Towards a Political Ecology of Urbanization: Comments from a Brazilian Experience

Heloisa Soares de Moura COSTA Associate Professor, Graduate Program in Geography, Instituto de Geociências, Federal University of Minas Gerais, Brazil www.igc.ufmg.br

Tel: 5531-34995430

E-mails: hsmcosta@ufmg.br; hsmcosta@ufmg.br; hsmcosta@ufmg.br; hsmcosta@ufmg.br; hsmcosta@ufmg.br; hsmcosta

Abstract

The paper departs from two apparently different lines of argument, which, it will be argued, converge to the same point: the strengthening of political ecology of urbanization as an area of both academic research and urban/environmental practice and policy making.

The first line of argument discusses the present trends of urban planning in Brazil, and the extend to which they can point to social and environmental justice and equality, all of them values embodied in the concept of sustainability. Torn between two main political paradigms - competitiveness and/or solidarity - the field of planning and urban politics in Brazil, has also to overcome the ambiguities posed by its centralized comprehensive heritage (still very present in undergraduate education) and, at the same time has to consolidate the conquests represented by popular participation and political struggles over urban/environmental issues.

The second line of arguments questions theoretically the standard views of sustainability, arguing for an approach that favors the understanding of contentious urban questions arising from the use, regulation and appropriation of (natural) resources within a larger field of political economy/ecology of urbanisation. Harvey (1996), Peet & Watts (1995), Escobar (1995), among others provide some interesting theoretical basis for the discussion. Our recent research results (Costa, 2002; 2004) may provide some empirical support.

The second part of the paper will show some evidence of the ways in which the above-mentioned discussion is presently influencing the contents and methodologies of courses and research projects currently taking place at the Graduate Program in Geography of the Federal University of Minas Gerais, in Southeast Brazil. The Program has a rather flexible curriculum organized around the areas of Environmental Analysis and Organization of Space, and receives graduate students from different academic backgrounds - geography, biology, architecture, urbanism, law, social sciences, economics, history - looking for formation intended to go beyond the traditional modern dichotomies related to natural/social, urban/rural, technical/political boundaries. As a work-in-progress experience, it deserves constant evaluation.

Keywords: Urbanization, planning, environmental politics, political ecology, graduate courses

Present Trends in Urban Planning and Policies in Brazil

Urban politics and planning in Brazil for the last two decades is marked by the emergence of organized sectors of civil society who progressively reclaimed their roles as subjects. Both society and the state were substantially transformed in such process, and urban policies based on citizens' participation can be seen as an important and visible outcome. The extent to which they lead to social and environmental justice and equality, all of them values embodied in the concept of sustainability, is a permanent challenge to governments, planning professionals and social movements. Torn between two distinct political paradigms - competitiveness and/or solidarity - the field of planning and urban politics in Brazil, has also to overcome the ambiguities posed by its centralized comprehensive heritage (still very present in undergraduate education) and, at the same time has to consolidate the conquests represented by popular participation and political struggles over urban/environmental issues. The incomplete character of Brazilian urbanization where several items of material reproduction, such as adequate housing, services and infrastructure are missing for a substantial part of the population – associated to intense urban/metropolitan concentration of population and economic activities throughout history are also a key element in the discussion around the sustainability.

A brief overview of Brazilian urbanization

Understanding the particularities of urbanization is an important way of defining the very notion of sustainability in the context we are referring to. This brings about the question of scales of approaching the reality. Dealing with relationship between population and environment, Martine (1992) establishes an hierarchy of environmental problems: the first level comprehend global problems that affect all societies, although not homogeneously, such as the loss of biodiversity, green house effect, depletion of the ozone layer, toxic waste, among others. Their origins, except for the question of biodiversity, are closely associated to the pattern of development (production and consumption) of industrialized countries, are a product of capitalist modernity. The second level of environmental problems comprises questions related to lack of adequate conditions of urban reproduction in terms of basic sanitation, health, adequate housing, and the like. They are most strongly related to the patterns of urbanization particularly in the so-called third world, and can be resolved through

the adoption of urban and social public policies, and strong and widespread investments in the built environment. Such a view reinforces the role of urban policies and planning directed to social and environmental justice and also represents a constant challenge to planning education and research. In this sense, analysing the Brazilian experience requires a previous understanding of both our planning trajectory together and the specificities of urbanization.

From the viewpoint of the urban network, Brazil's contemporary urbanization presents a pattern of increasingly high urbanization rates in all regions, with a national average of urban population of 81.23% of the total in 2000, and concentration of urban population and metropolitan areas¹ in the Southeast region where urbanization levels rise to 90.52%. In terms of spatial configuration, population is distributed in diverse and complex spatialities at local, regional and national levels, reinforcing a multi-centered urban network Such levels of urbanization "are the material expression of decades of high and increasing urban growth rates until the early eighties, in rhythms and intensities that vary according to the larger process of regional extension of urban-industrial capitalist relations of production throughout Brazil" (Costa; Monte-Mór, 2002: 130).

As a general overview, it could be said that:

"The eighties and the nineties were marked by a decreasing rhythm of population concentration in urban agglomerations and a de-concentration over medium-size cities and even over small towns articulated in local and/or micro-regional subsystems. In fact, spatial economic restructuring had made it possible for industry to locate anywhere where the basic conditions of production existed whereas metropolitan industrial losses to middle-size cities and smaller towns reflected growing agglomeration diseconomies and spatial fluidity. Both tendencies point toward a growing complexity in the urban network in which affluence and social inequality can be identified in all urban settlement patterns, thus extending typically *urban problems* to the country as a whole" (Costa; Monte-Mór, 2002: 130-132).

In 1999, twelve metropolitan agglomerations (200 municipalities) responded for 33.6% (52.7 million inhabitants) of the country's population; thirty-seven other urban agglomerations (178 municipalities) comprised other 13.1% (20.6 million inhabitants), and sixty two isolated urban centers with population of over 100.000

¹ Brazil's legal account of urban population encompasses residents in *cities/towns* (heads of municipalities) and *villages* (heads of municipal districts).

represented 8.5% (13.3 million people) of the total population (Ipea/Unicamp/Ibge, 1999).

In terms the characteristics of the urban areas, the large congested city appears as the "archetype of third world urbanization". In fact our urban experience points to decades of production of the built environment with little concern for both the natural resources and for highly unequal socio—economic structure, evidenced by appalling levels of income concentration and exclusion of the poor. In fact, as we argued "particularly within our hegemonic modernist tradition ranging from architecture and engineering to comprehensive urban planning, criteria of functionality and efficiency have always prevailed, in order to guarantee the minimum necessary conditions of (industrial) production, at the expenses of enlarged social reproduction" (idem, p. 134).

Low quality of the built environment and lack of social and environmental justice are two important element to be apprehended when considering Brazilian urbanization. The outcomes were massive urban migration, informal processes of land occupation, squatter settlements, extensive land developments, and social struggles for the extension of minimum conditions of urbanity for the majority of the population. The prevailing logic of the property market reproduces a pattern of social-spatial segregation where more densely built well-equipped and highly valued central areas contrast with low environmental quality areas expressing various levels of legality and informality. Neither central areas nor peripheral ones² are homogeneous: many squatter settlements, slums and other forms of developments present different legal status, and various levels of urbanization investments. Some involve considerable risks for the population, others experience conflicts related to private/public rights over land tenure, some have already experienced public intervention eventually including land ownership rights, most have locally based organizations struggling for their share of state intervention in basic urban services.

² The peripheral urban growth pattern typical of Brazilian urbanization was the outcome of continuous land development directed to the low-income sectors of the population. It was not a *spontaneous informal* process, but derives from systematic state absence in public housing provision in a context of structural economic exclusion, and also from the rationality of a particular fraction of property capital, whose product, the popular plot, embodies the least investments possible in order to be affordable by the largest share of the population (Costa, 1994; Torres and Oliveira, 2001).

In recent years there has been a substantial change of perspective in the focus of urban investments and planning, mainly as a response to decades of struggle of urban social movements around issues of housing, sanitation, transportation, and other items of everyday life. Popular participation changed planning in multiple ways as pointed briefly in the following section. The remaining question is: to what extent planning ideas and planning education has followed the changes produced by urban planning practice?

Urban planning and policy in contemporary Brazil: the merge of different traditions

Contemporary urban planning and policy making are formed by two traditions: the planning tradition as inherited from the international experience and learned in planning schools, and the emergence and consolidation of urban social movements.

Planning tradition evolves from a long history, originally based on modernist ideas which reached fertile ground in Brazilian architecture, in the planning of new cities, followed by popular housing sites projects, and comprehensive/functionalist planning financed and promoted by the state. The characteristics of such model, hegemonic in Brazilian planning experience from mid-sixties to mid-eighties, can be summarized as follows:

- emphasis on technical knowledge and power professional expertise is seen as the sole source of ideas to orient private and public intervention. Technocracy and authoritarianism were widespread, particularly during the seventies. Planning was seen as an state imposition, and even today most criticisms associate comprehensive planning with the military regime
- the plan is seen as the main product, usually a Master Plan, and not a long term planning process
- centralization of decisions and resources particularly at the national level, the state at the local and regional levels lacked financial resources and autonomy of decision
- uniformity of methodology established as urban policy in the 70's ³
- lack of means of implementation of proposals plans produced ideal proposals very far away from the financial, economic and political reality of local governments, the level responsible for implementation

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³ The SERFHAU, Serviço Federal de Habitação e Urbanismo, a part of Home Ministry, became responsible for the diffusion of a methodology for Local Development Plans, a precondition for local administrations to have access to urban financing schemes.

- idealized urban "order" and design the model was based on an ideal city and its functionality
- broad evaluation of urban problems during the seventies, a vast array of plans produced substantial knowledge of urban problems in many areas
- geared to state intervention, most propositions in the plan based solely on state action and policies, with little participation of other social agents
- lack of popular participation the authoritarian regime particularly during the mid sixties to mid-eighties avoided all forms of participation in the planning process
- no place for "informal" or "disorganized" aspects of urban dynamics, that is, the
 majority of the population was not reached by planning; the dichotomies legalillegal, formal-informal, planned-spontaneous were reinforced. The existence of
 informal areas is usually seen as a result of lack of planning and not linked to
 more structural origins.

If we can refer to the Brazilian urbanization as incomplete, inasmuch as several items of infrastructure and services are missing, similarly planning is very often also incomplete, because it usually lacks the necessary institutional and political strength to guarantee planning regulation even for the formal/legal urban developments. With heroic exceptions, private (property) interest usually prevails over public interest. On the other hand, for the majority of population, urban planning is an abstract idea with very little reference to their everyday concerns or needs. The disadjustment between ideas and reality, between planning and urban experience, is very well expressed by the title of an article by Maricato (2000): "the ideas out of place and the place outside the ideas", contrasting on the one hand the acritical import of planning models, values and designs from the advanced societies, and on the other hand the widespread pattern of production of urban peripheries, resulting in incomplete urbanization⁴.not necessarily illegal, but certainly outside the prevailing formalities of urban regulation.

With the worldwide crisis of comprehensive planning, associated to the deeper crisis of capitalist modernity, new alternatives are pursued. Some of them attempt to add the

⁴ In Brazil, the development of a site doesn't necessarily imply the construction of the houses. There are different social agents involved in the development of the plot, the provision of infrastructure, and the construction (either by the dweller or a firm). Each phase can occur in different timings, reinforcing the idea of incompleteness, of urban landscapes in permanent process of transformation. Also, it allows a very extensive pattern of land occupation, where plots remain empty for many years, while farther areas continue to be developed.

practice of collective action to the accumulated knowledge of planning (Friedmann, 1992; Soja, 1997).

The second tradition comes from the popular movements which, since the late seventies and early eighties, managed to bring their demands to the public arena. It became clear that the state was unable to provide minimum standards of urbanity and living conditions for most of the population. Initially organized to protest, urban social movements progressively evolve towards greater autonomy of action. In such tradition participation is a priority and technical knowledge is perceived as secondary, at least in its early phases.

The state, initially seen as the enemy, gradually becomes a partner, as far as urban social policies are concerned. Planning and popular participation discourses begin to amalgamate, particularly in the nineties, under the presence of a new constitution (1988), when a rejuvenating era of urban regulation spreads trough local governments. At the same time planning, particularly at the local level, begins to incorporate what has been called the "real city", that is the totality of urban settlements, with there inequalities and differences, formal or informal, slums, peripheral developments, etc...

It seems clear, however that planning itself has changed substantially since bureaucratic functionalist planning has suffered widespread criticism for more than a decade from now. Participatory schemes and strategies have appeared as a reaction to conventional planning and have systematically denied it. A third phase is now taking place, where many urban and also environmental policies are assuming popular participation as one of their methodological and political criteria. Many collegiate instances of decision were formed in several areas: collegiate councils, participatory budgeting, urbanization of irregular areas and slums, community administered housing policies, are some of the fruitful exemples of new urban policies in the last decade. The creation of a Ministry of Cities, backed up by social movements that have been active during the last twenty years is an evidence of the recently adquired, although rather fragile, importance of urban politics. Planning is reemerging as a public (and private) activity in newer and less dogmatic basis.

The need to focus on specific areas of intervention and/or sectors of activity, instead of attempting to encompass the totality is the rationale behind the so-called strategic planning, the other outcome of the new phase of planning. The appropriation of such discourse by local governments and planning professionals has produced a very powerful defense of cities as actors deciding their destinies in a global competitive arena. Big urban projects and design take place of planning as a routine activity. Urban marketing and urban renewal of central areas are the most visible face of strategic planning, giving rise to criticism due to questions of gentrification and market oriented logic of most interventions and projects⁵.

*The emergence of environmental concerns and planning*⁶.

In this section we present a brief review of the debate around the notion of sustainability, arguing for an approach that favors the understanding of contentious urban questions arising from the use, regulation and appropriation of (natural) resources within a larger field of urban and environmental politics. Our argument is that it constitutes a move towards a political ecology of urbanization.

Since the seventies, environmental thought has emerged and spread through various social movements, academic studies or policy-making processes. Its evolution followed many different paths, such as: from a general concern about nature and the need to protect so-called natural spaces from the continuous advance of urbanindustrial relations of production towards a profound discussion around the concept of development and the challenge of sustainability⁷. It supported both local protests around environmental accidents (Hogan, 1989) to broad movements organised around socio-environmental conflicts and justice (Harvey, 1996, Viola; Leis, 1992). Initially oriented by clear anti-urban bias of radical ecology and neo-Malthusian approaches claiming for population control, environmental concerns reached planning and public policy-making, redefining of agendas at various scales, with especial emphasis to the local level (Agenda 21, Habitat II or Cairo Population conference, among others).

⁵ There is an intense debate around strategic planning, their models and elitist character, which will not be considered in this paper. See Vainer (2000) for a broad criticism of strategic planning.

⁶ This section is partly based on Costa and Costa (2001).

Peet and Watts (1996) provide an interesting critical overview of the international literature on development and sustainability, while Colby (1990) as early as the end of the eighties, produced a useful framework for evaluation of different paradigms of environmental management.

Besides a plurality of positions, there is a great deal of ambiguity embodied in the apparent consensus of the environment discourse. The imprecise and unproblematic character of the official UN definition of sustainable development, based on a generic intergenerational equity indicates that the core of capitalist contradictions, related both to patterns of production and consumption, and to power relations in global terms, are not questioned. As many authors have pointed out in a number of ways, what is at stake is the extent to which modernity is accepted or questioned as a development project for the future.

The idealisation of untouched nature (Diegues, 1994), or modernity in general, produced values and cultural references separating society from nature. Some authors question present day modernity when compared to the promise of inclusion and freedom from the constraints of nature present in its original project (Norgaard, 1994). Others refer to nature, redefined as 'environment', captured by capital (Escobar, 1996), or as 'natural resources. The transformation of nature's use value in exchange value, extending to natural resources the rationality of market mechanisms (taxation of the use of natural resources, polluter-payer schemes, evaluation of natural assets) constitutes the basis for propositions in the growing area of environmental economics. The critique of such internalisation of nature by capital as an essential element of contemporary capitalist reproduction, derived from the post-structuralism, emphasises the imposition of western capitalism as the hegemonic form of development. Sustainability is therefore its legitimising discourse articulating nature, modernity and capitalism (Escobar, 1996; Leff, 1998).

The empowering capacity of environmental issues is present in the concepts of 'liberation ecologies' (Peet and Watts, 1996)⁸ and in environmental justice movement. The environmental question is not only a matter of preservation, but also an issue of distribution and justice, articulating "popular struggles around social and human rights, collective life quality and environmental sustainability". From that

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⁸ It derives from three traditions: the Marxist concept of consciousness, post-structural ideas about imagination and discourse, and some aspects of environmental determinism from early modern geography (Peet and Watts, 1996, p. 37). It aims to produce a consistent debate around modernity, its institutions and knowledge, to explore the notion of "everyday resistance" embodied in social movements, to reinforce the contradictory character of society-nature relations, in which dialectics "remain a compelling theory of contradiction, crisis and change" (p. 38).

⁹ Those are the terms of a recent Statement issued at an international congress on environmental justice (Colóquio Internacional sobre Justiça Ambiental, Trabalho e Cidadania, Niterói, Brazil, September 2001).

standpoint, contemporary urban practice and intervention in Brazil, has been marked by the convergence of social and environmental issues, mediated by urban planning, and struggles around social/environmental disputes. Social movements organised to demand access to the benefits of urbanization, reaffirm the centrality of the 'urban question', now redefined as socio-environmental; urban planning is progressively introducing environmental criteria in their policies and proposals; political involvement based on issues of citizenship and justice necessarily amalgamate social and environmental inequalities expressed in the extended urbanised areas. Also, at the level of regulation, there is a wide range of collegiate instances of state/society participation and decision-making, which are creating new political territorialities to negotiate environmental conflicts.

In spite of all that, environmental discourse and thought is not very much concerned about the spatial dimensions of the questions addressed, or with urbanization in general. And yet, we want to argue that such dimension is not only central but is latent in some of the approaches. In fact, even after years of debate, it is hard to find a consistent theoretical attempt to put together environmental and urban/social formulations. The idea of building up a political ecology of urbanization is a promising theoretical challenge. Furthermore, and as a consequence of the focus on practice and social change, the especificities of both urbanization and the context in which urban and environmental policies are formulated in Brazil have also to be taken into account. Therefore we focus our work within the realm of academy, teaching courses, supervising graduate students, and doing research is oriented towards the understanding of a political ecology of urbanization in general and with emphasis on Brazil

The Experience of the Graduate Program in Geography - IGC/UFMG

Planning in Brazil is not a profession that needs formal accreditation, such as architecture, engineering, or law. It is rather an activity performed by different professional formations: sociologists, economists, architects, geographers, lawyers, engineers, biologists among others. As a consequence, there are no undergraduate planning schools, although some undergraduate programs – architecture is a good

¹⁰ And as such expressing the gap between third world urbanization and that of industrialized societies, where there is generalized access to formal urbanization provided with basic infrastructure and housing.

example - have a great deal of planning in their courses. At graduate level, many programs and research areas deal with questions related to planning or environment, but only a few define planning as their main area of concentration ¹¹. As an example, ANPUR – the National Association of Graduate Programs and Research in Urban and Regional Planning - has presently 47 institutional members, but only 20% of them are classified in the area of concentration of Urban and Regional Planning. Around five other planning programs within that area of concentration and outside ANPUR complete the country's picture. As none of those programs are located in the State of Minas Gerais, planning is discussed and taught in few programs of different knowledge areas.

During the last decade the Graduate Program in Geography at the Federal University of Minas Gerais in Southeast Brazil, is progressively consolidating urban and environmental planning and analysis as an important area of teaching and research. The Program has a rather flexible curriculum organized around the areas of Environmental Analysis and Organization of Space, and receives graduate students from different academic backgrounds - geography, biology, architecture, urbanism, law, social sciences, economics, history - looking for formation intended to go beyond the disciplinary approaches of their own formation.

The discussion outlined in the first part of the paper has significantly influenced the contents and methodologies of courses and research projects currently taking place at the Graduate Program in Geography. Geography is a field of knowledge that has an inherent need to go beyond many disciplinary frontiers, as it deals with space in multiple ways. On day to day basis, it is always challenged by the need to bridge the gap between the so-called Physical and Human Geography, a task yet to be completed.

On the other hand, planning itself requires multiple approaches and disciplinary backgrounds. The emergence of the environmental question in recent years contributed substantially to add complexity to the requirements of graduate education and research in such field. The notion of a political ecology of urbanization, as

¹¹ Area of concentration is a formal expression used by education/research boards in Brazil to define in which field of knowledge academic programs, research projects, dissertations, papers, and like concentrate their approach. Urban and Regional Planning; Architecture and Urbanism; Geography, are examples of areas of concentration.

discussed in part one is an attempt to name an area of inquiry that benefits from the political economy of urbanization approach, incorporating also the environmental debate, urban/environmental politics and the regulatory approach through urban/environmental policies and planning¹². It aims to go beyond traditional modern dichotomies related to natural/social, urban/rural, technical/political boundaries.

To cope with such hard task, some courses were introduced in the Program Curriculum in its most recent revision¹³. Two regular courses provide the basic contents: *Population, Space and Environment* during the first term, and *Urban-Environmental Planning and Governance (Gestão)* during the second term. Both courses were first offered on experimental basis, before reaching their present status in the 2001 Curriculum. Since then, there has always been a huge demand for attendance to them, both from regular graduate students and from society in general. Its quite usual to have an average of fifty applications to attend *Population, Space and Environment* as 'isolated course'¹⁴, and around thirty applications for *Urban-Environmental Planning and Governance*. Such figures suggest that there is a large gap to be filled in the formation of professionals and academics prepared to deal with urban/environmental questions as formulated previously. Another evidence of such demand is the variety of undergraduate formation of our graduate candidates, resulting in an eclectic group of students, benefiting from each other's experiences..

Two other courses were recently created to deepen the discussion initiated in the above-mentioned courses: *Urbanization, Nature and Social Production of Space,* was first offered in 2005, departing from a Lefebvrian approach and aiming at exploring the relationship between theoretical formulations and actual empirical research results. It involved faculty and their research developed within two graduate programs in geography from two universities: ours in Minas Gerais, and the UFF – Fluminense Federal University in the State of Rio de Janeiro. The idea is to offer the same course in both universities, with faculty travelling occasionally, and students getting together

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¹² The formulation derives from Peet and Watts' original notion of liberation ecologies (1996), to which a have added an urbanization approach, with emphasis on the specificities of Brazilian urbanization. It is the outcome of a period I spent as Visiting Scholar at the Geography Department at the University of California at Berkeley, having Michael Watts as sponsor.

¹³ In 2003 the Graduate Program in Geography was reformulated to include the doctoral degree. From its creation in 1988 until then, it offered only a Master's Degree in Geography.

¹⁴ Any person with undergraduate degree may apply for attending graduate courses in public (federal) university, provided there are vacancies. In our Program, selection is made by faculty responsible for each course.

in a common fieldwork. So far, a first experiment was made this year with promising results, and the field work is planned to be added in the next edition of the course.

The second new course, *Advanced Topics: Readings in Political Ecology*, is geared towards doctoral students only, and designed to emphasize theoretical discussions to help students to develop their theses. The content deals with political ecology from a social sciences perspective. Contemporary discourses on nature and development are reviewed based on the contribution of Harvey, Escobar, Peet, Watts, Leff, Swyngedouwn, among others.

Besides the taught courses, students'research work developed in theses and dissertations are beginning to be influenced by such conceptual framework. Naturally, our own research results are embedded in them. Although still quite modest, the results can be considered as very promising as a means of building a more complex and critical understanding of reality.

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