

Global Metropolises: Places, Where the Process of Modernity is Most Visibly Materialized

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Summary

Paper is concerned with concepts that strives to grasp several notable features of a modern globally interconnected and urbanized world. It starts with a fictional image and advances the concepts of the process of modernity, consisting of urbanization, modernization and capitalism, and a concept of global metropolis. It proposes to treat the network of global metropolises, and especially their core areas, as spatially discontinuous but nevertheless socially closely interconnected 'one-world' city. These core areas are surrounded by ancillary metropolitan regions, while the 'rest of the worlds', the peripheries, are taken as reservoirs of resources. The one-world is then taken as the ultimate infrastructure, as the world that connects all the rest of the diverse social worlds, it is the crossroads of the worlds and a background or context that needs to be taken into consideration in whatever talk about modernity. The concept of infrastructure is also developed to distinguish the 'deep' infrastructure of language, social practices, standards or codes from the 'overt' infrastructure of public roads, pipelines or institutions.

Keywords

Global metropolises, one-world city, process of modernity, infrastructure, codes, social practices.

Fictional introduction

I would like to start this paper about modernity and contemporary metropolises little bit unusually, with a passage from *The Fall of Hyperion*, a science-fiction novel written in 1990 by Dan Simmons:

“I wandered down the long, gradual slope to the River Tethys, past the dock where an incredible assortment of river craft disgorged their passengers. The Tethys was the only webwide river, flowing past its permanent farcaster portals through sections of More than two hundred worlds and moons, and the folk who lived along its banks were some of the wealthiest in the Hegemony.” (Simmons 1990, 12)

The passage illustrates, in a cosmic scale, the idea of the core of the 'one-world', consisting of multiple places (cities, planets), interconnected by a perfect network (farcaster portals are gates that allow instantaneous travel between places where they are installed) – even river, with no spring and no estuary, can flow through it. The network of portals is the basic (and almost unseen) infrastructure of the Hegemony: a constellation of habitable planets in the galaxy that were terraformed (colonized) by humans. Interestingly enough, shortly after the dawn of this cosmic age, the 'Old Earth' have been gradually consumed by a black hole that had arisen by 'an accident' that followed the discovery of farcaster portal technology. Other notable feature of the portals is the fact that people do not understand this technology: farcaster network was developed and is ran by artificial intelligences (AIs) that are mutually dependent on that part of humanity that lives under the Hegemony. And Hegemony makes total war upon the other part of humanity, the Ousters, those that chose to live outside the portals, in the outer space, and without the support of AIs.

The fictional universe, portrayed by Simmons, have much more features that may interest us, but let us stick to this sketch and use it for enlightening the structure of contemporary world. I am going to argue the the basic and more and more pronounced distinction is between 'one-world' in the core and 'multiplicity of worlds' on the periphery. While the scale of the one-world is global, the scale of peripheries varies – from neighbourhoods and communities through cities and regions to the whole nations.

Discourse of modernity

Modernity is a process that comprise three other, mutually entangled processes – urbanization, modernization and capitalism. Let's go through these three processes one after another.

Urbanization is indeed a process of materialization of social structure, of ideas and of identities. The discourse of modernity bluntly says that dreams may come true, it is possible to bring them down on earth, to materialize them. Modern cities are presented as a proof of this bold claim. And they are, in a way, the world that our predecessors dreamed of: many of them lived in a world of scarcity, so they dreamed of abundance; others lived in slavery or in subjection, so the modern cities are places of freedom. At least some of them. Or, to be correct, some of their parts. This is the dividing line between the one-world, where dreams come true, and the rest of the worlds, that were built or used in order to fulfil those dreams.

All the modern 'worlds' are purposefully and rationally constructed. Even the fantasy and science fiction worlds are made this way: they serve, besides other, as a reservoir of dreams. But the discourse of modernity says that the only world that really *matter* (do you hear it in these words?) is a *material* world, the *one* world, the *only* world that “really exist”. The rest of the worlds is there only to serve, these worlds are either tools, reservoirs of resources or they does not matter to modernity at all. In fact, the worlds that are not servant should not rather exist at all – if only because they are capable of disproving the modern story. And therefore, the managers of one-world usually, rationally, in order to construct and safeguard their most precious one-world, makes war on those uncontrollable other worlds: to subdue or destroy them.

The second constitutive process of modernity is modernization: a process of change. It is really hard in a discourse of modernity to criticize that what is termed *modern*. For instance, pointing at something and saying “this is not modern“ (meaning particular social practice, building, land-use, segment of society) starts the legitimation of a process of change. It almost equals to strongly saying that: “this is *tabula rasa*“ and it is therefore reasonable to modernize it, develop it, change it to “something useful“, simply to *connect* it to the modern world-system. Being disconnected, being *off* or *out* is definitely something that is not *modern*. But what *exactly* is *modern* in particular time, at particular place or society, that is the issue of intense debate and a reason for social struggle. And a truly modern society is institutionally arranged for an accommodation of such debates and struggles. Demanding *change* is profoundly modern.

Within the core of a discourse of modernity lies the imperative: “You have to be modern!“ and “Change yourself!“ Although it is never precisely discernible what is modern at particular time, place or circumstances, it is sure that you have to find it out and change yourself, the environment, the others or the relations in accordance with the needs of a modern system. Those that will find out best and change accordingly will be rewarded by a system and drawn closer into its core, closer to the one-world. The rest will be marginalized and pushed out to the peripheral other worlds.

Finally, the third element of the process of modernity is capitalism. It rests on an assumption that “more is better“ and that is why capitalism is inseparably linked with growth and the desire for profit. For development of the concept of capitalism, let's quote David Harvey:

“Capital is a process and not a thing. It is a process of reproduction of social life through commodity production, in which all of us in the advanced capitalist world are heavily implicated. Its internalized rules of operation are such as to ensure that it is a dynamic and revolutionary mode of social organization, restlessly and ceaselessly

transforming the society within which it is embedded. “ (Harvey 1989, 343)

“*First*: capitalism is under the impulsion to accelerate turnover time, to *speed up* the circulation of capital and consequently to revolutionize the time horizons of development. But it can do so only through long term investments (in, for example, the built environment as well as in elaborate and stable infrastructures for production, consumption, exchange, communication, and the like).“

“*Second*: capitalism is under the impulsion to eliminate all spatial barriers, but it can do so only through the production of a fixed space. Capitalism thereby produces a geographical landscape (of space relations, of territorial organization and of systems of places linked in a “global” division of labor and of functions) appropriate to its own dynamic of accumulation at a particular moment of its history, only to have to destroy and rebuild that geographical landscape to accommodate accumulation at a later date.” (Harvey 2000, 19)

Put differently, Harvey says that capitalism is a process that produces its own time-space, much in a way that Lefebvre (1991) writes about the production of social space, but he also says that change is inherent to the process of growth and capital accumulation.

One-world: visible and invisible

One of the most visible feature of the modern world is a fact that it is urban. Cities provide the ultimate human living environment and cater for all imaginable human needs and wants. But cities are also the engines of modernity: they embody distinctions and display all that can be achieved and possessed in a material world. But not for everyone and not in every city: and this disparity is a powerful source of 'social energy' that capitalism release and utilize.

I would like to argue¹ that it was a *process of modernity* that have produced the urban and globally interconnected world and that *global metropolises* embody the contemporary results of this process. These metropolises clearly illustrate all three above mentioned aspects of the process of modernity: 1) they are vast material places: enormous number of people and resources have been mobilized in order to construct them – the infrastructure (streets, roads, railways, pipelines and power lines, various institutions such as courts, schools, police or hospitals) as well as the architecture (houses, public buildings) and production facilities (factories, offices). 2) The structure, character and especially size of these metropolises changed rapidly during last decades and centuries: in these cities were first in a city-wide scale introduced all the inventions that are today seen as indispensable for the functioning of such big settlements (such as paved streets, water supply, sewerage, public transportation, street lighting, elevators or communication services). Although the technologies and uses of time-space are changing rapidly, the structure of cities, once it is laid out, is considerably stable – as well as the overall population. However, the stable structure of cities and of territories accommodates even very profound changes (of government, of land-use, of structure, direction and composition of various flows of commodities). 3) Global metropolises show a steady growth in population and in size of build-up area (cities that were in different times considered the archetypes of modernity changed): from 17th century Amsterdam, through 18th and 19th century Paris and London, early 20th century New York and Chicago to the contemporary mega-urban regions: BosWash corridor along the eastern coast of USA and Taiheiyō Belt (Shinkansen corridor) in Japan being only the earliest examples.

Due to the successive waves of improvements in transportation and communication technologies, it is becoming still more and more complicated issue only to delimit the extent and population of each metropolis. At the dawn of modernity, global metropolises were among the first cities that spread behind the walls and during the course of time, these metropolises leapt several times over whatever administrative boundaries there were in place. But nowadays, even the continuous build-up area is

¹ For precise meaning of the terms 'process of modernity' and 'global metropolises' as well as for the argumentation see (Holubec 2011).

not a clear sign of the boundary of a city: while geographers dispute the delimitation of functional urban areas (defined by commuting patterns) or local labour markets, demographers and public authorities strives to distinguish and count citizens, inhabitants and migrants. Manuel Castells speaks about the emergence of new spatial form – *metropolitan region*:

“The metropolitan region arises from two intertwined processes: extended decentralization from big cities to adjacent areas and interconnection of pre-existing towns whose territories become integrated by new communication capabilities.”
(Castells 2010, xxxiii)

Metropolitan regions are indeed part of a concept of global metropolis and say a lot about what is happening with cities in general: they are nowadays rather region-wide structures. But conceptually I propose to treat the network of global metropolises (for instance those cities listed in GaWC 2008), and especially their core areas, as spatially discontinuous but nevertheless socially closely interconnected *one-world city*, similar to the image of a cosmic promenade along the River Tethys, mentioned in the introduction.

While the city centres of global metropolises together with several other featured places and with the international passenger transport infrastructure (airports and hi-speed rails) are visible part of a one-world city, displaying all the wealth, the invisible infrastructure of this one-world is probably even more important because it facilitates the daily 24-hour functioning of the modern one-world: stock exchanges and news channels are working continuously as well as services in cores of global metropolises. Geography of the modern world that is embodied in global metropolises is no longer measured in miles and meters but in hours and minutes. For some people the one-world is every time and everywhere within their reach and the principal gate into this one-world is their credit card and ID card or a computer connected into the internet. But for the majority, although the one-world is present on a TV screen and they are directly influenced by it, it is gated.

The deeply hidden infrastructure of the one-world consist of the most fundamental and common practices, languages, values, rules, standards and codes that we usually do not even notice as an infrastructure (for example: equal exchange, binding treaties, human rights, basics of world languages, use of money, traffic regulations, internet communication protocols). But they are the basis upon which is built all the more complex infrastructure that sustain the daily existence of billions of people living urban environments. There is the pervasive *global culture*, both elite and popular, with all of its standards, design, entertainment, ads, food or clothing that delimits the extent of the one-world. Its the common practices and codes that matter, this is what distinguish core of the one-world, surrounded by its ancillary metropolitan regions, from the multiplicity of peripheral worlds (with their diversity of languages, habits and local cultures).

Scale of globalization: one-world that connects

What is a scale? It is the relation of one part to another and of parts to the whole. Or, the scale is simply relation to an etalon (standard). If we intend to dig into the scale of globalization, we should delimit the whole and the parts that matter in this relation or define an etalon. In the previous talk about one-world and about multiplicity of worlds, we meant especially the social worlds. When all social worlds are gathered together we get the human world – that is one of the possible wholes. But there is also the universe in which is the human world embedded.

My suggestion is to treat the modern one-world as the middle-world, the central world, the crossroads of the worlds, the etalon. The one-world is situated in between the multiplicity of social worlds – it connects them together – but it put itself also in between the human world and the universe – because only modern science is allowed to talk about universe or about the relation between people and nature. One-world is situated also in between the real (material) world and fictional worlds – the connection is commercial (to sell the author's rights), scientific (fiction is treated as dream that was not yet realized) or semiotic (everything can be treated as 'text'). And finally one-world is also the present world – it is situated in between various past and future worlds:

while historians and screenwriters construct the worlds of medieval Europe, ancient China or pre-Columbian America, scientists, philosophers and novelists construct the scenarios, utopias or fictions.

So, what is in this context meaning of globalization? Globalization is a process in which different parts of the globe (i.e. Earth taken as human world) are being connected together. But I argue here that they are connected via the one-world. Globalization is therefore the process of construction of the one-world at the crossroads of all the worlds that have been discovered or constructed so far.

Taken from different perspective, one-world is the ultimate infrastructure – that is able to connect everything with everything else. It seems useful to develop further the Manuel Castells's concept of *network society* (Castells 2010) that deals with entanglement of various networks that connect the nodes (the node can also be a 'world' as conceptualized here) and his notion of switches (nodes where different networks intersect). One-world, consisting of the network of global metropolises, can, therefore, be taken as such switch where different worlds meet.

Back to the scale of globalization: although it seems that a sense of any meaningful whole has been lost in contemporary phase of the process of modernity, there is a centre – modern one-world – that is the ultimate reference. It is a reference that cannot be omitted from any considerations, plans or serious talks. It is the background and context of our lives. This is what I hear in that almost trivial saying “thing globally“.

But the subtitle of the conference is also “act locally, change individually”. This brings us back to the idea of *one-world as the infrastructure that connects* and to the idea of *deep infrastructures*, consisting of practices and codes. “Change individually” I read as a an incentive to change the practices that are harmful, unsustainable or inhuman – that may be difficult but even you can do it. What's really hard is to change the codes. Why? Because they are deeply embedded in structure of cities, of land-use, in language, in the devices we use and in socially enforced habits. But if we want to change not only particular local cell in that robust framework of our modern world, we need to focus on codes, language, standards and social rules.

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References

- Castells, Manuel. 2010. Preface to the 2010 Edition of *The Information Age: Economy, Society and Culture, Volume I: The Rise of the Network Society*, xvii-xliv. Chichester: Wiley-Blackwell.
- GaWC. 2008. “The World According to GaWC 2008 - Cartogram of alpha cities 2008”, accessed april 4, 2010, <http://www.lboro.ac.uk/gawc/world2008.html>
- Harvey, David 1989. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Cambridge and Oxford: Blackwell.
- Holubec, Pavel. 2011. “The Rise of Global Metropolises.” In *Construction on brownfields*, edited by Václav Kuráž and Alena Mansfeldová, 31-48. Prague: Czech Technical University in Prague.
- Lefebvre, Henri. 1991. *The Production of Space*. Oxford and Cambridge: Blackwell.
- Simmons, Dan. 1990. *The Fall of Hyperion*.