment and nature in the way they were being conceived. The problem of the "environment", as presented until then, had not addressed the urban problem in its plenitude. A "fictitious nature" posed by "green spaces" in cities, such as parks, gardens, etc., is a simulation, a representation of nature, with a view to improving the quality of urban space, but, in fact, it consisted of a "*neutralization* of unbuilt space" (LEFEBVRE, 2008b, p. 33, emphasis in original).³⁹ Additionally, for Lefebvre (ibid.), the "aspects of the problematic urban" went beyond "the commonplace images of the 'environment'". Why? Perhaps due to the fact that the nature of urbanization is not adequately taken into account by thinkers of the "environment", since the study of the urban problematic – and this idea Lefebvre would later extend to the plan of space – needed a unitary approach, not fragmentary.

Lefebvre was critical of the idea of "environment", which he addressed as a "pseudoconcept" and, as such, responsible for legitimizing the fragmentation and cross-sectioning of the urban phenomenon into pieces (LEFEBVRE, 2008b, p. 167). Considering the "environment" was an ideological way of addressing the real problem, centered on space, that is to say, a "crisis of space", which for him became evident through "generalized urbanization", i.e., the "critical point" or "critical phase". It is within this context, in this periodization of the city's history, urbanization and then the "history of space", that "nature becomes problematic". In *La Révolution urbaine*, after questioning the way in which nature is represented in the context of the "second nature" (the city), he clearly maintained that "[D]uring the critical phase, *nature* appears as one of the key problems. Industrialization and urbanization, together or in competition, ravage nature. Water, earth, air, fire—the elements— are threatened with destruction" (id., ibid., p. 33-34, emphasis in original).⁴⁰

These elements, as new rarities, signaled the "deadlines", in which "water and air will be so polluted that life on Earth will be difficult to maintain" (LEFEBVRE, 2008b, p. 34),⁴¹ and are reproduced in space (notably urban) as fetishes, illusory, i.e., the signs of nature multiply to the extent that nature itself becomes the target of destruction by the production of abstract space on a planetary scale. Nature, in effect, manifests itself in a presence-absence. Its signs, Lefebvre recalled, are

^{39.} For direct citations, the English version was used of LEFEBVRE, H. (2003, p. 26).

^{40.} For direct citations, the English version was used of LEFEBVRE, H. (2003, p. 26).

^{41.} For direct citations, the English version was used of LEFEBVRE, H. (2003, p. 26).

presented in "green spaces", in advertising, in representations, in an ideological urbanism that makes it a rarity, inserted into the circuits of capital and into the world of merchandise.

What we currently call the "ecological crisis" or "environmental crisis" is, therefore, intimately related to the "space crisis". The basic question that arises is: how to solve the problem of nature, which is, at the same time, a problem of space and society? Lefebvre had in mind the idea of a revolution of space which, in a very clear sense, brings to its very core the need to produce another space, the "differential space", also characterized by a new form of relationship with nature. Nonetheless, in the context of capitalist production, the forces that it generates, simultaneously, have the capacity to destroy "the physical health of urban workers and the equilibrium of rural workers". However, there is an even more serious destruction, since "it [capitalist production] disturbs the organic exchanges between man and nature" and, "by using the technology and organization of labor, exhausts the sources from which wealth springs: the soil and the labor force" (LEFEBVRE, 1999 [1972], p. 145).⁴²

On the horizon of Lefebvre's critical and utopian thought, with a "revolution of space", is the reestablishment of organic exchanges, which, in other words, is a new form of relationship with nature. The "space of differences" or "differential space" results from the contradictions of the abstract space of capitalism and within it a relationship with transformed nature. "To change life" is a "command", an "aspiration and a demand", which thus have an integral meaning, which is that of a new society and a new space – therefore, a new form of relationship with nature based on use and appropriation, and no longer on the technical and (self) destructive domination of capital. "To change life" serves as a symptom of the future. It announces a shifting of meaning, an inflection of time and space: a (total) revolution" (LEFEBVRE, 2015, p. 455).⁴³ The concept of appropriation, in this context, takes on centrality:

The concept of appropriation is one of the most important concepts that centuries of philosophical reflection have bequeathed to us. The action of human groups on the material and natural environment has two modalities, two attributes: domination and appropriation. They should go together, but they often become separated. The domination over material Nature, the result of technical operations, devastates this Nature, allowing societies to replace it with their products. Appropriation does not destroy, but transforms Nature

^{42.} For direct citations, the English version was used of LEFEBVRE, H. *Marxist Thought and the City*. Minneapolis-London, University of Minnesota Press. 2016, p. 121. Translation: Robert Bononno.

^{43.} For direct citations, the English version was used of LEFEBVRE, H. (2009, p. 208).

– the biological body and life, the time and space made available – into human goods. Appropriation is the goal, the purpose of social life. Without appropriation, technical domination over Nature tends to the absurd as it increases. Without appropriation, there may be economic and technical growth, but social development itself remains nullified (LEFEBVRE, 1973b, p. 164-165; emphasis added).

If, on the one hand, *domination* refers "[to the] pulverization of space, [and to the] the destruction of natural space", with private property, from the exchange value, from abstraction, on the other hand, *appropriation* is defined as "the priority of use and use value over exchange and exchange value; a community that works space for its own use; collective management of the produced space; nature transformed in such a way that it can be regenerated" (LEFEBVRE, 2018, p. 150-151).⁴⁴ Appropriation concerns, therefore, the praxis toward the meaning of the work that underlies the transformed relationship with the body, desire, the party, poetry and nature in evident conflict with the characteristic oppressions of the technical, bureaucratic and alienated domination of human beings before the world, themselves and, lastly, nature.

It is for this reason that "the problematic of nature" does not involve reflection on the "environment", since this expression is, at the same time, confusing and reductive. The problematic of nature, in truth, passes through the problematic of space, theoretical and practical, since the *appropriation of nature*, much more than domination and ownership, takes place within the scope of the production of a new space, no longer accustomed to the technocratic rationality and industrial praxis, but to a new rationality and another praxis, in this case, urban.

The appropriation of nature is directly related to the appropriation of space, in the sense of a greater valorization of use and use value. The production of differential space, therefore, has a direct connection with the way nature is thought of, appropriated. It seeks to go beyond and overcome the reduction of natural space, increasingly transformed into a product and merchandise in the context of the reproduction of neo-capitalist production relations. Indeed, the relationship of society and nature must go far beyond what the "right-wing criticism" has proposed. Therefore:

The production of space, yes, but what space? This question, the true question, the right question, the proper expression of the problem, comes to the fore, slowly but surely, in the full light of day.

^{44.} For direct citations, the English version was used of LEFEBVRE, H. *Toward an Architecture of Enjoyment*. Minneapolis – London, University of Minnesota Press. 2014, p. 95. Translation: Robert Bononno.

What space? The space that destroys nature, which envisions it without precaution, or the space that addresses all of nature, not merely its resources, but space as a whole, without, however, isolating it in its pure state by restricting nature to reserves and parks? (LEFEBVRE, 2018, p. 186).⁴⁵

The problems detected and analyzed by Lefebvre, in his thinking, signaled a critical understanding and the reestablishment of utopian thought, pointing toward autogestion. More than speculative, this is a practical thought, that reveals a praxis, which seeks to open the dialectic of the possible and the impossible as a solution for the crisis of space. The critical period, of the urban problematic, of space, and therefore of nature, reveals the social and political forces that may intervene, the period of mutation, in which this dialectic of the possible and the impossible (the concrete utopia) is established and places the possibility in check: "Either revolutionary action, or the self-destruction of the world [...] is a matter of revolution or death" (KOLAKOWSKI; LEFEBVRE, 1981 [1974], p. 271-273). For Lefebvre, the beginning of the 1970s indicated the risk of catastrophes and conflict on a world scale, which would grow and become worse; a "clear, precise and brutal" alternative was needed: the revolution (id., ibid., p. 275-276). What was needed was "[A] total revolution – material, economic, social, political, psychic, cultural, erotic, etc.", which "seems to be in the offing, as though already immanent to the present. To change life, however, we must first change space" (LEFEBVRE, 2000 [1974], p. 220).46

Autogestion was to figure as a mode of social, political and economic organization, capable of accommodating (not without conflicts) the production and management of the new space, of a socialist space distinct from that which "State socialism" produced. For Lefebvre (1976a, p. 19; 1978, p. 342),⁴⁷ the "autogestion of space" is "[T]he activity of the base" and constitutes "direct democracy and democratic control, affirmation of the differences produced in and through that struggle", thus becoming a path, a "perpetual, perennially reemerging struggle. An attempt at autogestion is something essential and fundamental, since it signifies mastering the conditions of existence" (id., 1980 [1979], p. 95). Thus, the production and management of a space corresponding to a new mode of production, through a "revolution of space", makes it possible to imagine a different relationship with nature, a way to overcome the domination of nature in its industrial and bureaucratic rationality for an appropriation that reveals itself as a pathway, a

^{45.} For direct citations, the English version was used of LEFEBVRE, H. (2014, p. 133).

^{46.} For direct citations, the English version was used of LEFEBVRE, H. (1991, p. 190).

^{47.} For direct citations, the English version was used of LEFEBVRE, H. (2009, p. 251)

route, a possible way to "change life" and produce another space – the differential space, which signals "the right to space" (LEFEBVRE, 1976a, p. 19; 1978, p. 317), a new society, the "total man". "The unity of the individual and of the social, *man's appropriation of nature and of his own nature*, defines the total man" (LEFEBVRE; GUTERMAN, 2018, p. 96; emphasis in original).

The search for the right to the city, often misconfigured and drained of its revolutionary and utopian meaning, is necessarily related to the construction of another urbanization and a transformed everyday life. Viewed as utopian projects, these horizons therefore, pass through the production of differential space, which is linked to the reappropriation of the body, time, desire, enjoyment, work, appropriation, and use, the centrality of which is in the difference. Nature is not displaced from this movement.

Appropriation takes on a crucial meaning throughout this movement, in which use and use value gain prominence against exchange and exchange value. Within this context, autogestion occupies a prominent place in the left-wing political strategy inherited by the Lefebvrian project. The role played by users is central, who, with their practices, are able to build and formulate alternatives that are, in essence, anti-capitalist, with a view to transforming what is experienced. "Changing life", thus needs to encompass the appropriation of nature and the construction of a new relationship between society and nature based on "mastering the conditions of existence", this in turn, based on the utopian horizon and looking toward the future – i.e., in the "possible-impossible" that envisions the radical change in the ways of living on Earth.

Final considerations

There has been a notable renewed interest in nature and ecology in critical Marxist studies. There is now an extensive bibliography and has been translated into several languages. However, the contribution brought to the debate by some authors still maintains a somewhat marginal interest on the part of those interpreting the subject of the environment. Lefebvre is one of them.

In this article, an analytical approach has been developed, seeking to establish how nature permeates Lefebvre's writings dedicated to space, urbanization and the city. There, the way in which Lefebvre understood nature, exposed it and related it to his various theoretical and conceptual elaborations is clear. A much broader and more wide ranging study would be necessary to encompass the way in which nature appears throughout his theoretical production, and his intellectual and political trajectory.

It was possible to observe that nature is sometimes conceptualized in relation to the basis on which human work is carried out, i.e., as the "raw material" with which social space is produced and reproduced, sometimes modeled and, to a certain extent, produced by human beings, by society. The two are inseparable. The "raw material", understood as such, is linked to the production of a "second nature", the result of human work, which is not by any means purely and exclusively human; its contents, forms and structures, mediated by work and technique, are the result of the human being-nature dialectic. Recalling Neil Smith at this moment is not casual, given the fact that Lefebvre's theorization was very influential in Smith's formulation of the "production of nature".⁴⁸

However, unlike a "social nature" in the Smithian style, in Lefebvre the concept of nature is, at the same time, relational and open, in the sense that it is the basis of creation and is, on the other hand, the result of production. and object of destruction. There is, in my view, no evidence that Lefebvre ignored a certain externality of nature imbued with physical and biological processes, and even less that he limited himself or was restricted to that single meaning. Nature thus has a reality that is external to human beings and society, on the one hand, but it also has a reality that is internal, in the sense that it is not possible to think of human beings and society as unattached, separate and autonomous in relation to it. Praxis gives unity to dialectical contradiction. There is no dichotomy, there is dialectic, the dialectic of the social with the natural. There is a mutual interpenetration between "first nature" and "second nature", between society and nature. The problematic of nature, both for Lefebvre and for his legacy, is a result of the society-nature relationship, that is to say, a socio-ecological scope that becomes socio-spatial. Thus, it appears that the Lefebvrian legacy in this regard seems distant from certain current critical trends according to which ecology is the opium of the people, since the theme of nature, treated as part of the social totality and the production of space, is fundamental for analyzing the contemporary crisis. This enables a better adjustment of the author's contributions in relation to space, understanding the role of nature in his spatial theory. Lefebvre's concerns with the destruction of nature and the call to revolutionary action, I believe, attest to this relational vision which, in other terms, is a vision based on totality and which ultimately sees the real possibility of human self-destruction under capitalism.

^{48.} Here it is important to note that, although Smith (2020) recognized his debt to Lefebvre's production of space, he sought to move away from the concept of nature elaborated by the French philosopher. Smith's criticisms of Lefebvre have been questioned by Napoletano, Foster and Clark (2022c), as reported in note 32.

Furthermore, even with a focus primarily on the period in which Lefebvre elaborated the theory of the production of space, it is understood that, based on what has been exposed, there are elements that enable us to understand at least some aspects that permeate his thoughts in relation to nature and, by extension, evaluate their contributions to the present and the challenges it offers. Some considerations, therefore, may be drawn up as a result of the discussion that took place.

In first place, I would like to emphasize that Lefebvre's theorization on the production of space and the role that nature occupies in it provides a theoretical and methodological framework for thinking more critically about the problematics of the environment and ecology, which may help in the way that contemporary society views the relationship between human beings and nature and the resulting transformations. The way in which the subject of the environment and ecology has been addressed requires a type of interlocution that is removed from an understanding involving a purely external nature and, therefore, distant and apart from human beings. It is also necessary to avoid any kind of naturalism that attempts to dilute the existing specificities between the social and the natural. Dialectical and critical thought is thus a remedy for thinking that dissolves procedural mediations and contradictions such as flat ontologies or neutral monisms.⁴⁹ The Lefebvrian legacy also adds a fundamental utopian dimension that points to the horizon, in a movement that focuses on the possible, the virtual. Only a dialectical understanding of the relationship of society and nature and the implications that the contradictions of the capitalist mode of production seen as a totality may entail for the future of humanity enables the construction of a more effective and nonalienated type of practice in relation to nature.

A second point follows on directly from the first. Lefebvre's reflections raise the need to face nature as a political problem. I consider that here is one of the most original contributions that he ever made to the subject. In the 1970s, when it was formulated, the idea of a "politicized nature" was innovative, since the debate surrounding the influences of human beings in the destruction of nature had been uncritically mobilized in international reports and conferences. The solutions put forward by the various conferences of multilateral organizations since then have failed to touch the root of the problem. Although an influential Marxist literature (the Frankfurt School, for example) at the time, had already warned of the consequences of the domination of nature by human beings in capitalism, Lefebvre's approach provided a broader understanding, since the socially produced space entered the game of political practice. I consider this to be fundamental. Just as space is no

^{49.} In this respect, please see Napoletano et al. (2022a).

longer seen as neutral and non-political, nature also needs to be thought of in these same terms, since it is not an abstract nature separate from human beings, a simple object of domination. This legacy is fruitful because it stimulates greater political engagement and the search for a praxis that takes into account the criticism of both the State and capital, and this needs to be witnessed. The debate on the environmental and ecological crisis that excludes the State and capital as preponderant agents of the processes is a dead end and aimless debate.

There have generally been several developments for a critical analysis of issues involving the Brazilian Amazon and Cerrado, extractivism in Latin America, Africa and the Global South. Planetary and generalized urbanization maintains links with the growing transformation of nature into merchandise and exchange value. Agribusiness and the so-called commodity boom over recent decades are not isolated phenomena. Environmental geopolitics in search of cheap natural resources (water, minerals, food) have redefined relations between States and have encouraged the reproduction of the abstract space of capitalism. These processes are intertwined and fundamental to the reproduction and accumulation of capital, and need to be understood as such, given the need for analysis based on totality. Indeed, it may be argued that debates on the politics of space and the politics of nature provide a solid basis for problematizing the theoretical and political issues that involve, for example, the Anthropocene and Capitalocene⁵⁰ debate, currently in vogue, and all the disastrous results that the Covid-19 pandemic bequeathed to the world. In this regard, I believe that the problematization of nature in relation to space based on Lefebvre's legacy opens up stimulating paths for political ecology, by addressing the relationship between the politics of space and the politics of nature.

A third point that seems to me to be relevant in the discussion laid out herein concerns the issue of social classes. This is not to be read orthodoxly. Even if it is necessary to emphasize the originality of his thought by creatively articulating Hegel, Marx and Nietzsche in several of his writings, it is necessary to take into account that Lefebvre was a Marxist thinker and that the class struggle and the overcoming of capitalism were on the horizon of his metaphilosophical reflection.

50. In this regard, see Malm (2015) and Moore (2021). The collection organized by Jason Moore (2022) is a reference in this debate. For a critique of Moore's formulations, see Saito (2017). MALM, A. O mito do Antropoceno [The Myth of the Anthropocene.] *Piseagrama*, Belo Horizonte, No. 8, p. 24-31, 2015. SAITO, K. Marx en el Antropoceno: Valor, fractura metabólica y el dualismo no-cartesiano [Marx in the Anthropocene: Value, metabolic fracture and non-Cartesian dualism]. *Marxismocrítico*. Translation:

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Poststructuralist and postmodernist approaches distance themselves from the way in which ecological Marxism approaches the environmental issue and the ecological crisis. I understand that, as such, and from Lefebvre it is possible to extract this lesson, thought and action regarding nature may not be disconnected from the debate of social classes, and therefore, from dialectical materialism. The political struggle in relation to ecology requires considering an approach that understands the class struggle, conflicts between groups, between capital and work beyond the autonomous, isolated individuals that neoliberal thought insists on entrenching in the means of communication, and in a considerable section of the academy, and which gains diffusion through the role played by corporations with their "green and sustainable strategies"!

Thus, since space is political and social relations of production and class struggle are reproduced in it, there is no reason to analyze the society-nature relationship and the environmental crisis in other theoretical terms. It is here that the links between a process of autogestion and the Lefebvrian political project are set out and may contribute to the contemporary reading that, in many cases, surrounds philosophies based on an autonomous individual and subject, isolated and supposedly capable of resolving alone, or institutionally, the contradictions of the mode of production. It is evident that in Lefebvrian theory there is space for subjects, and a very important place, as long as they are understood in a movement of open totality that is the dynamics of the world and that they are not reduced to subjectivism. The body, sex, desire, dream, emotions, sensibility, all the characteristic elements that involve the lived experience and reproduction, are present and central dimensions of the Lefebvrian legacy to think about space, everyday life, the city. However, these are individuals and subjects inserted into class conflicts. The environmental and ecological crisis, having said that, has unequal expressions according to the unequal and contradictory logic of the production and reproduction of space within the scope of the dynamics of valorization and capital accumulation, with reverberations in the lived experiences and daily lives of thousands of people around the world.

Indeed, it is the "users" who, in the field of social movements, provide outlets (albeit limited) to question and offer alternatives against the existing mode of production. Thus, Lefebvre's ideas may be stimulating for the very social movements that guide the ecological crisis, such as ecofeminism, debates on environmental racism, environmental and climate justice and even the proposal of ecosocialism, even though the themes of feminism, gender and race were not direct objects of

Lefebvre's reflection.⁵¹ The central point is that the debate on class struggle and conflict, allied to the idea of revolution and against capital and the State, constitute the nerve endings of the philosopher's theoretical and practical political project and may be taken into the ecological debate.

Based on the above, it seems clear that nature is prominent in the theory of space production, reverberating in the way in which the politics of space and the politics of nature are conducted within the context of the capitalist mode of production.

Thus, only a utopian alternative that takes into account an appropriation of space, time, and nature, i.e., that proposes to "change life", may burst the ideological bubble that sustains the current discourses surrounding the environmental problematic, which remain silent about capitalism, the State, the productive forces and techniques and, thus, attempt to imprison and exhaust the forces of resistance that question the contradictions and functioning of capitalism in the search for another possible world.

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^{51.} Lefebvre's contributions to the themes of feminism and racism remain to be explored. I will content myself with mentioning the critical dialogue that Aladro (2021) carried out between the Lefebvrian theory of social space and the theory of social reproduction of Marxist feminism. Also, in relation to feminism and Lefebvre, although in another theoretical key to that of the Marxist, see Silva and Ornat (2022). In relation to the use of the potential of Lefebvre's spatial theory for analying racial identity and urbanism, see McCann (1999). ALADRO, A. As mulheres em Lefebvre: para uma releitura do espaço urbano a partir dos feminismos marxistas [The women in Lefebvre: toward a reinterpretation of the urban space from the perspective of Marxist feminisms]. *Plural*, v. 28, No. 2, p. 47-65, 2021. SILVA, J. M.; ORNAT, M. J. Diálogos entre Henri Lefebvre e as perspectivas feministas: o espaço diferencial como possibilidade [Dialogues between Henri Lefebvre and feminist perspectives: the differential space as a possibility]. *Revista da Anpege*, v. 18, p. 334-356, 2022. McCANN, E. Race, protest, and public space: contextualizing Lefebvre in the US city. *Antipode*, v. 31, no. 2, p. 163-84, 1999.

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