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## **Multi-scalar Networks for the Convergence of Micro- and Macro-actors**

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### **Abstract**

The paper examines the constellation between local stakeholders and macro-scale decision making processes and shows, that new types of associations and networks will enable the convergence between macro- and micro-scale actors for urban interventions. Based upon two examples from the online platform for knowledge-exchange ‘urbaninform.net’ and references from Brazilian planning history different modes of top-down and bottom-up methods are described and put into the context of the theoretical framework of Actor-Network-Theory. In reference to Bruno Latour’s essay ‘Unscrewing the Big Leviathan’ (Latour 1981) the paper relates Hobbe’s idea of the multitude of individual interests that are unified through the social contract in one single body to the formation of legitimate authority for urban action. In line with the concept of ‘black boxes’ that constitute automated procedures helping to reduce the complexity in decision making processes, the paper argues that macro-scale interventions in the ‘informal city’ will only achieve inclusive developments through the integration and empowerment of local stakeholders in multi-scalar networks, where micro- and macro-actors cooperate and interact.

### **VORSCHLAG:**

The paper examines the potency of local stakeholders within macro-scale decision making processes and shows that new types of associations and networks for urban interventions will enable the convergence between macro- and micro-scale actors. Based upon two examples from the online platform for knowledge-exchange ‘urbaninform.net’ and references from

Brazilian planning history different modes of top-down and bottom-up methods are described and put into the context of the theoretical framework of Actor-Network-Theory. In reference to Bruno Latour's essay 'Unscrewing the Big Leviathan' (Latour 1981) the paper follows Hobbe's idea of the multitude of individual interests that are unified through the social contract in one single body and develops common principles for the formation of legitimate authority for urban action. In line with the concept of 'black boxes' that constitute automated procedures helping to reduce the complexity in decision making processes, the paper argues that macro-scale interventions in the 'informal city' will only achieve inclusive developments through the integration and empowerment of local stakeholders in multi-scalar networks, where micro- and macro-actors cooperate and interact.

## **The Convergence of Micro- and Macro-actors Towards Multi-scalar Networks for Urban Interventions**

"We can not know who is big and who is small, who is hard and who is soft, who is hot and who is cold. The effect of this tongues who suddenly start to wag and these black boxes that suddenly snap shut is a city, uncountable Leviathans with the beauty of the beast or the circles of hell."

Bruno Latour, *Unscrewing the big Leviathan* (1981)

The paradigmatic shift from top-down methods (strategies? In relation to warfare...) to bottom-up practices can be considered the most important innovation in urban planning for the realization of the 'inclusive city'. Participation, assisted self-help and the empowerment of local actors have been widely recognized as prerequisites for 'good urban governance' and the integration of marginalized groups as equal urban players. Thus, with the acknowledgement of informal processes, auto-construction and community-based organizations as driving forces behind the activation and renewal of neglected urban territory, municipalities started to recognize the potential of micro-urbanism incorporating initiatives of local stakeholders in their official programs and urbanization strategies.

Can we interpret the apparent interest of macro-actors in transformation processes of local micro-environments and in their stakeholders as a step forward for a new understanding in urban planning, or should we rather be sceptical as the present phenomenon might just be another strategy of authorities employing bottom-up initiatives for their political agenda? Before we will be able to understand the mutual relationship between micro- and macro-planning we should first question the way decision making is determined and how specific actors are authorized to speak and act on behalf of others.

In 'Unscrewing the big Leviathan', Bruno Latour describes the micro- and macro-level paradox emblematic for the organization of a multitude of individual actors: As embodiment of the sum of a multitude of wishes Hobbe's 'Leviathan' doesn't stand above the people and says nothing on his own authority. 'He is the people itself in another state – as we speak of a gaseous or a solid state.' (Latour 1981). The identification of one single person with the great number of people authorizing him allows Latour to re-evaluate the relationship between micro- and macro-order. For him it is useless 'classifying macro-actors (institutions, organizations, social classes, parties, states) and micro-actors (individuals, groups, families), or reconciling what we know of the former and of the latter' – what needs to be examined closely here is the question: 'How does a micro-actor become a macro-actor? How can men act like one man?' (Latour 1981)

The most interesting finding in Hobbes's depiction of the totalitarian monster 'Leviathan' is the isomorphic relationship between micro- and macro-organizations and the fact that no actor is bigger than another except by means of transactions. The nature of the macro-order is to consist of macro-actors who have successfully 'translated' other actors' will by means of negotiations, policies, intrigues, calculations, acts of persuasion, violence and other types of transmission. The enrolment of other actors allows them to act like a single will which is, however extremely powerful because of the forces on which it can rely. In this sense the micro- and macro-actors are operating the same way - they just differ in the degree of connectivity and the capacity to construct durable and self-sustaining links between bodies, materials, discourses, techniques, feelings, laws, organizations and buildings (Latour 1981). The once established connections, whether they are guaranteed by a legal framework or by informal transactions, do not have to be reconsidered for each single decision – they can be put into 'black boxes'. As long as we know what the input has to be in order to get the right output 'black boxes' are reducing the complexity of the task and they enable actors to grow. Black boxes allow us to intervene in specific cases without knowing or even controlling all the processes in place that help to make things happen. Therefore decision-making is for a macro-actor at least as simple as for a micro-actor. 'We do not draw closer to social reality by descending to micro-negotiations or by rising towards the macro-actors. We must leave behind the preconceptions, which lead us to believe that macro-actors are more complicated than micro-actors.' (Latour 1981)

Latour's analysis shows that the common understanding of power constellations and established order is not sufficient anymore to describe the way complex urban systems are developed. The mechanisms that are at stake in the construction of the city cannot be reduced to one single program. Usually, the more elements one can place in black boxes – modes of thoughts, habits, technologies, forces and objects – the broader the construction one can raise. In today's urban reality black boxes are like living organisms and they often become leaky as soon as we start to take them for granted. The complexity of the urban system can only become operable through the mediation of well-oiled black boxes oscillating between micro-activities and the overall modes of the macro-scale. The constitution of black boxes decides whether a plan or program can be translated into reality and how far the result will be controlled by the stakeholders involved in the process.

'A macro-actor is a micro-actor seated on top of many (leaky) black boxes, a force capable of associating so many other forces that it acts like a single man' (Latour 1981). If we want to change the way urban reality is produced we have to open the black boxes – we have to assemble and re-assemble the once established links between macro- and micro-organizations, between the formal and the informal city.

In order to get closer to the potentials and conflicts that are at stake in the formation of multi-scalar modes of operations, we will look at three examples showing strategies for urban interventions on different levels. In the first example we will use the historical lens reconsidering the 'Favela Bairro' program, the slum upgrading initiative in Brazil that introduced micro-urbanism methods in the municipal planning efforts. The second and the third example are from the contemporary context. With the social movement 'Dignity Barricades' and the 'Upgrading Slum System' by the Municipality of São Paulo two seemingly opposite urban actors will be presented. The examples will help us to illustrate how urban action is always entangled in translation processes between multiple scales and mediating actors.

A glance on the history of slum upgrading programs in Brazil makes us aware about the fact that the integration of participatory methods in the legal framework of public policies and applied practices has been a long struggle. Macro- and Micro-actors have been opposed to each other until representatives of specific local interest groups became themselves part of the

decision making process.<sup>1</sup> The pioneers of slum upgrading in Brazil were able to bring the fieldwork of the first favela interventions together with exemplary urban policies that have been anchored in the Federal Constitution of Brazil. ‘The public function of private property’, as it is stated, is not only a declaration for the collective project of the city, it also shows that the relationship between private and public interests have to be negotiated on the basis of each individual property. The ‘Favela Bairro’ program that has been introduced by the municipality of Rio de Janeiro in the 1990s had been recognized as best practice for the urbanization of informal settlements worldwide precisely because the negotiation process was institutionalized and participation has been understood as the only viable practice that would guarantee the integrity and self-responsibility of each single micro-environment. Even though the program still functions as a model for the renewal of precarious environments from ‘the inside’, keeping the social structure of the favela intact, the achieved results fall far short of its expected goals. From about 100 favelas that have been affected by the program only one can be considered a regular neighbourhood today. In view of these facts, do we have to state that the equal relationship between micro- and macro- is only viable as long it stays within the precisely confined limits of punctual interventions of local territory? Or can we also find a way to push the once established ties between bottom-up and top-down one step further in order to find a common model for a long-term coexistence of both methods?

Rather than just measuring the results of integrative planning methods we should reconsider the way micro- and macro-actors are defined and to which degree they relate to local demands and public interests.

The two following examples from the São Paulo context will help us to clarify the role of specific actors in the process of mobilizing different forces using completely different kind of rhetoric and strategies for urban action.

‘Dignity barricades’ is a project initiated by ‘Elefante Collective’, a housing movement in São Paulo that appropriates illegally plaques from real estate advertisement strategically. By painting large-scale letters on those plaques, they are subverting their message. The project is understood as a protest against criminalizing discourses attributed to social movements in Brazil. The conversion of the common language of real estate developers transforming the cityscape according to their own private profit interests is used for the mobilization of public space and the claim for equitable treatment of the people that have no access to adequate shelter. The demonstrative letters of ‘DIGNIDADE’ put up in the middle of the street is not only the manifestation of a group of political activists, it is also a call for the re-organization of urban space putting the right of each individual dweller in the foreground.

The ‘Upgrading Slum System’ established by the Municipality of São Paulo seeks to provide dwellers from precarious environments with infrastructure, public facilities and affordable shelter in order to realize ‘the social function of the city’ through participatory and inclusive practices according to the Federal Constitution and its supplement ‘The statute of the city’. In 2005 the Municipal Housing Secretariat – SEHAB – was launching a new slum-upgrading program implementing the municipal housing policy as a fundamental activity of the urban development of the city. Thus, the program makes use of the inhabitants’ tremendous socioeconomic efforts in building their dwellings by providing them with infrastructure and access to public services. Partnerships were formed on various institutional levels adapting urban management policies to the immediate needs of the slum dwellers, aiming at the integration of public and private interests. Besides the secretariats and municipal companies, state and federal governments also take part, optimizing public funds.

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<sup>1</sup> In Brazil the discussion on the integration of social movements started already in the early 60s when the constitutional prerequisites for integrative urban planning methods and the ‘social function of the city’ have been formulated. The Brazilian Architecture Institute (IAB) organized in 1962 a congress where the main guidelines for urban reforms have been established, known as ‘Reforma Urbana’. After the end of the dictatorship in the 80s the ideas of the ‘Reforma Urbana’ have been readopted under the name ‘Reforma Urbana Redistributiva’ and furthermore included in the Federal Constitution of Brazil from 1988 (Santos 2003)

The program combines analytic tools for the survey and evaluation of precarious urban areas with integrative planning methods put in practice through administrative structures and the collaboration between architects, planners, engineers, social workers and the inhabitants represented through management boards that follow the planning process from the beginning until the execution of the works.

State power versus empowerment of the helpless?

How is it possible to bring these two kinds of apparently opposite actors together and to consider them equal? How can we think of a convergence between two completely different interest groups if their position is defined through power constellation that cannot easily be converted? A closer look on the roles these actors have to play reveals a more complex relationship that cannot just be reduced to the simple opposition of state authority and marginalized groups or of the government versus local stakeholders.

By definition, the role of official representatives is to act according to the program that has been set through the policy and the public agenda. Municipal initiatives have to follow the interests of the inhabitants of the city in their integrity whereas the role of the political activist is confined to represent the rights of neglected parts of the population. The municipal government is operating through complex administrative structures and analytic instruments, whereas local stakeholders mobilize themselves based on community organizations and mutual support. Is the macro-actor just more powerful dealing with complex problems while the micro-actor is more important, because he really takes the individual rights seriously? Both sides dispose of different means to achieve their goals, but nevertheless, in order to transform their programs into action they both have to rely on networks.

According to Actor-Network Theory networks are not only made out of ‘social actors’ (Latour 2005). If we want to analyze the impact of certain actors we have to examine to what extent they are able to create and maintain networks between individuals, groups, programs, discourses, technologies and much more. Networks constantly have to be maintained in order to stay intact and as their complexity often exceeds our comprehension we have to consider them as ‘black boxes’. They are stable if the association of their elements are guaranteed and for a certain period irreversible. Networks are most powerful when the objectives of the different actors in play become equivalent. The dynamics of self-organizing networks are less relying on the social contracts that have been established between different parties, but on the capacity to create associations between heterogeneous groups without being based on fixed social and cultural identities and political attitudes.

If macro-organizations are smart enough they will be able to integrate the diversity of multiple micro-actors in their programs – If micro-actors and urban activists will manage to connect more to the networks of local authorities they will be able to grow and become part of the decision-making process. The size and the stability of those networks are more relevant than the power position of authorities. With the expansion of informal urban environments the sum of many micro-actors have a remarkable share on future development of the cities – that’s why they are also getting more important for official planning authorities. If we focus on the sustainability of the overall system, the city can only develop with the collaboration of both, the macro- and the micro-level. In the end, public stakeholders from both levels should share common goals. Against the privatization of public goods and the deconstruction of urban culture through private profits, the convergence between micro- and macro-order will allow us to reassemble the multiplicity of individual interests.

Beyond any ideological polarizations, micro- and macro- actors have much more in common than they would like to believe. If we measure the strength of these actors by their capacity to intervene, that is to mobilize the forces that are needed to make interventions in public space happen, we realize that cooperation will mutually empower them both. Rather than just being

an idealized concept, the big Leviathan is the city itself – its fragmented topography represents an organism of diverse parts interacting in one single collective body.

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