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## The Right to the City. Towards the Dictatorship of the Digital Proletariat in an Age of Total Planetary Computation

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## **The Right to the City. Towards the Dictatorship of the Digital Proletariat in an Age of Total Planetary Computation**

‘Alexa, turn on the hall lights.’ Words taken from a 2017 promotional video for the Amazon Echo — ‘a disembodied voice’, and ‘interface for an extraordinarily complex set of information processing layers.’ ‘Alexa, do x’. The discounted toilet-roll is ordered or the house lights come on, but before they do, travelling at the speed of light, a small packet of data arrives at a banal warehouse in the middle of somewhere where needs, wants and desires are farmed in a repository of disembodied voices. From the mining of tantalum, used in the manufacturing of the Echo, from the geological strata of the Democratic Republic of Congo where the profits helped fund the deadliest civil war since WWII; to cavernous, so-called ‘fulfilment centres’ where an invisible workforce are called into action by our buy-now-1-click interface commands; moving robotically down seemingly endless isles of algorithmically organised products arranged according to purchase preferences the like of which we never knew we had — someone who buys a Foucault book is likely to go on and buy cat food; a computer monitor; underwear a hammer and a John Grisham novel; objects juxtaposed together, a strange kind of architecture of consumer desires — a new production of space: abstract space. Products primed and ready to move across a more than military grade infrastructure to arrive as a banal, innocent looking brown box through the domestic front-door letterbox-come-retail destination.

Those simple words ‘turn on ... lights’, ‘buy this-or-that’, are part of complex entangled infrastructural ecology; what Benjamin Bratton calls The Stack — an accidental megastructure that is both a way of understanding our age of planetary computation and a machine from which spatial production takes place. A vertical geography moving from the raw resources of the earth, to the light speed interactions of the cloud, drawing in users (human and non-human), and acting upon the terrains of the cities. Just as Marx understood the division of labour as intrinsically linked to the

history of the means of production, so these new means of barely perceptible light-speed production are radically deterritorialising and territorialising new urban terrains via new means of software sovereignty and algorithmic governmentality. This digital turn of production is inherently material; inherently spatial.

An urgent set of questions is therefore necessary; questions asked fifty years ago by marxist sociologist Henri Lefebvre: Who produces this space? What is it that is being produced? How is it being produced? Why is it being produced? And for whom is it being produced? And perhaps most importantly to what extent do these spaces contribute to our alienation from our ability to participate in what Lefebvre saw as our democratic right to the production of space. What, in his 1968 text, he called *the right to the city*.

There is not space in this paper to answer all of those question nor have I yet developed these ideas fully. Rather I want to provide a framework in which those questions can be discussed. I want to open up a conversation that asks: to what extent might Lefebvre's right to the city act as a useful conceptual apparatus by which we might understand the materialisation of total planetary computation? I offer no answers just what I hope will be possible lines of flight from which new assemblages might emerge.

As an architect these questions are important to me. I believe that unless architecture, urban theory and design begins to deal with the issues created by the kind of global planetary computation that I have just described we will fast become a discipline in exile — if we are not already. A discipline with the inability to move beyond the blinkered visions of our transcendental ontologies, reductionistic understandings of context, the deeply ideological scales at which we work, and our singular anthropocentric perspectives. These cartographic tracings “of horizontal global space can't account for all the overlapping layers that create thickened vertical jurisdictional complexity, or for

how we already use them to design and govern our worlds. Instead of lamenting all the exceptions to the norm, hoping that they will get back in the box where they belong, perhaps it is time to map a new normal.<sup>1</sup> Perhaps it is time to move beyond the “immaterial, friction-less, acontextual, and non-spatial ideologies that continue to surround contemporary information and communication technologies.”<sup>2</sup> And perhaps if we as designers “were to pay more attention to the mundane infrastructures, landscapes and assemblages involved and the ways in which they quite literally surround and sustain our everyday lives, we might be less likely to wrap these transformations in the hype of utopia — or dystopia — with all the unhelpful gloss that doing so invites.”<sup>3</sup> To map this new normal is, with Deleuze and Guattari, to distinguish between mapping as “tracing” and mapping as a cartography, that is “... open and connectable in all of its dimensions ... detachable, reversible, [and] susceptible to constant modification.”

But first I want to set the scene by offering some brief thoughts on Lefebvre’s right to the city.

Firstly a correction. The city is a construct of the imagination that relativises our understanding of the world and so we must stop talking about the right to the *city*. What do I mean by that? Late-integrated-capitalism cares not for Westphalian jurisdictions and territories. Instead of the right to the city, in line with Lefebvre in the *Urban Revolution*, we must instead talk of the *right to the urban*.<sup>4</sup> Lefebvre makes an important and prescient distinction between the city and the urban which rather than being a bounded specificity is more like an interrelated process; an “ecosystem”<sup>5</sup> or, a “social reality made up of relations.”<sup>6</sup> The city, under the forces of capital has imploded; its

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<sup>1</sup> Benjamin H Bratton, *The Stack* (Massachusetts: MIT, 2005) 4.

<sup>2</sup> Taraneh Meshkani and Ali Fard Ed., *Geographies Of Information* (Cambridge: Harvard University Graduate School of Design, 2015) 17.

<sup>3</sup> *Ibid.*, 35

<sup>4</sup> Henri Lefebvre, Eleonore Kofman and Elizabeth Lebas, *Writings On Cities* (Oxford: Blackwell Publishing, 2008), 123.

<sup>5</sup> *Ibid.*, 72.

<sup>6</sup> *Ibid.*, 103.

citizens alienated from its spaces, but in-turn it has exploded with the geospatialisation of capital that had once been confined to the specific territory of designated zones of city centre trade (Chen's *Evolution of Free Economic Zones*<sup>7</sup> outlines this process). Urbanisation has exploded beyond the city walls and the binary distinction between rural and urban is transformed. Lefebvre conceives this as being like a "fabric thrown over a territory,"<sup>8</sup> transgressing borders and subsuming territories. The city is not the opposite of the urban, rather, it has become caught in the net of the fabric of urbanisation and "is no longer lived, . . . no longer understood practically. It is only an object of . . . consumption for tourists."<sup>9</sup> Or, in our age, it is increasingly become the theatre for the banal platitudes of Muskian accelerationist smart city ideology and its associated techno-messiah complexes — perhaps they could volunteer to go and colonise Mars. The city has entered into a system of exchange, its use value now dominated by its exchange value. This Lefebvre calls abstract space: a state/market produced homogenised space smoothed to allow for the unobstructed flow of frictionless capital.

Lefebvre calls this total planetary urbanisation or "complete urbanisation." It is not complete in the sense that urbanisation is a teleological process which has reached its destination. Rather, complete urbanisation is the continual unfolding and reshaping of the fabric mesh draped over society. "Urban society," he writes "refers to tendencies, orientations, and virtualities, rather than any preordained reality."<sup>10</sup> This is not to say that the right to the urban is not material. The right to the urban is a deeply material becoming. In the closing sentence of one of his final texts *Dissolving City, Planetary Metamorphosis*, Lefebvre is clear: "The right to the city implies nothing less than a

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<sup>7</sup> Xiangming Chen, "The Evolution Of Free Economic Zones And The Recent Development Of Cross-National Growth Zones", *International Journal Of Urban And Regional Research* 19, no. 4 (1995): 593-621, doi:10.1111/j.1468-2427.1995.tb00530.x.

<sup>8</sup> Henri Lefebvre, Eleonore Kofman and Elizabeth Lebas, *Writings On Cities*, 71.

<sup>9</sup> *Ibid.*, 148.

<sup>10</sup> Henri Lefebvre, *The Urban Revolution* (Minneapolis: University of Minnesota Press, 2014), 2.

revolutionary concept of citizenship.”<sup>11</sup> At the core of this revolutionary concept of citizenship, and all of Lefebvre’s work, is the disalienation of the proletariat. But Lefebvre moves on from Marx — In his understanding this disalienation leading to the dictatorship of the proletariat would not take place on the factory floor but in the city through the production of new spaces of emancipation by the proletariat who through actual material practices of grassroots self-management (or autogestion), outside of the jurisdiction of the state would (following Marx’s revolutionary progression) arrive at the withering away of the state. Thus the Right to the City is an inherently spatial becoming-dialientated of the proletariat. It is therefore nothing unless it takes hold of the latent immanent virtuality's of the present and in imagining multiple possible futures actualises those latent virtuality's in the real. It is a concrete-utopian becoming urban that is intrinsically linked to the production of space which is itself intrinsically linked to the means of production. Lefebvre offers us a reminder: the process of deproletarianisation is a spatial process.

The irony of Lefebvre’s right to the city is thus: “The condition of possibility for the right to the city is the death of the city.”<sup>12</sup> The city has dissolved. It is to break from the ideological legislative images of the city as a bounded totality of abstract spaces and instead to understand that the production of new differential spaces of emancipation, dis-alienation and deproletarianisation will be subject to much more complex, entangled and interconnected forces. What today we might call total planetary computation, a force far more complex than Lefebvre’s thesis of total planetary urbanisation could account for. As Bratton writes, it is an “altogether different ... challenge to account for an urban-scale agglomeration of computational object-instruments, ranging in size from a few molecules, to a few centimetres, up to the scales of furniture, a dump truck, and city block, all

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<sup>11</sup> Henri Lefebvre, "Dissolving City, Planetary Metamorphosis", *Environment And Planning D: Society And Space* 32, no. 2 (2014): 203-205, doi:10.1068/d3202tra.

<sup>12</sup> David J Madden, "City Becoming World: Nancy, Lefebvre, And The Global—Urban Imagination", *Environment And Planning D: Society And Space* 30, no. 5 (2012): 772-787, doi:10.1068/d17310.

interacting among one another.”<sup>13</sup> If the right to the city is ultimately the disalienation of the proletariat through the production of new kinds of urban space then the question is how do these spaces get produced. For this we turn to Lefebvre’s trialectic of spatial production, a concept that I contend remains a relevant tool for understanding the multi-scalar spaces produced in our age of global planetary computation.

For Lefebvre, if social space is socially produced, it is done so through three dialectically interrelated processes. Firstly, *spatial practice*: In short, this is space produced by daily routines — going to the shop, driving to work, the school run etc — and what Lefebvre calls “urban reality”;<sup>14</sup> the network of infrastructures produced by the current means of production such as roads, rail networks etc. Secondly: *representations of space* — this is “conceptualized space, the space of scientists, planners, urbanists,”<sup>15</sup> smart city ideologists, architects and the so called experts who produce certain cartographic representations of space, through drawings, images and visualisations. Thirdly: *representational spaces* — this is passively experienced space; space that is mediated to us through signs, symbols and images. It is thus directly linked to the daily lived experience of spatial practice and those who produce symbolic representations of space but it is more to do with how space is mediated to us as an act of perception and imagination through signifying processes of “non-verbal symbols and signs” — for example when I say New York, most of us probably have a very similar image in our minds.

So, in summary, the right to the city as a material practice is nothing less than the right of citizens to disalienation through the act of deproletarianisation by the production of new kinds of differential space through 1.) *Spatial practices* that are not coded by the abstract homogenised spaces of capital 2.) *Representations of space* that are not produced for the purposes of a state/market led ideology

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<sup>13</sup> Benjamin H Bratton, *The Stack* (Massachusetts: MIT, 2005), 227.

<sup>14</sup> Henri Lefebvre, *The Production Of Space* (Malden, Mass.: Blackwell, 2016), 38.

<sup>15</sup> *Ibid.*, 38.

and the purpose of consumption 3.) *Representational spaces* whereby the symbolic mediation of space is not an ideologically driven means of smoothing space for the purpose of frictionless capital production and accumulation.

What relevance does this have for us today? Well, Lefebvre future-proofed his trialectic of spatial production by connecting it to the means of production. He writes that “each mode of production has its own particular space, the shift from one mode to another must entail the production of a new space.”<sup>16</sup> While we don’t need to rehearse the radical shifts in the means of production that total planetary computation has brought about, I am saying nothing new when I say that personal digital computation has led to a complete reconfiguration of what we previously understood by ‘means of production.’ Plugged into our various digital prosthetics, manifesting as innocent looking must-have luxury fashion objects, we are now not simply users of digital prosthetics but have ourselves become the prosthesis, the digital proletariat of late-integrated-digital capitalism; simultaneously consumer, product and producer yet — for the purposes of the real-end-users capital accumulation — hidden conveniently from the knowledge that we are any of those things and the joy of that which we produce.

But what does this mean for the production of space? Let’s consider a simple example. I am standing in Grafton street and I open Google maps on my phone — a representation of space is presented to me. I assume, because I am conditioned to think so, that the map which I see on my screen is an accurate representation of my surroundings. However something much more nuanced is taking place. As Adam Greenfield writes, when we open something like a digital mapping application “our sense of the world is subtly conditioned by information that is presented to us for interested reasons, and yet does not disclose that interest.”<sup>17</sup> The information that I see on my screen

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<sup>16</sup> Ibid., 46.

<sup>17</sup> Adam Greenfield, *Radical Technologies* (London: Verso, 2017), 63.

— the representation of space — may be different from information that you see on your screen because (depending on various privacy settings) that information has gone through a process of algorithmic sorting based on my web search history, other apps I have installed, things that I have said, where I have visited before etc. While this may appear to be of little consequence it has a tangible effect on the spaces produced by my daily routines or as Lefebvre would call them: “lived spaces,” because “according to Google, four out of every five consumers use the map application to make local searches” half of those end up “visiting a store within twenty-four hours, and one out of every five of these searches results in a “conversion,” or sale.”<sup>18</sup>

So, lets imagine that, based on the representation of the map that I have on my screen I pick a coffee shop, find some ‘representational’ images of that coffee shop, read some representational reviews on Trip Advisor and visit the coffee shop (lived space) where via social media platforms, like Instagram or Facebook, I might contribute to the production of additional representational spaces by posting careful cropped and filtered images of my skinny latte, or a review geotagged marking my location, that immediately connects me into a global cognitive assemblage of dopamine firing ‘like’ clicks and perhaps more importantly to a digital tertiary retention creating the possibility that my memory and perception of the spaces that I experience may be diminished thus changing how I might re-represent those spaces at a later date. These *representational spaces* that I create, and the *lived spaces* that I inhabit then become important data when it comes to the neurological, chemical and physical remapping of me the user who is re-represented new spatial configurations via digital mapping devices that in-turn change the ‘lived’ spaces that I might inhabit and go on to produce representable space of. All of which is based on the increasingly quickened hyper-speed algorithmic processing of an imagined future configured by the past which dictates my actions in a material present — meaning that the digital production of space has become a closed-loop of increased

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<sup>18</sup> Ibid.

alienation selling me with the myth that my portable digital prosthesis is opening the world out to me when in fact it is closing it in.

This kind of hyper-speed, barely imperceptible production of digital space “is an encounter with layers of visible and invisible interfaces” that not only map the world but map us, “rendering the world as an image map and image instrument for [our] particular idealised conception of it.” We are thus governed by a “highly striated weave of dense differential connections in specific networks.” This kind of urban realm “is not managed from some central command position,” Like the technosupremacist ideology of smart city exponents like IBM or Cisco would have you believe. Rather the digital turn of the spatial has resulted in a “dispersal of authority into hypergranular interfacial fields” where each individual or “‘dividual’ is cast as a sort of cellular automaton, expressing absolutely specific intentions and instructions for an emerging territory in formation. That territory in turn is driven from the bottom up according to the limited frames of thought, action, access, and expression that its own aggregate field of interfaces presents to each user.”<sup>19</sup>

The example I have offered is a simple one but is perhaps one that is representative of how everyday spatial production is changing in our age of total planetary computation. What is happening here is not inconsequential; “computation is not virtual; it is a deeply physical event.” The lived spaces that we inhabit are being represented to us in a particular way for a particular purpose for a particular outcome that then in-turn go to dictate how space might be represented to us in the future, how we might use those spaces, and how we produce space. And if deproletarianisation is an inherently spatial process then our attention needs to turn to what kind of cartographies we might be able to assemble that can participate in that process. This paper doesn’t offer any of those answers. But the questions remain: Who produces this space? What is it that is

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<sup>19</sup> Benjamin H Bratton, *The Stack* (Massachusetts: MIT, 2005), 158.

being produced? How is it being produced? Why is it being produced? And for whom is it being produced?

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