

Building with Jelly, or, Concrete as the Concretion of the Abstract

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Abstract

In his recent book titled *Béton: arme de construction massive du capitalisme*, Marxist thinker Anselm Jappe presents a critique of reinforced concrete as an hegemonic building material. In this review, I examine Jappe's book in conjunction with the questions of cosmotechnics and technodiversity raised by Yuk Hui. As this issue of *Footprint* rightly points out, the fields of architecture and urbanism have not yet properly addressed their implication in the process of the decline of technodiversity and the spread of Western technological monoculture throughout capitalist modernity. I argue that the homogenisation of building practices and the unanimous popularity of reinforced concrete is a major aspect of this process which ought to be examined. Expanding Jappe's value-critical analysis of reinforced concrete with Moishe Postone's account of how the peculiar social 'self-mediating' character of abstract labour in capitalism explains the transformation of labour into pure means and of its

tools and products into mere objects, I intend to complement the question of cosmotechnics with an explanation of the decline of technodiversity grounded in the abstract logic of capital.

Keywords

Value-form, cosmotechnics, concrete, Wertkritik

It is not an exaggeration to say that concrete was the material of the previous century and, if things continue running their current course, will define the current one as well. Modern industrial societies are veritable machines for pumping out gargantuan quantities of concrete. Although the total volume of anthropogenic mass already caught up with the total volume of earth's biomass in 2020, by the year 2040 the latter will be surpassed by the global heap of concrete alone.¹ In the third chapter of his book *Betón: Arme de construction massive du capitalisme (Concrete: capitalism's weapon of mass construction)*, Anselm Jappe showers us with several other staggering statistics. Between 1950 and 2019, the world production of concrete was multiplied by twenty-twofold at a growth rate three times faster than that of steel. Since 2003, China has used more concrete every three years than the United States did during the whole twentieth century. Besides consuming 10 per cent of the water in the world, if the concrete industry was a country, it would be the third largest producer of CO₂ emissions.² This is by no means a secret anymore. Labeled by some 'the most destructive material on earth', the ecological consequences of concrete have been underscored by plenty of architects and designers

who call for a return to more traditional (and 'energy-efficient') building practices.³

Despite constituting the unavoidable backdrop of Jappe's searing book-length critique of concrete, an exposition of the ecological consequences of this omnipresent material is not his core purpose. Rather, the main propelling force of the book is a condemnation of reinforced concrete as a major factor in the progressive disappearance of traditional materials and vernacular building practices throughout the world; a crucial dimension of the decline of technodiversity resulting from the globalisation of Western technological monoculture – using the concepts introduced by Yuk Hui in recent years – and one which the architectural profession has yet to reckon with. In his own work, Hui has examined this decline and the concomitant foreclosing of non-Western cosmotechnics, that is, the way in which the complex imbrication of technical thinking and practice with culturally specific cosmological settings has been replaced by a homogeneous way of deploying technology instrumentally on a mute and disenchanting nature. While Hui's project provides us with conceptual tools that are useful to critique this foreclosing of alternative ways of relating technically to the world beyond instrumental rationality, and to imagine how modern technologies could be redirected towards future divergent trajectories, he does not delve into the precise mechanisms through which this monoculture has been established in the first place. I believe that Marxist theory can aid us in this purpose. Although Jappe's book certainly does not present us with a fully-fledged Marxist theory of the decline of technodiversity in architecture (nor does it aspire to), it does offer some interesting remarks that can suggest a path forward.

Before looking more closely at this point (which only appears in a small fraction of the text) and how Jappe approaches it, it is worth saying a brief word about where he's coming from. Jappe is an important figure of German *Wertkritik* (value-critique), a strand of Marxist thought formed in the late '80s around the journals *Krisis* and later *Exit!*.⁴ Despite their many differences, *Wertkritik* can be regarded as part of the same theoretical milieu as other strands of contemporary Marxism such as *Neue Marx Lektür* and so-called value-form theory, all of which have, in their own ways and with different aims, attempted to dislodge Marx's mature critique of political economy from orthodox readings that portrayed it as either an 'alternative' economic theory or as a teleological philosophy of history. In contrast, these new readings of Marx have focused on elaborating the problems and concepts of abstract labour, fetishism, and the form of value, all with the intention of developing a Marxist

critical social theory that elucidates the abstract and impersonal domination that the logic of value exerts over society.⁵

Betón can be situated within a longer lineage of Marxist critiques of architecture and urbanism. Jappe himself regards his contribution as complementary to classic works in the field such as those of Henri Lefebvre and David Harvey, thinkers who have developed pathbreaking critiques of the production of space under capitalism and its ensuing urban dynamics of inequality. However, Jappe argues that such authors have omitted a closer look into materiality. Thus, in the preface, he states what he views as the three main contributions of his short volume: 'it highlights the problem of *materials*, it resorts to the so-called vernacular architecture to judge modern constructions, and it reveals the isomorphism between concrete and the logic of exchange value.'⁶

The chapters are considerably heterogeneous, ranging from the factual and historical to the polemic and even belligerent. The first chapter presents a useful short history of concrete as a building material, from its origins in the Roman *caementum* with which the Parthenon was erected, to Joseph Aspdin's patenting of Portland cement (the most prevalent to this day) in 1824, and finally to Joseph-Louis Lambot's revolutionary use of steel reinforcements for a rather whimsical purpose: to build a concrete dingy displayed in the 1855 International Exhibition in Paris. This very French past sets the stage for the next chapter, where we encounter what could be described as a short political history of reinforced concrete in the twentieth century. Polymorphous in both its materiality and its political affiliations, concrete was employed in all kinds of building projects, whether they were socialist, vanguardist, fascist, Stalinist, or social democratic: 'From the Soviet five year plans to the New Deal in the United States, China's Great Leap Forward and the construction of housing in Europe after the Second World War... In all these cases reinforced concrete was always summoned.'⁷ One merit of Jappe's account is his emphatic dispelling of the idea that concrete could be regarded as a 'democratic' – or even 'proletarian' – material. While concrete did not attain its hegemonic status until the post-war period, this notion was established early on through its initial affiliation with the progressive bourgeoisie of the French Second Empire that established a 'precocious link between concrete and the progressive bourgeoisie, between "concrete" and "housing for everyone". A link that we will encounter again throughout this story.'⁸ Jappe is adamant in refuting this association, not only on the grounds that there is nothing inherently progressive about mass-produced housing (often of dubious quality and durability) enabled by the sheer economic efficiency of a low-cost material.



Fig.1: Hoover Dam, Colorado. Source: Tim Felce.

In a very interesting argument (which unfortunately is not developed further), Jappe points out the role that the establishment of reinforced concrete as a de facto building material has played in the division between manual and intellectual labour, that is, the division between the architect and engineer, on the one hand, and the unqualified labourer on the other.⁹

Jappe's scathing critique of modern architecture, one of the main advocates of concrete throughout the twentieth century, is arguably the core pugilistic intervention of the book – and, to my mind, perhaps one of its weakest. Jappe often wears his disdain for modern architecture on his sleeve: a disdain that he admits has been a constant since his teenage years and was further ignited by the 'inconceivable ugliness' of Le Corbusier's Chandigarh project in India, which prompted Jappe to write *Betón* after seeing a picture of its current 'ruinous' state.¹⁰ Likewise, Jappe can hardly hide his contempt for the Swiss architect himself. He dedicates a considerable portion of Chapter 2 to the burying of the commonplace image of Le Corbusier – and his architectural vision – as 'progressive' or humanistic, showing instead his fascist (and quasi-eugenicist) inclinations, his allegiances to authoritarianism and technocracy, and the close link between the Modulor and Taylorist ergonometerism. Satisfying as these acts of idol-smashing might be, Jappe's scorn for his political foes can sometimes veer towards the derisive – for example, when he offhandedly dismisses Heidegger's philosophy as a 'farce'.¹¹ Often channelling his energy into tackling individuals rather than elucidating the mute compulsions and structural determinants of the capitalist system, such a style of critique precludes Jappe from elaborating a more robust historical and dialectical analysis of modern architecture.

Jappe's engagement with what I described above as the decline of technodiversity in building practices can be found in Chapter 4, titled 'Building without concrete and without architects'. There he discusses the role of concrete in 'the loss of traditional knowledges and in the decline of craftsmanship in construction'.¹² If reinforced concrete is the 'sworn enemy of local particularities and infinite variations', this is because it lends itself to the prefabrication of its elements and thus to standardisation. The hegemony of concrete from the post-war period onwards has produced a veritable transformation in the conception and construction of buildings. Besides its imposition of the new division of labour in construction glossed above, it has substituted traditional building materials and their associated knowledges. Thus, Jappe regards the 'international style' or 'modern movement' as a movement geared towards the 'elimination of architectural diversity and its global homogenisation'.¹³ As such,

it is part and parcel with a more general understanding of modernity as being distinguished 'by *monoculture* in all domains'.¹⁴

In continuity with the establishment of such an architectural monoculture, in the seventh and last chapter titled 'The Concrete of the Abstract', we can find a suggestive attempt to explain how this has come about as a result of the logic of capital's encroachment in building practices, and why concrete constitutes its privileged material. In the introduction, Jappe asks the crucial question that this short chapter (barely fourteen pages) attends to: 'Is it possible that concrete sustains links with capitalism that cannot be reduced to the increase of profit for some, but that even go so far as to make it the perfect materialisation of the logic of exchange value?'¹⁵

In this last chapter, Jappe gives us a swift – albeit instructive and helpful – rehearsal of the path that leads to Marx's concept of abstract labour and his famous assertion that 'individuals are now ruled by abstractions'.¹⁶ From Hegel's materialisation of the Idea to Feuerbach's humanist critique of hypostatised ideas and Marx's critique of Hegel's philosophy of right: the running thread is the diagnosis of an inversion between the abstract and the concrete, that is, the concretising of abstraction. In the case of capitalist society, the abstraction in question is none other than value. Without going into much detail here, we can say that value emerges from the particular social form of labour under capitalism. In a society where social reproduction is mediated by an impersonal global market, individual labours only become part of the totality of social labour through the quantitative comparison of the exchange-value of their products, that is, through a social process that implies the practical abstraction of labour.¹⁷ Jappe describes the inversion of the abstract (that is, value that emerges from abstract labour) and the concrete in the context of the value relation in the following way: 'although it derives from the concrete, the abstract becomes, through a kind of inversion, in the substantial reality, and the concrete only exists as the temporary and interchangeable incarnation of the abstract'.¹⁸ In Seb Franklin's apt formulation, value becomes an 'empty form that takes hold of material relations'.¹⁹

This is precisely the point where Jappe claims that 'concrete [the material] *constitutes one of the concrete sides of the exchange abstraction produced by value that, in itself, is created by abstract labour*. ... This abstraction is expressed in a particularly concrete and visible way in two materials: concrete and plastics'.²⁰ Jappe's striking claim is thus that due to their physical properties, these materials are particularly adequate to the perverse hylo-morphism of value. Concrete and plastic, Jappe argues,

are 'perfectly isomorphic' with value. This isomorphism is predicated on their shared penchant for homogenisation. As Jappe writes, the logic of value is 'a gigantic *reductio ad unum*, an ontological *Gleichschaltung*, a permanent uniformisation. For value, the world's infinite forms are nothing more than the coating of a substance that is always the same. Marx described this phenomenon well with the term *Gallerte*, jelly.'²¹

Marx's striking – and for many, contradictory or cat-achrestic – portrayal of value through the figure of *Gallerte* has been widely commented on.²² For Jappe, *Gallerte* is Marx's term for the fetishistic or 'spectral objectivity' of value; as a 'phantasmagoric, imaginary jelly' it refers to the way the abstract social substance that is value acquires a certain 'pseudo-concreteness' when it is incarnated in concrete commodities.²³ However – and apologies in advance for the clumsy cipher – it would seem that with concrete, this pseudo concreteness of value becomes fully concrete. Reinforced concrete is Marx's jelly come true. 'Concrete is the perfect materialisation of the logic of value. It is its hypostasis, its incarnation. It represents, par excellence, *the concrete side of exchange abstraction*. Concrete is the visible side of abstraction ... The jelly of abstract labour is made from limestone and rubble.'²⁴

Jappe's notion of concrete as the concretion of the logic of value could be fruitfully complemented with a series of interesting remarks made by Moishe Postone in his trailblazing *Time, Labour, and Social Domination* (a central source of inspiration for *Wertkritik*). There, he explains how the socially synthetic process whereby labour is practically abstracted in capitalism leads to the transformation of labour into pure means and of its tools and products into mere objects – in other words, to the "secularisation" of labour and its products'.²⁵ He describes how in 'traditional societies' labouring activities and their products are embedded in a matrix of social relations that determine them with seemingly intrinsic meanings – which range from the 'overtly' social to the sacred – and, in a curious inversion, also with a socially determining character, that is, with the power to determine an individual's position within the cosmos. However, in capitalist society we encounter the opposite inversion: 'social relations in traditional societies determine labours, implements, and objects that, inversely, appear to possess a socially determining character. In capitalism, labour and its products create a sphere of objective social relations: they are in fact socially determining but do not appear as such. Rather, they appear to be purely "material."²⁶ Labour becomes instrumental and its product a desacralised commodifiable thing, ready to become the (pseudo)concrete incarnation of the value form. 'The

world of commodities is one in which objects and actions are no longer imbued with sacred significance. It is a secular world of "thingly" objects bound together by, and revolving around, the glittering abstractum of money.'²⁷

Despite its brevity, I hope this short incursion into a possible Marxist theory of the decline of technodiversity will have provided a glimpse of how, besides being a worthwhile contribution to the critique of modern architecture, *Betón's* particular interweaving of value and the very materiality of architecture opens up avenues of thought that have yet to be probed more extensively.

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Notes

1. Brian Potter, 'There Will Soon Be More Concrete Than Biomass on Earth', *Heatmap*, 8 March 2023, <https://heatmap.news/economy/the-planet-s-jaw-dropping-astonishing-down-right-shocking-amount-of-concrete>.
2. Anselm Jappe, *Hormigón: Arma de Construcción Masiva Del Capitalismo*, trans. Diego Luis Sanromán (Logroño: Pepitas de calabaza, 2021), 77–83. Published originally in French in 2020, at the time of writing this review the book has yet to appear in English. All citations refer to the Spanish edition, and all translations to English are my own.
3. Jonathan Watts, 'Concrete: The Most Destructive Material on Earth', *The Guardian*, 25 February 2019, <https://www.theguardian.com/cities/2019/feb/25/concrete-the-most-destructive-material-on-earth>; Will Hurst, 'Concrete: Do Architects Have Their Heads in the Sand?' *The Architects' Journal* (blog), 16 January 2019, <https://www.architectsjournal.co.uk/news/concrete-do-architects-have-their-heads-in-the-sand>. In contradistinction to such appeals to traditional building methods, there has also been a lot of discussion around 'green' concrete and so-called 'sponge cities'. Lei Wang et al., 'Overview of the Application of Ecological Concrete in Sponge City Construction', *Frontiers in Earth Science* 10 (2022): 10–17, <https://doi.org/10.3389/feart.2022.1085419>.
4. For a compilation of canonical *Wertkritik* texts, see Neil Larsen et al., eds., *Marxism and the Critique of Value* (Chicago: MCM Publishing, 2014). Jappe himself has written a useful survey of this current; see Anselm Jappe, 'Towards a History of the Critique of Value', *Capitalism Nature Socialism* 25, no. 2 (3 April 2014): 25–37.
5. The term *Neue Marx-Lektüre* comes from Hans-Georg Backhaus's influential collection of essays, where he used this term to emphasise what he saw as a departure from traditional interpretations of Marx. Generally speaking, the term is used to refer to the discussion that ensued in Germany among followers of Backhaus (himself a student of Adorno) and later writers such as Michael Heinrich. The origin of the term 'value-form theory' is harder to pin down. However, according to Samuel Chambers, one can regard *Neue Marx-Lektüre* and value-form theory as practically interchangeable terms due to the shared emphasis that authors labelled with these terms place on Marx's understanding of the form of value and their attempt to re-evaluate the methodological bases of the critique of political economy. Chambers also points out that, while closely related and in many ways overlapping, the project of *Wertkritik* is different insofar as it embarks on a broader critique of modern society and is thus more closely related to early forms of Frankfurt School critical theory. Samuel A. Chambers, *There's No Such Thing As 'The Economy': Essays on Capitalist Value* (Earth: Punctum Books, 2018), 108 n5.
6. Jappe, *Hormigón*, 8; original emphasis.
7. *Ibid.*, 56.
8. *Ibid.*, 28.
9. Adrian Forty provides us with a useful historical account of the impacts of concrete on labour practices, albeit without adopting a Marxist standpoint. See Adrian Forty, *Concrete and Culture: A Material History* (London: Reaktion Books, 2012), Chapter 8 'Concrete and Labour.'
10. Jappe, *Hormigón*, 46.
11. *Ibid.*, 48.
12. *Ibid.*, 102.
13. *Ibid.*, 40.
14. *Ibid.*, 111; original emphasis.
15. *Ibid.*, 16.
16. Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy*, trans. Martin Nicolaus (London: Penguin Books, 1973), 164.
17. For the useful rendering of abstract labour as 'practically abstract labour', see Patrick Murray, 'Marx's "Truly Social" Labour Theory of Value: Part I, Abstract Labour in Marxian Value Theory', in Murray's *The Mismeasure of Wealth: Essays on Marx and Social Form* (Leiden: Brill, 2016), 120–55.
18. Jappe, *Hormigón*, 163.
19. Seb Franklin, *The Digitally Disposed: Racial Capitalism and the Informatics of Value* (Minneapolis: University of Minnesota Press, 2021), 197.
20. *Ibid.*, 157. Emphasis in original.
21. *Ibid.*, 165–66.
22. See in particular Keston Sutherland, 'Marx in Jargon', *World Picture* 1 (2008): 1–25; Sianne Ngai, 'Visceral Abstractions', *GLQ: A Journal of Lesbian and Gay Studies* 21, no. 1 (2015): 33–63.
23. *Ibid.*, 164, 159.
Perhaps it is worth quoting this intriguing passage in full here:

Now then, what is more similar to jelly than concrete? This is not a simple analogy. Concrete is the perfect materialisation of the logic of value. It is its hypostasis, its incarnation. It represents, par excellence, *the concrete side of exchange abstraction*. Concrete is the visible side of abstraction. It is a material without limits (liquid to start with), amorphous, polymorphous, and can be poured into any mould. It overwrites all differences and it is more or less always the same ... It has *no form of its own*, but can adopt any. It does not exist in natural state anywhere, but it has become omnipresent. The same thing happens with value: it can change form, it can be money, become commodity, be money again, pass through a series of metamorphoses until it becomes unrecognisable – when it is incarnated in a use-value – to recover its initial form once again. Capitalist value has abolished all local particularities, all traditions, and imposes itself in every corner of the planet as the only law ... in the same way, concrete has extended its monotonic kingdom over the entire

world, homogenising every place with its presence. The jelly of abstract labour is made from limestone and rubble.

Ibid., 166; original emphasis.

24. Moishe Postone, *Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory* (Cambridge: Cambridge University Press, 1993), 173.
25. Ibid., 172.
26. Ibid., 175.

Biography

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