

The Horizontal Metropolis: A Radical Project



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A Book

The book is an account of the international encounter held at the EPFL between researchers and Ph.D. students belonging to different geographic and disciplinary contexts and constructed around two joint occasions: the Latsis Symposium and the 8th Ph.D. Urbanism&Urbanization Seminar 2015. The general theme we have proposed, *The Horizontal Metropolis: a radical project*, is both an image and a conceptual device through which to criticize, apprehend and imagine the contemporary city and its future challenges. It refers to a specific spatial condition characterized by a horizontality of infrastructure, urbanity, relationships, and by closely interlinked, co-penetrating rural/urban realms, communication, transport and economic systems.

The book is part of a broader research into the roots, the physical and immaterial substance, the vision and the project of a “Horizontal Metropolis”.¹ It aims at documenting such an occasion, discussing the changes underway in urbanism and in the urban condition through a wide variety of research forms and interdisciplinary approaches: between urban analysis, design research, case studies and theoretical elaborations, which nurture and critically develop the theme.

The Horizontal Metropolis is a vaguely defined and open conceptualization. The oxymoron of the title triggers both the notion of metropolis and that of horizontality. In fact, the traditional concentration of wealth, power and production of the

¹Two books are in preparation: *The Horizontal Metropolis. A radical project* (Cavalieri, C., Viganò P., eds., Park, Zürich, 2017, forthcoming), *The Horizontal Metropolis. The Anthology* (Barcellona Corte, M., Viganò, P., eds., Springer, 2017, forthcoming).

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Metropolis/*Großstadt* (Scheffler 1913), its way of life and degree of personal freedom (Simmel 1903; Park et al. 1925) are today, in many places, a less selective condition: metropolitan areas include vast urbanized regions and expand their effects on much larger territories; metropolitan areas are not always generated by big cities.

Horizontality (as opposed to vertical centre-periphery relations), territorial complementarity (as opposed to dependency, dominion and submission) characterize large polycentric and acentered urban configurations. Less simplistic and complex relational socio-spatial structures are at work, beyond the idea of a centre and a periphery, but also beyond the idea of balanced regions where cells would live in a supposedly stable order.

The Metropolis, deeply reconsidered in its contemporary evolution and forms, is not here expunged from the urban discourse, neither weakened by a “post”, as in Soja’s *Postmetropolis* (Soja 2000), although several topics here discussed are common to his reflection. The process of urban restructuring has been deep, old categories and traditional interpretations of the urban are no longer useful, the modern Metropolis belongs, *hélas*, to the history of urbanism, as one of its most powerful myths (Chambers 1990). The change has been revolutionary: something new is out there, Edward Soja acknowledges it, and *Postmetropolis* is a working title mainly dictated by the risk of a misunderstanding.²

Horizontality can be related to a diffuse and extended urban territory (Berger 2006). More difficult and politically engaging: horizontality deals with spatial justice, power and social relations. Horizontality is often part of longer histories of shared territorial responsibilities and of long political construction, as in the case of Europe (Buijs et al. 2010; Grosjean 2010). It is also related to practices of common production of city space, although often at a low and poor level, as investigated in Quito by Giulia Testori in the second part of this book.

Horizontality is to be related to the dense debate which cyclically re-emerges about centred and acented systems, where the latter are not guided by an external rationality, nor by an overarching vision, not even by a global awareness pervading each individual. Horizontal is a configuration, the dynamics of which are contextualized on the basis of limited and close information. As Jean Petitot has stated: the awareness of the situation is the product of the situation itself (Petitot 1977–1982). An acented system is typically shortsighted (Guzzardi 2015).

Horizontality deals with city territory where the traditional hierarchical Christaller model is not verified, pyramidal structures cede space to low hierarchical configurations: in terms of size, location or distribution of services. Vast parts of the planet contain horizontal metropolises in germinal form.

The clash between the two terms gives rise to the oxymoron and the research hypothesis: the Horizontal Metropolis, originally tested in the construction of a

²“I have chosen the term ‘postmetropolis’ as a working title for what might otherwise be called the new urbanism, had not the latter term been taken up by architects and designers for other and narrower purposes”. Soja (2000), *Postmetropolis*, Preface xiii.

long-term vision for the Brussels Region³ (Secchi and Viganò 2011; Viganò 2013a), is meant to highlight the space in which metropolitan characters coexist with horizontality of relations; an extended urban condition is supported by long-term diffuse infrastructures which guarantee accessibility and inhabitability. The urban and metropolitan characters develop thanks to specific “spatialities” which are “powerful forces in shaping the very nature of social production and reproduction” (Soja 2000: 69), always intrinsically urban and metropolitan.

The Horizontal Metropolis opens to novel interpretations and positioning.

The Construction of a Discourse

The fundamental hypothesis of the Symposium is that the Horizontal Metropolis, as spatial capital and agent of transformation, may be supportive of a radically innovative urban and territorial project—and thus considered as an original urban ecology.

The ambivalent and ambiguously hybrid urban condition has been since decades the object of conceptualization and interpretation, in the effort to delineate a body of theories useful to understand its characteristics and challenges, as well as to project its potentialities in the future. Historically this specific spatial condition has provided test cases for the elaboration of original urban theories which are slowly generating a new discourse on urbanism and urbanization. Contemporary urban figures, oxymorons, conceptual metaphors, such as *città diffusa* in Northern Italy, *desakota* in Asia, *Zwischenstadt* in Germany, are just some of the examples able to effectively describe an emergent urban and metropolitan form, increasingly related to the dispersion of the urban fabric within the agricultural and equipped landscape.

Since Geddes, the main themes nourishing such a body of theories and discourses have been the *city countryside continuum*, related to the territorial reorganization following the industrial revolution, later transformed into explicit territorial policies, for example in Belgium, at the beginning of the last century; a *revolution in land use* (Gottmann 1961) which completely modifies our perception of what is urban, rural, or wilderness, which accepts heterogeneity as a value and overcomes the rigid division of labour in favour of new integrations, coexistences and synergies; the concept of *urbanized countryside*—Samonà in the Trentino plan (Provincia di Trento 1968), where to spread the benefits of the urban, in terms of services and activities contrasting the rural and mountain exodus, maintaining people where they were living: a strategy has been developed which has become the field for spatial and functional hybrids. Against polarization and exclusion, the challenges and potentialities of an extended urban and metropolitan condition are here finally coupled with the theme of horizontality of relations among territories and subjects.

³The team: Studio Bernardo Secchi, Paola Viganò with CREAT, Egis Mobilité, Gerhard Hausladen (TU München), IDEA Consult, Karbon.

The Horizontal Metropolis considers and relies on the urban figures which have revealed the dispersed condition and the related mechanism of the production of space as a potential asset, rather than and only as a problem. They act as an inspiration for the construction of a sustainable and innovative urban-rural project to tackle new paradoxes and crises, from a social, economic and environmental point of view. A new transcultural discourse on urbanism is on its way, which originates from autonomous intellectual trajectories and situated modernization paths, of vast, but still too limited exchanges among cultural, academic and geographic contexts.

Beyond the project of Modern Urbanism, but, and at the same time, being one of its concrete physical results, the Horizontal Metropolis can finally be investigated as a possible space of emancipation, where spatial and natural capital can be the support for better conditions of life moving through the radical nature of the change underway.

Three Parts

The symposium has gathered a variety of approaches, connected young and well-experienced scholars; ongoing Ph.D. dissertations have been discussed, as well as long-term research trajectories, bringing together a set of statements to feed the debate. Deeper conversations have been structured around three main topics.⁴

Horizontal Metropolis: Theories and Roots, a Transcultural Tradition

The Horizontal Metropolis has come to the fore at different times: a dense legacy of concepts and of interpretations of the urban phenomena has been accumulated. This legacy is also the result of influences and exchanges among authors, interpretations and contexts in very distant parts of the world. The first part of the book investigates the role of exchanges and references in constructing, by integration or differentiation, various conceptions of the urban phenomena. It focuses on theories, images and distinct archives.

Some important research tracks converge in the HM reflection: an agrarian urbanism, in the aspiration to reconcile the new industrial society with older and traditional forms, or as an alternative to the big industrial city, a new decentralized order (Maumi and Waldheim essays).

⁴The Symposium was organized in three sessions (1 *The Horizontal Metropolis: spatial and natural capital*, 2 *The Horizontal Metropolis: issues and challenges of a new urban ecology*, 3 *The Horizontal Metropolis: a transcultural tradition*) which have been re-elaborated in this publication, reorganizing the contributions in function of a more fluid and clear chain of reflections.

Concern for the ground, its qualities, properties and interactions with the extended city that is structured on it, is reconstructed through the thought of Geddes, Reclus and Dokuchaev (Durand). The question of the ground and of the soil, central to the territories of dispersion which have always been condemned for their high land use, is treated by the three authors in ways different from those subsequently developed by the CIAM debate and in particular by Bernoulli (1943). The latter being more interested in ground ownership, which has to be public, rather than in its biological and ecological value: only public ground would have allowed the *tabula rasa* for the realization, without constraints, of the modern city project. However, Hans Bernoulli and Franck Lloyd Wright share the same references: the theories of Henry George and Silvio Gesell with all their implications on city space. Finally, a multiple interpretation of the land and soil centrality in the Horizontal Metropolis emerges, where a pioneering perception of the city and new survey methods are introduced (Skjonsberg).

A body of essays (Veronesi, Pisano, Rebillot), weaves the threads of continuity between metaphors, theories, like that of radical decentralisation, and concrete situations (the Berlin metropolis, the Randstad metropolitan systems, the “ecological retrofit” of the rapid process of urbanization in China). Several convergences appear in the debate on Asian urban, rural and dispersed conditions which enlarge the western theoretical tradition and open a dense research agenda (Cairns), without losing in cultural specificity. Advocating, finally, for more adequate lenses (Lin) to deal with the new urban rural territory that “has been hybrid, path-dependent and locally constitutive, blending elements from the past with the present and the local with the global.”

Horizontal Metropolis: A Spatial, Social and Natural Capital

It is in fact impossible to account for the structure and functioning of the social world unless one reintroduces capital in all its forms and not solely in the one form recognized by economic theory. (Bourdieu 1986)

The second part of the book critically reflects upon the relation between the natural capital and long-term artificial rationalities, where novel ecological dynamics are today part of the urban (McGrath, Girot) and upon hybrid urban-territorial figures in relation to conditions of spatial and social justice.

Enlarging the concept of social capital proposed by Pierre Bourdieu (as *l'ensemble des ressources actuelles ou potentielles qui sont liées à la possession d'un réseau durable de relations*, 1980) and later by Robert D. Putnam, interested to the structure of networks, “arguing that ‘horizontal’ ties represented more productive social capital than vertical ties” (Putnam 1995), space is here considered as capital (Lévy and Lussault 2003).

This part of the book focuses on the long-term construction of a productive territory where horizontal supports to mobility and inhabitability have been developed. Water management and accessibility, among others, are a fundamental physical and spatial capital of the Horizontal Metropolis, an “accumulated labour (in its materialized form or its ‘incorporated,’ embodied form) which, when appropriated (...) by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labour” (Bourdieu 1986).

Diffuse, low hierarchical meshes, micro-infrastructures (Viganò 2016) are accumulated in the Horizontal Metropolis, whose cost of maintenance, adaptation and reproduction today require investments and collective care. In particular, the diffuse networks, in their complexity and chaotic stratification, demand to be understood, represented and mapped. In such a palimpsest, the spatial capital exists thanks to and because of civic uses and engagement, a true social capital “bound together by horizontal relations of reciprocity and cooperation, not by vertical relations of authority and dependency” (Putnam 1993).

The Horizontal Metropolis can be seen as a product of specific processes of infrastructuring and conveying urbanity in extended territories. The technical and spatial devices to render the land inhabitable, their measures and modules are often the expression of deeply embedded rationalities related to the organization of economic and social systems where population, mechanisms and resources can reproduce. The construction of a productive landscape—dealing with water management, qualities of soil, parcels and property size, types of agriculture, mix of functions, presence of biodiversity (see Toselli, Rojas, Rivera, Zhang contributions); of territorial accessibility—mobility networks, their permeability and degree of connectivity, exchange nodes, social infrastructures and amenities - enhancing abilities of individuals and firms to move and to locate (see Broes, Burgemann, Pagnacco), as well as of social and cultural infrastructures (Vanhalen) are investigated.

A new “environmental box” (Mantziaras) to regenerate and valorize the spatial, natural and social capital of the Horizontal Metropolis is under construction.

Horizontal Metropolis: Issues and Challenges of a New Urban Ecology

The third part of the book considers the radical nature of the change underway and the emergence of new practices and paradigms, scenarios and design strategies for re-cycling and upgrading the city-territory.

The Horizontal Metropolis is a space where the “urban question” (Castells 1972), in its new and future forms (Secchi 2006), takes on a peculiar meaning (Viganò 2013b). As a new urban ecology, the Horizontal Metropolis redefines the relation between open and built space, between soil, water, forest, waste production..., their cycles and the urban (Baccini, Furlan, Wambecq, Vanneste in this part). The HM metabolism is different from the one created by the traditional urban/

rural dichotomy, still, its qualities and potentialities have not yet been fully investigated and appreciated. Old industrial and rural landscapes are today urban problems, fertility and soil productivity, water quality and energy production are problems of the urban, intrinsically and spatially urban, to be considered and valorized: this generates contradictions and new possibilities. The upgrading of the infrastructural level of the HM, where the palimpsest has been exploited and rewritten time and time again, where “actors have been able to externalize the social and environmental cost of their individual choices” (Dehaene in his statements), is today a difficult and ambiguous issue which also involves the ecological transition and the economic crises, opening to the recycling of the dispersed and small grain industrial activities typical of the city-territory (Garofoli, But, Sega).

The problem is especially tricky if we imagine to treat it with the sole tools of concentrated investments and projects to solve randomly diffuse problems (from mobility to health issues, to industrial restructuring or flooding problems, to soil pollution and resources consumption). In this sense, the hypothesis of the Horizontal Metropolis as a renewable resource (Viganò 2011) serves to challenge common sense, it helps in differently highlighting the question of consumption and reproduction, of maintaining and reproducing life.

Slowly but steadily, the Horizontal Metropolis has become the object of explicit political and institutional projects, often bridging academia, institutions and local administrations through research by design explorations (Declercq). Its public space is still under-defined and certainly still under construction: rethinking its infrastructural network brings together reflections on the design of the Horizontal Metropolis public domain (Gheysen, Vialle, Bahrami). A new shared imaginary is needed (Travasso).

Details and Visions: A Style of Thought

The conference and this book have been conceived as a network structured around certain themes and words that do not even attempt or wish to build, and indeed are incapable of building, a vision that is complete, defined or definitive. The different contributions add details and views that are sometimes lateral, but not marginal. From their reading emerges what the reflection on the Horizontal Metropolis reveals in terms of our current concerns: the urgency of a new environmental awareness in the Anthropocene era (Sieverts in its conclusions, and twenty years after the publication of *Zwischenstadt* in 1997), the limits of a debate polarized between top-down and bottom-up, expectations as to the consolidation of new systems of relationships (Grosjean) and of a different perception of space (Cogato Lanza); the need to overcome the dichotomy between infrastructure and city, “operational” and “agglomeration landscapes”, in favour of new interdependencies (Katsikis), celebrating the multiplicity of positions (Shane in the Afterword). The weight and polysemy of the concept of hierarchy, both subordination and domination, but also integration and functionality, is also under investigation. Despite “the centric/

hierarchical/specialized organization entailing some dangers such as waste, rigidity, fragility, even parasitism” (Morin 2015: 34), the concept of hierarchy continues to occupy the role of influential metaphysics, which the Horizontal Metropolis shakes, and strongly reconsiders, not taking it as evident.

The city has changed and the ways of reading and interpreting it are also changing. A critical approach, from the point of view of the *Horizontal Metropolis: a Radical Project* Symposium, does not imply a “post” affixed to modernity. We do this, not to be forced to claim, for our time, the possibility of a project, both progressive and emancipatory that, instead, belongs to us by right.

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