REVIEW A LOOK AT THE LOCAL SPHERE: REFLECTING ON CLIMATE CHANGE AND CITIES

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A review of the book: Ojima, Ricardo; Marandola Jr., Eduardo (org). Mudanças climáticas e as cidades: novos e antigos debates na busca da sustentabilidade urbana e social. São Paulo: Editora Blucher, 2013, 272p.

Environmental and climate change have increased in salience in citizens' daily life with an intensity that has not been previously observed, and highlight a need for theoretical and methodological approaches to understand a set of new risks and threats that would further exacerbate the current adverse situations in urban areas. Responses to these risks and threats involve elements that shape our contemporary lifestyles. At the local level, where people are directly affected by climate and environmental risks and adaptive actions must be urgently implemented (Serrao-Neumann *et al.*, 2013; Kasperson *et al.*, 2005; Ribeiro, 2010; Diling and Lemos, 2011; Lemos *et al.*, 2012), these responses need to be linked to key questions of urban governance.

The book "Mudanças climáticas e as cidades: novos e antigos debates na busca da sustentabilidade urbana e social" (São Paulo: Editora Blucher, 2013, 272p.) is based on this perspective: to bring a reflection about complex relationships among cities, socio-environmental problems, global environmental change and the challenges to political and scientific agendas.

The book is a result of a set of debates among researchers from different areas, which were performed by a Brazilian network called Sub-rede Cidades, from Rede Brasileira de Pesquisa sobre Mudanças Climáticas Globais (Rede Clima). Organized by the demographer Ricardo Ojima and the geographer Eduardo Marandola Jr, this book seeks to go forward in the current debates on human dimensions of global environmental changes, focusing on climate change.

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Based on the idea that most social, political and technological changes will take place in cities, which will have to deal with the most drastic impacts of environmental change and with the vulnerabilities of climate change, the book – composed of 10 chapters – seeks to advance the debate about the dynamic relationship between people, urbanization and environment.

In the first part of the book (Urban Policy), the readers are invited to think about how public policies related to climate change speed up the solution of current urban problems in the cities. The chapters present the legal frameworks upon which actions and measures of mitigation and adaptation have been based. As Laura Machado de Mello Bueno points out, those actions must be linked to housing policy, sanitation, urban planning, water management and to the review of possibilities of urban mobility. Mello Bueno reminds us that the agenda of urban reform (which still must be implemented in Brazil) involves the "right" to the city.

However, and considering the complexities in decisions about those actions, the process of rethinking the city and proposing solutions to urban problems that would be further exacerbated by climate issues may be structured through a participative process perspective. Alisson Flavio Barbieri and Raquel de Mattos Vianna recognize that a participative perspective for understanding the relationship between society and climate change is particularly challenging in large metropolitan agglomerates. In their view, a participative process requires one to take account of (i) individual and collective concerns on climate change, (ii) the role of the State in democratizing the public access to the collective engagement, (iii) and public policies that cover all social groups.

The water issue, which is explored by Marcelo Coutinho Vargas, is an interesting starting point to thinking that the vulnerability to climate risks should be understood as a multifaceted phenomenon, which is socially and spatially variable, because it involves differences of people and places' exposition to risks and disasters, including differences of responses and adaptive capacities. The author analyses the Baixada Santista case (on the Coast of São Paulo) and highlights that the climate change issue has not yet been covered in the regional planning agenda. Moreover, the issue is far from the focus of organizations who are responsible for regional water management.

Thinking about the current water crises in São Paulo (the State has been enduring a long, dry spell), we could wonder if the vulnerability of hydrological resources and sanitation to climatic risks has gained, in fact, more attention in the recent public and political agendas.

In the second part of the book (Vulnerability and Resilience), the authors of five chapters seek to advance on the approaches about comprehension of cities' vulnerabilities and responsive capacities to climate risks and threats, and achievement of adaptive policies.

Eduardo Marandola Jr. reminds us of the relevance of urban climate studies (most of which do not involve large temporal series of data, in fact) in order to understand the interactions of climate-city in the urban scale, the local repercussions of regional and global changes, and the management of urban hazards in the daily life. Urban climate studies are also relevant to line out the dimensions of vulnerability. As Marandola points out, the majority of the middle and big cities have limited knowledge about their hazards

and climate dynamics. This, in his vision, places the societies in a precarious situation to debate and respond the vulnerabilities of people and cities and which measures of adaptation and mitigation must be put into practice.

Considering this reflection, the authors Sébastien Oliveau and Christophe Guilmoto debate the opportunities and challenges in inquiries that seek to integrate space issues to population studies in order to better understand the spatial occurrences of environmental phenomena.

Francisco Mendonça, Marley Deschamps and Myriam Del Vecchio de Lima agree with the relevance of studies focused on scalar dimension of environmental phenomena. The authors recognize that the intense and chaotic growth of cities in the South in the last four decades has attested the creation of urban areas that are characterized by environmental and social degradation. In this context, the Brazilian cities are clear examples of the dissonance between the growth and public policies orientated to urban development. One of these examples explored by the authors is Curitiba, the capital of Paraná State (south region). Recognizing that the climate negotiations, projections and responses have been shaped by societal variables and been overlaid by a high political interest, the authors argue for a need to look at global environmental change as an opportunity to amplify the debate about urban problems in the cities, in particular in the South.

Through a local level perspective of environmental phenomena, Lucí Hidalgo Nunes, Norma Valêncio and Cláudia Silvana da Costa seek to debate the impacts of climate change in African countries and the repercussions of population flows. Many African nations are amongst the most vulnerable areas to climate change and climatic variability in the world; however, that continent presents the lowest per capita levels of greenhouse gas emissions. The authors highlight then the ethical question involved in the climate change debate at the global level. The heterogeneity of African countries, in terms of access to resources, levels of poverty and abilities to interact with climate change, is suggested as an important issue to the debate about impossibilities to generalize conditions and responses to climate change. Beyond this impossibility, the authors also argue that adaptive strategies to be adopted in these countries, in order to reduce the negative effects of climate change, should be engaged to the sociopolitical context, which is characterized by intolerance, neglect and violence against poor groups.

Considering the relevance of local specificities in dealing with climate change impacts, Tathiane Anazawa, Flávia Feitosa and Ântonio Miguel Vieira Monteiro remind us how important territorial indicators of socio-ecological vulnerability may be in urban studies. The authors debate a new approach to translate the concept of "vulnerability" to the idea of "mediator objects" for bringing up the discussion of the socioterritorial inequalities derived from the Brazilian urbanization. The authors debate a case study on vulnerability at São Sebastião (North Coast of São Paulo) and demonstrate that their theoretical and methodological approach is relevant to better understand the vulnerability's dynamics, including their differentials and paths in the cities.

In the last part of the book (Adaptation and Mitigation), the chapters present a rich debate on measures of adaptation – how they are needed, if they can be calculated and be put into in practice. Carlos Mello Garcias and Eduardo Gomes Pinheiro analyze

276 Di Giulio

the Brazilian case, and recognize that Brazil exhibits serious problems of organization and participation in the system of disaster risk management. As an alternative to deal with climate change, the authors propose a new planning of disaster risk management (called Plano Diretor de Defesa Civil), which is able to work as an instrumental tool for cities management, and is applicable to the future scenarios of climate change.

In the last chapter, Ricardo Ojima suggests that there is still a need for more detailed studies on urban vulnerabilities in order to facilitate adoption of adaptive measures that are not only focused on remediating impacts, but are proactive. The author debates how the recent literature on urbanization has incorporated the current discussions on vulnerability and climate change, and seeks to point out the needs and challenges to this field. In his view, positive potentialities of urbanization to the future are linked to the comprehension of current vulnerabilities. Ojima also highlights how important the integration of different knowledge areas could be to getting a more holistic understanding of the relationship between environment and society through the cities. At this point, he reminds us that a big challenge is simplifying academic languages without losing the analytical integrity that each framework can offer to this more holistic understanding.

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