

Introduction

by

ANNA IRENE DEL MONACO

A brief annotated bibliography around the concept of “evolutionary city”. East-Africa Cities; Hydro-Generated Urbanism in Latin America, China New Urbanization

This second volume of the review “L’architettura delle città – The Journal of the Scientific Society Ludovico Quaroni” – a triple monographic issue produced in 2014 – develops the theme of “The City in the Evolutionary Age”. The comprehensive theme of this volume expands a discussion around the idea of the “evolutionary age of the city” or “evolutionary city” as it has been stated by Lucio Barbera in his introductory essay to this issue, with a special reference to Jean Piaget theoretical contribution to developmental and childhood psychology – the “evolutive age”: «I cannot help but observe the metropolises of the New and Old World as one observes the evolution of an immense swarm of individuals; I cannot help but compare, for example, the stage of the cultural and physical structure of parts of the spontaneously developed metropolis with the stage of adolescent maturity when, despite the concrete problems of life, an individual unexpectedly and favourably expresses an “interest in non-topical problems that anticipate future and often chimeric situations with a disarming *naïveté*».¹ Following the forewords essays expanding the theme of “evolutionary city”, this second volume of the review “L’architettura delle città – The Journal of the Scientific Society Ludovico Quaroni” includes a dense number of papers from the proceedings of the Seminar *East-Africa Cities Lab. Urbanization vs Human Survival* – organized by the UNESCO-Chair in “Sustainable Urban Quality and Urban Culture, notably in Africa” of Sapienza University of Rome and held in Rome on April 28th 2014 – and a number of papers submitted by international scholars for an “internal” call for paper among the partners institutions of the UNESCO-Chair on

1. BARBERA 2014.

the theme: “the evolutionary age of the city”. The volume is divided in three sections distinguished for geographical areas and issues: East-Africa Cities, Hydro-Generated Urbanism in Latin America, China New Urbanization. Here after some bibliographical notes follow. They are supposed to be useful to integrate the studies related to the themes of the three sections of this volume and to the contributions collected.

The concept of “evolutionary city”

In the field of urban studies the use of “evolutionary” concept is generally not considered as a major topic of discussion but for the scholars routed within the “darwinian” tradition: geographers more than architects. However this concept is used in other cases even assigning to the idea of “evolution” or “evolutionary” a meaning less “darwinian” and more cultural-phenomenological. This is evident from the sequence of the cultural debate that Lucio Barbera draws in his introductory essay: Lewis Mumford, Claude Lévi Strauss, Walter Benjamin, Max Weber, Georg Simmel. The comprehensive approach towards urban phenomena emerging from the different contributions of this issue can be evidently related also to the discussion on the *Architecture of the Cities* (L'architettura delle città) the Scientific Society Ludovico Quaroni is engaged with. In his earliest book entitled *L'architettura delle città* (1939) Ludovico Quaroni affirms: «as any organism, the city too is subject to change; but cities must always be regulated by the laws of the composition. The forces that operate such transformation are, more often than not, beyond human control: they are the product of the social evolution of a people, of the progress or decadence of his culture».² Also in his latest writings Ludovico Quaroni seems to have in some way an “evolutionary” vision of the processes regulating the growth and decay of a city. He does it through a logical sequence of subtitles in a chapter of his book *Il progetto per la città*.³ But the city for Quaroni is organism of its own species, more a “social-physical” entity than a biological “organism”. He writes the following subtitles for his book:

- The Urban Organism life and its biological characters;

2. QUARONI 1939, p. 10.

3. QUARONI 1996, p. 85.

- Direct and indirect relations among the Physic-urban Organism, the Social energy and the Human will;
- The Urban Organism behaviour is not that of a Zoological Organism;
- The Urban Organism behaviour is not that of a Botanic Organism;
- Is the Urban Organism behaviour that of a Machine?
- The City is a continuously self-transforming Organization;
- The City, the City Idea and the architectural Building Idea do not match with the Idea of Repetition;
- The City is built “by Parts” which are not simultaneously conceived;
- The most interesting architectural complexes are produced by gradual design and building actions.

Back to Darwinians, although the concept of “city in evolution” was probably used for the first time in an openly “darwinian” way by Patrick Geddes in his book of 1915 entitled *Cities in Evolution: an introduction to the Town Planning Movement and to the study of civics*, the concept we hereby intend to explore entitling this volume “the evolutionary age of the city” is more in Jean Piaget’s lineage than in the Darwin’s one. Piaget used to affirm: «Knowledge is a continuous building process». Similarly Quaroni stated: «the most interesting architectural complexes are the result of gradual steps of a continuous design and construction process». Patrick Geddes studied the theory of evolution, with Sir Thomas Henry Huxley – direct pupil of Charles Darwin and grandfather of Julian Huxley – who was the first director general of the UNESCO; while Jean Piaget was UNESCO director General after the IIWW – and is considered among the founding fathers of the “town planning” profession and among the first to use “landscape architect” as a professional title. Geddes seems to affirm a position based on the process of “selection”: «In matters civic, as in simpler fields of science, it is from facts surveyed and interpreted that we gain our general ideas of the direction of Evolution, and even see how to further this; since from the best growths selected we may rear yet better ones». ⁴ Moreover we find the use of the concept of “evolutionary city” in a section of the book by Philipp Oswald introducing Kai Vöckler’s essay ⁵: «Cit-

4. GEDDES 1915, p.vii.

5. Kai Vöckler affirms: “Robert Smithson and the Architecture of Absence” in which Vöckler describe

ies and buildings are subject to a constant process of construction and decay, the course of which rarely can be anticipated. Planning means creating spatial structures that are open to various future developments and that thus become spaces of potential. Their specific indeterminacy generates architectonic and urban qualities. Design also can consist of making processes of transformation visible and thereby challenge our perception of permanence».⁶ Winy Maas and Daniel Dekkers, in an essay useful to this bibliographical selection of the state-of-the-art on the concept of “evolutionary city”, entitled *Spacefighter: The Evolutionary City (Game)*⁷ produced for the *First-Year Core Research Studio 2005-2006* at The Berlage Institute, affirm: «The studio wants to work on the evolutionary city. A city that changes in time. Continuously. A city that engages itself both with individuals as a possible collective. That wants to manoeuvre between that. This inevitable and total surrender towards this ‘process’ oriented approach, changes radically urban planning and its architectural products. It leads to new ‘city’ of evolutions, that is meant to be communicative, interactive, self-critical and ultimately self-forming or self-shaping. It is a city that can reformulate itself. It can compare, analyze, optimize, adapt and create alternatives. It is a city that is conscious of its gained knowledge. The studio wants to develop a software for that process». Finally – without the pretension of being exhaustive –, an other interesting book, by Stephen Marshall – senior lecturer at the Bartlett School of Planning – has to be considered: *Cities Design and Evolution*. It offers an engaging and original narrative that interprets planning philosophies from Modernism to New Urbanism, organic theories from Patrick Geddes to Le Corbusier, and evolutionary thinking from Charles Darwin to Richard Dawkins. The book develops a new evolutionary perspective that recognizes both the ‘designed’ and ‘organic’ nature of cities, and provides a rational impetus for fresh approaches to urban planning and design.⁸

the Tower of Babel that “stands for an incompletable process, for the eternal impossibility of completing such an undertaking under worldly conditions”.

6. OSWALT/VÖCKLER 2006, pp. 113-115.

7. MAAS, DEKKERS 2005/2006.

8. MARSHALL 2008.

Asia - Africa - Latin America

To better understand the significance and meaning of the three sections of this volume, it could be useful to quote some excerpts from the essay by Giulio Sapelli entitled *Un Racconto Apocalittico* [An Apocalyptic Tale] that precisely addresses the three geographic systems of our three sections: Asia, Africa, Latin America. As stated by Giulio Sapelli⁹: «the European city as it is known, was the primary focus of the decentralization of political power and the economic mechanism that allowed the development of the market (...). [In Asia] the path to industrialization will take place through urbanization, as has happened in Europe? (...) in any case, the Asian continent has completely transformed his face, with deep social inequalities and territorial cohesion and the creation of a large sector of the middle class and bourgeoisie. [In the meanwhile] the comparative horizon must also include Latin America and Africa (...) In Asia, Africa and Latin America under the capitalist accumulation in the face of rentier capitalism and colonial capitalism have devastated the agrarian social relations and did not allow a small and medium urban spatialization (as in Europe) aggregating the overwhelming majority of humanity in the immense metropolitan areas. (...) The challenge now is to transform the metropolis of the future in a new *pépinière* of sovereignty that will ensure not only the order, but also the well-being and equality of merit in the totality of human life associated with land beyond the national dimension. And the outlook is perhaps crucial to understand the big cities like social organization similar to the functional autonomy of the modern globalized societies and organizations. (...) In Asia, the rule of law is always, inevitably, the result of processes of acculturation and of the grafts, often painful and non-implemented. Africa has not yet defined the magmatic nascent state of its statehood, while Latin America has created first the State and then the Nation, and this distinguishes his place oneself in the world of state law by a peculiar distinctness».

9. SAPELLI 2011, pp.127-138.

On East-Africa Cities

The next urbanization frontier. Africa human population will at least double by 2050. According to the projection UN Habitat around 2050 about 60% of the world population will be living in cities, with the African urban population tripling to 1.23 billion.¹⁰

Rural-Urban Migration–City Growth today. According to Gora Mboup (Chief UN Habitat) – 2011 report *UN Habitat Global Urban Observatory* – “Rural-Urban Migration is important for City Growth, but it is not the main factor today”. During 19th and 20th Century more than 85% of urban growth was due to R-U migrations. In 21st Century R-U Migrations accounts for only 20% of urban growth worldwide, natural growth for 50% and reclassification of land Rural to Urban for 30%. Consequences: weak municipal financial capacities, urban sprawl, increased cost of transport, higher use of energy + CO₂, peri-urban informal growth, higher cost of public infrastructure, uncontrolled planning of city growth. Urbanization and dwellings lack are major tasks to be managed in the near future especially in Africa, Asia and Southern America within a framework of efficient urban systems well-equipped by infrastructures and facilities.

Housing lack: from National Territory to Global commodity/jurisdiction. As Adenrele Awotona demonstrated in his book¹¹ of 1998 «The governments of many countries in Africa, Asia and South America have failed to tackle the housing problem in a coherent way. The rapidly increasing gap between supply and demand has led to the proliferation of informal settlements and the growth of shanty towns, offering precarious and dismal conditions to their residents (...) physical and non-physical [... stimulating] bottom-up housing approaches». After almost twenty years from Awotona’s research the situation is not significantly changed. Saskia Sassen asserted in more than one conference that even the sub-prime mortgages episodes confirmed that the «modest neighbourhood became part of global finance». Infact Africa is a main target for land acquisition from Chinese and Saudi investors: shift from National Territory to Global commodity/jurisdiction (reposition-

10. UN Habitat 2010.

11. AWOTONA 1998.

ing of Territory in the Global Division of Functions; making alternative jurisdictions: going beyond older forms of extraterritoriality; making parallel geopolitical circuits).¹² These conditions create considerable consequences for the rural-urban balance in several African territories. *Urban Health in Africa. Four main indicators: water, sanitation, housing and overcrowding as physical expression of slum.* In 2011 Gora Mboup, UN-Habitat, delivered a speech at the Urban Age conference in Hong Kong on “healthy African cities”: he maintained that high density and overcrowding – especially in Asian, African and South American cities – manifest differently. Overcrowding has been for long time associated to high population density. However, demographic studies show that there are cities with high density but with low overcrowding rate as there are cities with low density but with high overcrowding rate. The potential factors related with overcrowding are: urban planning; housing market; living conditions; family size and structure; other social, economic and cultural factors. Gora Mboup introduced the “shelter deprivation index” and explained that using the four main indicators: water, sanitation, housing and overcrowding as physical expression of slum, it was possible to measure the morbidity differential according to the degree of “shelter deprivation”: a single deprivation or multiple deprivations. The single deprivation includes overcrowding alone while the multiple deprivations include overcrowding in combination with lack of one, two or three among the other shelter deprivation variables: housing, water, sanitation. Gora Mboup introduced also some principles and suggestions on how to take advantage of high densities: promoting high densities while avoiding overcrowding; adequate urban planning for socially integrated, connected and compacted cities; when promoting high density, land and housing shall be factored as associated variables; accessibility to basic services (water, sanitation, health services) taken into account. On this principles and behaviours depends the extent to which a city may take advantages by being at the centre of concentrated production and population, while avoiding the relevant negative effects. Notwithstanding improvements, urban health in Africa remains a particular challenge, with 70% of urban dwell-

12. SASSEN, *Columbia University speech*, www.saskiasassen.com 2013.

ers living in informal settlements, facing multiple disease burdens. *European-american centric city-making models vs integrated place-making: the complex co-existence of formal and informal settlements.* As AbdouMaliq Simone affirms: «It is important to go beyond rudimentary divisions of formal and informal, the cosmopolitan and the parochial. Rather, it is crucial to look at the interweaving of potentials and constraints which activate and delimit specific initiatives of local communities to maintain a sense of cohesion, exceed how such cohesion is put together at any one time, take advantage of unforeseen opportunities, and mitigate the negative effects of being as opportunistic as possible».¹³ Cities seem to face the possibility of some kind of Afropolis where informality would essentially be the organising logic, a DeSotoland (Dreamland) of formalised informality, or hybrid understandings that more comfortably weave together the already interpenetrating organising logics. Those organising logics are not the same in “informal” cities. Informality and informal settlement also do not have inevitable, predictable, reproducible outcomes in any African city. Easy, one-size-fits-all analyses are inadequate. We might need new terms for the apparently fading dichotomy between formal and informal, given how interwoven they are.

Rogue Urbanism: Emergent African Cities. Recent scholars in African urban studies – as Pieterse and Simone – have pointed us toward understandings of cities as centers of generative, imaginative, or creative energies, in part to consciously contest the wounded urbicides of so much of the popular imagination outside the continent. Various international arts festivals, novelists, artists, and photographers animate a discussion of alternative visions and re-visions.¹⁴

*African Cities alternative visions of urban theory and practice*¹⁵. Garth Myers, discussing about African Urban Dynamics, sets up seven research categories to analyse the present conditions in African cities: Postcolonial Cities; (I)n(f)ormalising Cities; Poor, Unequal and Unjust Cities; Organising, Provisioning and Servicing Cities; Wounded Cities; Cosmopolitan Cities; Imaginative Cities.¹⁶

13. SIMONE 2001.

14. PIETERSE, SIMONE 2013.

15. MYERS 2012.

16. MYERS 2010.

On "Hydro-Generated" Urbanism

Particularly related to Latina America issues, and the remarkable research activity of the *Consortium for Hydro-Generated Urbanism (CHU)* at University of Florida, it might be interesting to consider other studies for a more general research on the "hydro-generated" urbanism issues: Lucio Barbera¹⁷, *Proposal for the study of a Territorial Model for Venice and the Rebalance of the Veneto Region*, Technital, AA.VV., 1972; Paolo Maretto¹⁸, *La Casa Veneziana nella storia della città. Dalle origini all'Ottocento*, Marsilio, 1987; Piero Bevilaqua¹⁹, *Venice and the Water: A Model For Our Planet*, Polar Bear & Company, 2009; Saskia Sassen²⁰, *Bridging the ecologies of cities and of nature*, from The UNESCO Portal, 2009; Paola Viganò²¹, *Extreme Cities and Bad Places*, Disaster Risk Sci. 2012; Kate Orff, Richard Misrach²², *Petrochemical America*, Aperture 2012; Carl Smith²³, *City water, city life. Water and the Infrastructure of Ideas in Urbanizing Philadelphia Boston and Chicago*, University of Chicago Press, 2013; Lucio Barbera, *The Po Valley Megalopolis and the solution of the problems of Venice*, *The 4th International Symposium on Sciences of Human Settlements – Beijing*.

On China New Urbanization

To better understand the plan and the effects of the “new urbanization” put forward by the 18° CPC National Congress in 2012 as one of the national strategies for China’s socio-economic development, it is highly suggested the latest issue of “China City Planning Review”²⁴, Vol. 23 No.2, 2014. In particular the papers: *Thoughts on Issues of China’s Urbanization* by Zuo Deci; *Study on Spatial Planning and Rational Pattern of China’s Urbanization Development: Review on Research Report* by Xiaojian Li, Li Zhu, Yongbo Zhang; *Impact of City*

17. BARBERA 1972.

18. MARETTO 1987.

19. BEVILAQUA 2009.

20. SASSEN 2009.

21. VIGANÒ 2012.

22. ORFF, MISRACH 2012.

23. SMITH 2013.

24. CHINA CITY PLANNING REVIEW, Vol. 23 No.2, 2014.

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