

Do Blurred Institutional Organisation and Inconsistent Policy Agendas Hinder Urban Development of Post-Socialist Neighbourhoods in Serbia? MAS-ANT Method of Analysis

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1 ABSTRACT

In transitional countries, the course of merging socialist and neoliberal socio-economic condition, regulatory practices and organizational solutions led to inefficiently operationalized and inconsistently formalized institutional reforms rather known as “growth without development”. Included in this range of spatially and economically turbulent surroundings, post-socialist cities in transitional countries have undergone highly dramatic change in political, economic and social terms. This paper interprets blurred regulatory framework of post-socialist cities in Serbia through an assemblage methodological approach which combines Multi-agent system (MAS) procedure from computer science and Bruno Latour’s Actor-Network Theory (ANT) on social networks.

Generally speaking, any built environment always reflects political and economic processes, especially in turbulent social times such as the disintegration of Yugoslavia’s political system and the introduction of new context of market economy, decentralized administrative powers and a lack of investment and resources. Dramatic shifts in social organization and spatial transformations result in the incapacity of the post-socialist planning to define contextually appropriate and coherent urban management for tracing its chaotic urban development pattern. Conversely, with the huge socio-cultural base inherited from the socialist period, cities in transitional countries have continued to be centres of economic growth with a variety of services, expansion, technological innovation and cultural diversity. Therefore, the post-socialist period in these cities contains prevailing characteristics of the disintegration of the preceding system rather than a coherent vision of what should follow. The post-socialist urban governance fails substantially through the lack of consensus on priority goals, action-oriented implementation and horizontal and vertical coordination.

Tracing institutional articulation of post-socialist context through MAS-ANT methodology involves structural analysis of administrative procedures and content analysis of policy agendas to systematically deconstruct local urban governance in terms of political, economic and cultural aspects of transition with a multitude of actors, variety of interests, conflicted strategies and fragmented implementation. Multi-agent System serves as a generative bottom-up topography of the complex urban reality while Actor-Network Theory flattens the social into a panoptic internalized ontology. The schema thereafter involves taking into account all active agents regardless of their sort and form of social manifestation (ANT) and notwithstanding theoretical bias of their interdependencies and interconnections (MAS).

Finally, this dynamics of relations and influences between different layers of decision making and urban key agents indicates opportunities for altering post-socialist urban planning by analysing in which manner regulatory framework relates to urban actors and address spatial issues, and what urban patterns and social impact result from these actions and induce building a spatial and social vision. In the long run, the identification of relations and influences on post-socialist urban governance examines how urban actors, space and regulatory framework rely on planning and decision support systems as means to forecast and orchestrate any movement or change of the system.

2 INTRODUCTION

The development of cities is a contextual category, global and local. Nowadays, it is also political, economic and spatial category. This specifies the multilateral nature of urban development in contemporary world – it is not only strongly based on local socio-spatial capacities, but also responsive to global movements of capital, markets, goods and trends. Such complex and perpetual process could only be partially tamed and projected by regulatory practices and organizational solutions in the concrete urban environment. As institutional framework is the overarching historical and social invention that deals with the body of norms, projections and structures in the public domain, the institutionalization of planning restraints and administers how urban development unfolds.

Unfortunately, dramatic shifts in social organization, state apparatus, political structures and economic model result in the incapacity of the post-socialist urban planning to define contextually appropriate and coherent urban management for tracing its chaotic urban development pattern. A long, declining way from the rigid, centralized planning model that served to build Serbian capital as a modern European metropolis to the arbitrary, market-oriented, politically biased planning started with Balkan wars in the 1990s, was followed by transition from socialist to capitalist economy. In the recent years, this process is also exacerbated by failed social reforms, shallow democratization and unfinished decentralization.

However, it must be admitted that considerable effort has been made to solve this continually enlarging list of conflicts and problems in urban planning, but it has been done rather partially and arbitrarily and almost without any substantial synchronisation between policy agendas and regulatory practices in question. In this respect, Djordjevic and Dabovic (2009) also emphasize that political and economic problems are the principle obstacles for updating post-socialist institutional design, either particular policy agendas or institutions. Therefore, MAS-ANT assemblage methodology¹ is applied to set the interpretation of structure-agency relations within the institutional framework on different levels, with the complex architecture of post-socialist urban planning flattened to internalized and equalized network of agents, regardless of their sort and manifestation (for example, material and / or non-material).

This paper aims at tracing institutional articulation of post-socialist urban planning through MAS-ANT methodological approach. It is divided in three logical, consecutive segments addressing background, method of analysis and discussion concerning the specificities of transition in Serbia, at stake during the last 30 years, and its influence on institutional framework of post-socialist urban development. First of all, we explain general theoretical background in terms of transition, institutional design and MAS-ANT methodology. Then, we analyse the reinterpreted specificities of post-socialist urban planning institutions system according to the MAS-ANT methodological approach. Finally, the third delves into the risks and opportunities to address inefficiency and inconsistency of post-socialist institutional framework.

3 METHODS & APPROACHES

3.1 Context analysis

3.1.1 Socio-spatial patterns of transition

Even though contemporary urban development is embodied in globalized urbanization as a worldwide, broad, general and mutable process, it still contains a necessary connection to place - making an actual urban setting a very vital factor with regard to dealing with power relations and the uncertainty that are generated when global aspects are transformed to meet local specifications. The urban transformation of Serbian cities falls into the cliché of the new post-socialist urban reality, which emerged during the “transition to markets and democracy” (Tsenkova, 2006). Included in this range of spatially and economically different environments, post-socialist countries in Central and Eastern Europe (CEE), and transitional countries in general², have undergone dramatic change concerning social organization in general and political system, economic model and cultural distribution in particular.

The mayor consequences of such post-socialist transition introduce, on one hand, the disastrous effects of increasing social polarization (inequity), deinstitutionalization of socio-spatial practices (informality) and unfair wealth redistribution (poverty), and, on the other, the huge socio-cultural base inherited from the socialist period where cities have continued to be unique centres of growth with a variety of services, infrastructural expansion, technological innovation and cultural diversity. This has had a profound influence on the spatial adaptation and social repositioning of post-socialist cities.

¹ MAS-ant methodology is a combination from Multi-agent system (MAS) procedure borrowed from computer sciences and Actor-Network Theory (ANT) on social networks designed by, French philosopher Bruno Latour, among others.

² In terms of transition theory, transitional countries experience the period characterized by the discontinuity and opposition of 2 different states of affairs before and after. It has the overall common path of continuity (proceedings). Even though, those societies usually show considerable level of path dependency, the mayor "transitions" happen in terms of: state apparatus, economic order, political entity, and civil society.

While Yugoslav socialist period was less grave than in the other CEE socialist countries and often referred to as “self-managing market socialism” (Estrin 1991), the initial transitional period in 1990s was characterized by civil wars in the Balkans, isolation and blocked socio-economic transformations. Finally, the real transition³ started, but was rather qualified as slow socio-economic transformation with low rate of foreign investments, dominated by the flurry of wild capitalist and stumbling post-socialist proto democracy. Corruption, manipulation and clientelism have governed most of institutional relations and practices in the public domain, where political actors have become powerful economic actors within an un-transparent and semi-legal system (Vujović and Petrović 2007). In these circumstances, any substantial societal change has been degraded and misinterpreted with superficial economic liberalization and hyper production of ungrounded formalizations (emergence of new institutions and numerous policy agendas).

The belated post-social transition of 2000s can be best circumscribed as “growth without development” (Vujošević and Maricic 2012). This actually means that recently established Republic of Serbia⁴, as well as its predecessor Serbia and Montenegro (2003-2006) and Federal Republic of Yugoslavia (1992-2003), has not hitherto managed to solidify the main pillars of coherent socio-economic progress pipeline and adequate legal, institutional and educational framework in order to ensure stability and sustainability of the whole system. Even though, since 2000, the standard of living has increased, the socio-political system shows the traces of surface decentralization and democratization and national economy seems partly revived, the Serbian society stays heavily dependent on international relations, worldwide economic circumstances and regional political movements, being even only a passive recipient of what is happening on the global scale.

This condition of total dependence and local incapacity to pave its own way of feasible and resilient flow of development draws attention that it is only the revival of research, strategic thinking and governance in any field of the public domain which can, slowly but surely, guarantee the continuity and validity of reforms, durability of the system and development based growth (Vujošević and Maricic 2012). Knowing that urban planning is an essential part of public domain of contemporary cities and that it is deeply embedded in its concrete societal context, all the negative effects and anomalies of post-socialist transition must be also taken in consideration within regulatory framework of urban planning.

3.1.2 Post-socialist Planning Context

Having said that spatial planning system reflects political culture and entity of its immediate surroundings (Stojkov and Dobricic 2012), detailed analysis of post-socialist regulatory framework requires reinterpretation of transitory path difficulties in its institutional scope. The state of political instability, convergent socio-economic forces and inconsistent planning practice overcast already loose institutional organization and documentation in terms of: misleading map of actors, provisory rules and inconsistent procedures, and manipulative field of influences (Djordjević and Dabović 2009).

In this jumble of old routines and new market-based demands, the current planning system kept “the worst of both worlds” (Vujošević and Maricic 2012):

1. Cumbersome institutional structure inherited from socialism and managed bureaucratically, which complexifies and blurs the distribution of substantive, qualitative and procedural tasks, leaving space for manipulations⁵;
2. New management agencies and organizations formed to address recent market-oriented context, which prove to be incapable to cope with post-socialist development challenges, but prompt to minister political voluntarism and wild capitalism business models present in place.

On the one hand, although the post-social transition keeps changing the social climate in Serbia, the prevailing planning practice is still dominated by rigid traditional system with the planner in centre, even only nominally, and the fixed land use regulations in focus, though often arbitrarily implemented (Djordjević and Dabović 2009). When applied to the particular institutional and organizational arrangements, such planning habit is predominantly technical activity orientated towards end-state functionality of urban systems and the fixed image of the city. However, these practices initiate that policy agendas and projects are made

³ We evaluate transition in reference to transition theory.

⁴ The Republic of Serbia was officially established in 2006, after Montenegro gained independence on the referendum held on May 21 2006 and is a legal successor to the former state union.

⁵ “old institutional zombies” as Maricic and Vujošević call it (Vujošević and Maricic 2012).

by a cluster of planners⁶, who are deprived of officially binding authority and professional dignity (Vujović and Petrović 2007), and become a mere executive body for the decisions made elsewhere. Furthermore, urban regulative stays limited to the land use disposition, which is also non-obligatory, but rather biased by local power relations.

On the other hand, actual building and spatial planning carry on notwithstanding factual regulatory and planning authorities, but rather according to new rules of neoliberal market and the corresponding power relations. Therefore, emergence of multitude of new actors and actor groups from foreign investment organizations and councils to new local managerial structures (functions of city mayor, manager and architect, for example) serve only to ramify this new urban planning battlefield, but without any significant influence or clarified roles in the setting. With new institutional and private actors and strong pressure towards decentralization, urban planning system lose its authoritarian, vertical structure dominant in socialism, but at the same time offer hardly any solutions for (1) binding horizontal and vertical coordination, (2) insertion of efficient meso (regional) level to connect national and local decision making, priorities and interests, and (3) facilitating procedures and relations up and down the institutional structure. Public sector lacks engagement on the regional level; private actors engage individually to find their way through institutional procedures and corrupt public institutions; urban planners are marginalized by the partial and unclear legal framework; and political actors hesitate to introduce a new legal framework (Vujović and Petrović 2007). Consequently, urban planning tend to “happen” spontaneously as a mixture of different models, most often focused on crisis management or investor-based planning to support privatization and marketization, but the least preoccupied with adjusting the institutional framework to accommodate the needed social, economic, cultural and environmental transformation of the society (Vujošević and Maricic 2012).

In short, loose and blurred hierarchy of institutions, vertical clientelism as a way through complex institutional organization, and no trace of effective communication and exchange between national and local level are just few obvious conflicting issues that take place on the surface of institutionalized urban planning practice during the post-socialist transition in Serbia. In this manner, we outline the murky period of overlapping remnants of socialist system and its strong cultural and behavioural heritage with new practices and means of capitalist socio-economic order. Yet it is also clear that post-socialist regulatory framework has a particular set of material and non-material agents that govern its goings-on, which are not yet identified, demystified, traced and evaluated in order to have a functional map of post-socialist institutional design of urban planning.

3.2 Content analysis

3.2.1 MAS-ANT methodological approach

According to the complexity of post-socialist urban system broken down herein in terms of transitional context, path dependency of socialist and post-socialist urban planning and complex, blurred and changing institutional design of urban planning regulatory framework; its dynamics may be reinterpreted as a network constituted of active, operationally independent urban key agents that are being methodically orchestrated by the hierarchy of decision making. This methodology comprises structural analysis of administrative procedures and content analysis of policy agendas to systematically deconstruct local urban governance in terms of political, economic and cultural aspects of transition and investigate the influence of blurred institutional organization and inconsistent policy agendas on post-socialist urban development.

Within such an urban system, all agents and independent external factors influence the agent's functioning, but on the other hand, at the same time, the agent while being influenced by the others also influences them simultaneously (Ferber 1999). This interpretation corresponds to the Multi-agent system (MAS) approach for complex computing systems based on the concept of agents, communication, cooperation and coordination of actions. This approach has already been applied in urbanism as a simplified problem solving strategy primarily used for the decision making process of all urban actors converted into agents and to the social organisations in which these agents are embedded (Bousquet et al. 2004). However, we combine MAS it with Latour's Actor-network theory (ANT), where all human and non-human agents, social and technical

⁶ With the term “planners”, we refer to any professionals from all disciplines present in the planning process (spatial planners, architects and landscape architects, economists, sociologists, geographers, lawyers etc.)

elements are symmetrically treated within a system and together contribute to a dynamic never-ending network where understanding of all phenomena, including the social ones, lies in the associations among them (Latour 2005). Even though, if taken internally, cities are constituted as dual systems incorporating physical and social component; this MAS-ANT methodological approach thereafter involves taking into account all active agents regardless of their sort (ANT), their interdependencies and interconnections (MAS) and how they rely on the planning support system and decision support system to contribute to the overall urban functionality and produces a new complex reality of urban development.

<i>Multi Agent System</i>				<i>Actor-network theory</i>	<i>Urban theory</i>			
process	technique			concept	content			
	procedures	apparatuses						
<u>Environment (E)</u>	Types of agents			Agent based	Post-socialist urban planning			
Sensory input								
Assembl y of agents (A)	Agent profile		<u>Agent type</u>		Human	<u>Urban actors</u>		
					Non-human	<u>Spatial forms</u>		
	existence		Agent state	Agent behaviour				
	figuration		Agent preferences					
			content	Field	perception			
			priorities	Receptiveness	Pro-activity			
			position					
challenges		sensibility	1-1 interaction					
Assembl y of operation s (Op)	<u>Interactions</u>		data exchange		Urban assemblages	Levels of decision making		
	Cooperation, coordination & negotiation		strategic					
			tactical					
applicati on (U)	Ethnography of causality	linking	Independ ent actions			Technical	Functional	Social
				<u>Chain of networks</u>				
				<u>Networks</u>				
Action output								

Table 1: Cross-pollination process of urban development (MAS-ANT methodological approach)

This methodological approach aims at developing the looped concept of building an urban development model through the continuous intermingling of network chains (technical, functional and social). Bearing in mind that actor-network explanations give real results only in strongly defined situations (Farias et al., 2009), the elaborated distribution of causality and linking (MAS) among the elements of the multifarious composition (ANT) activates the core of urban theory about modern cities if constrained to the specific, but non-deterministic urban environment. In this sense, simulating urban development is envisioned with:

- MAS methodology of process generation through basic agents and the pertaining technique of categorizing the pertaining infrastructure with apparatuses (set of fields of influences and major forces) and procedures (set of operational agencies)
- ANT concept of labelling all active elements of an urban ecosystem (urban environment)
- Urban theory layer of content that provides complete and accurate data on the circumstances in urban context of modern cities

The modelling spiral of urban development is in endless motion while the set of sensory apparatuses provide the input about the environment, while the procedures and action apparatuses give back the output that

influence the immediate surroundings and constitutes the new environment reality to be further re-entered in the urban development loop (Table 1).

3.2.2 Institutionalization of post-socialist urban planning through MAS-ANT method of analysis

MAS-ANT methodological approach aims at balancing constrained theoretical influence, wide conceptual field (ANT) and the dynamic potential of MAS for the simulation of complex urban systems. Doing so practically involves exploring the pattern of apparatuses and procedures that determine the particularity of an urban context in spite of the multiplicity of general urban trends and its local influences, so that the direction of urban development can be traced and simulated. Consequently, this methodological approach deals with an urban environment as an indivisible entity with all mayor, actors, structures, practices, processes and procedures represented within a model (Fig. 1)

Multi-agent system (MAS) + Actor-network theory (ANT)

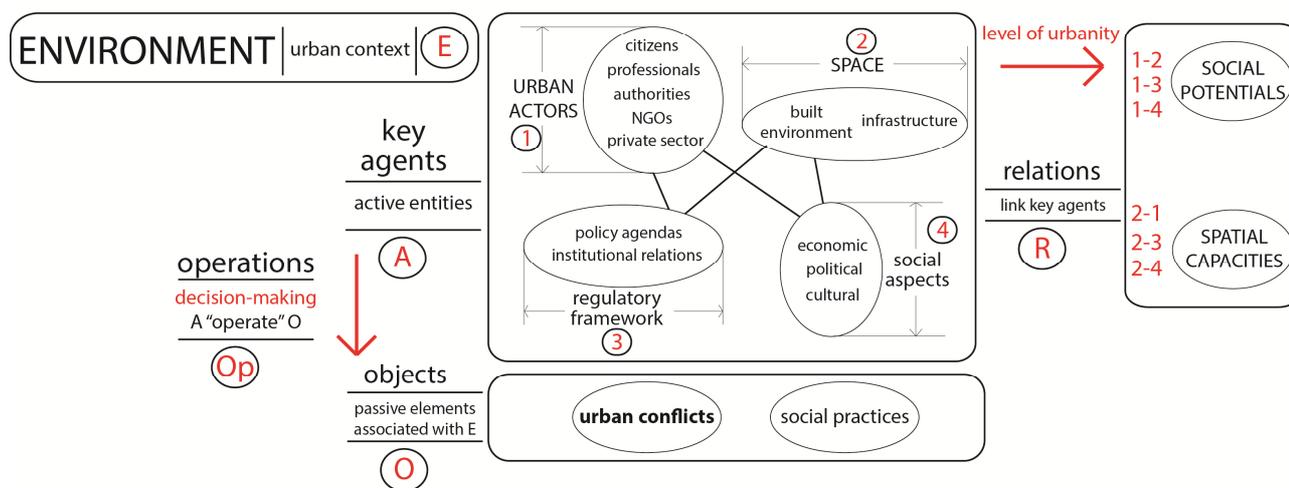


Fig. 1: MAS-ANT concept

Translating MAS-ANT terminology onto the institutional design of post-socialist urban planning works so that we consider the totality of this regulatory framework as an agent of the system and analyse it as a specific agent type in relations to all other set of agents present in the urban context.⁷ In this manner, regulatory framework is being extensively defined through agent profile, with its state, preferences and behaviour, i.e. structure, functions and practices of the system.

Knowing that all active agents are identified using the same ontology, the co- and multi- actions among them could be traced in the form of field of influence or perception potential. In practice, it signifies that all urban conflicts and social practices could be identified as directed relations. In other words, the role of any agent of the system could be denoted as pro-activity, sensibility or 1-1 interaction according to (1) the changes recognized in its agent state (structure), fields of influence according to the agent preferences (envisioned function of its norms, rules and regulatory bodies), and mayor forces determining its agent behaviour. These broad domains of the agent profile answer the question of who, what and how acts in the network of complicate relations among institutions and documents comprised within the institutional design.

If interpreted with MAS-ANT methodological approach, post-socialist institutional framework in Serbia represents linear organization and hierarchical relations of its structures and policy agendas (Fig.2). In reference to the agent state structure, it is organized hierarchically and we distinguish 3 consecutive levels: national, citywide (regional), and local (municipality, community). In this way, we structuralize all public authorities, services, agencies, organizations and enterprises and track the instigating factors, lines of amenability, as well as circulation of substantial, regulatory and executive tasks. Conversely, the distribution of functions differentiates strategic, tactical and operational sources of legal documents and it is identified as a core position, content and priorities of the agent type. Finally, the logistics of agent behaviour

⁷ The specific terms of MAS-ANT are explained in the Table 1.

conducts through future-oriented actions and practice (strategies, programs, plans, projects, recommendations etc.)

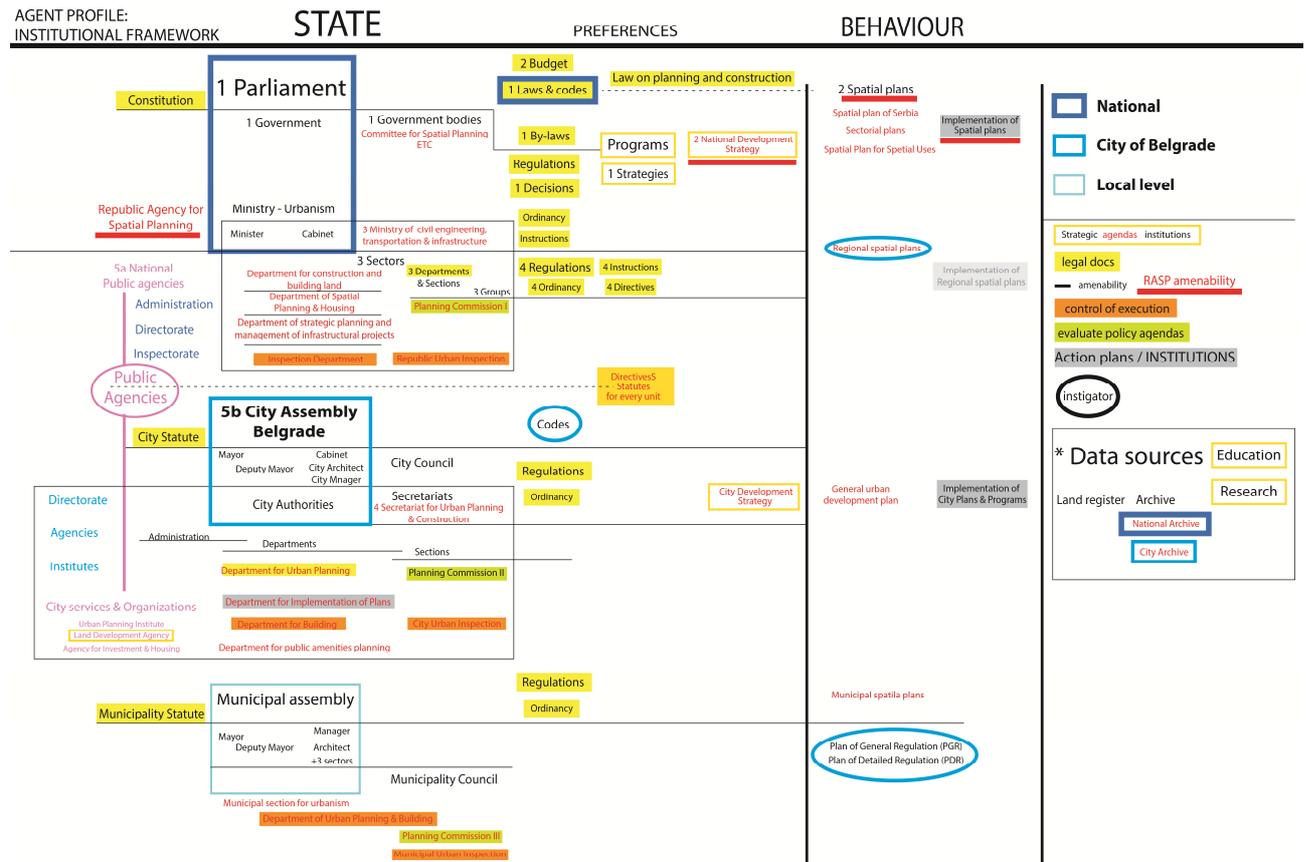


Fig. 2: MAS-ANT interpretation of the post-socialist institutional framework.

4 RISKS AND LIMIT OF POST-SOCIALIST INSTITUTIONAL FRAMEWORK

Institutional design is an overarching theoretical category which comprises rules, procedures and organization structure for enabling or constraining behaviour and actions to accord with values, achieve objectives, and execute tasks.⁸ It includes legislative, strategic, procedural and executive tasks that address contextualization, policy making, planning and implementation. In other words, professional and practical spheres of planning respond in its particular manners to the societal circumstances (Djordjević and Dabović 2009), and all their different aspects should be enclosed within the institutional design. Only when we have an exhaustive definition for categorizing everything what happen “under the hood of regulatory framework of urban planning”, could we be confident to track and trace any of its agents, analyse it properly and set the conditions for systematic improvements.

Institutional organization of urban planning regulatory framework in Serbia corresponds to the administrative organization of the Republic with 29 districts and 189 communes (including 16 municipalities of Belgrade and city municipalities of Novi Sad, Nis & Kragujevac). The districts act as political bodies, but they are not authorized to make their own decisions regarding spatial development. Therefore, in practice, spatial plan of the Republic, regional spatial plans and spatial plans of special uses are under the jurisdiction of the National authorities. On one hand, the Ministry in charge of spatial and urban planning⁹ prepares those plans, while National Government and the Parliament initiate their preparation and adopt the finalized versions. Moreover, implementation plans and programs dealing with spatial development are also the

⁸ This extensive definition is provided by Alexander (Alexander 2005) as a revision of a set of previous definitions from various authors, which were partial and incomplete.

⁹ The name, organization and distribution of tasks vary from one Government mandate to another and depend on the political party in power. Currently the Ministry operates under the name “, the Ministry of Civil Engineering, Transport and Infrastructure”

responsibility of the Parliament and republic government¹⁰. In this respect, the Ministry of Civil Engineering, Transport and Infrastructure is the key public actor at national level in the domain which (1) conduct administration tasks, (2) govern strategic construction, site-development and infrastructure equipment works, (3) carry out survey jobs, and (4) perform inspection and supervision actions in the field (Maksic 2012)¹¹. On the other hand, cities and municipalities have legal means and rights to make their own strategies, plans, and programs, as well as local regulations and rules in terms of urban development. In this respect, local authorities initiate and adopt all planning documents that control urban development and comprise guidelines for administration of their respective municipalities/cities/communities¹². Urban plans, therefore, consist of General Urban Development Plans, Plans of General Regulations and Plans of Detailed Regulations¹³. They cover respectively smaller territory, incorporate all sorts of innovative, strategic and up-to-date methods, and in general offer the detailed solutions for issues already conceptually covered with spatial plans, such as land use and building zones, transportation, infrastructure, natural and cultural heritage, green, recreation, protected areas etc. For example, General Urban Development plans control development on a local level, so that they are prepared and adopted locally; but, being regarded as strategic documents with a certain influence on national and/or regional level, the final consent upon their adaptation rest with the Ministry in competence.

According to Alexander (2005), core concepts of 3 institutional bonds that provide the functionality of the system on different levels are: governance, coordination and agency. His approach elaborates how institutional design emerged from institutionalization theory and how these categories of governance, coordination and agency and their independent development in the institutional context and on the different scale, in the long run, contribute to positive institutional transformations and eventually to significant urban development in our case. From a broader perspective, the issues of governance, coordination and agency refers to the ways conflictive hierarchy, activities and relations could be reinterpreted on macro-micro levels (governance), through network organizations and distribution of roles (coordination), and within task implementation procedures (agency). In post-socialist institutional framework, as it has been shortly presented herein, we can identify “cracks” in all 3 mayor institutional bonds:

- (1) Centralized, top-down decision-making structure with the respective Ministry as an executive and regulatory entity and national authorities as a supreme legislative body.
- (2) Loose horizontal and vertical communication among the institutions, with the authoritarian attitude on the national level, no adequate regional level, and no clear task separation among the institutions on the same level.
- (3) Top-down political voluntarism as well as bottom-up vertical clientelism bringing about the institutionalization of various doubtful interests within the official institutional framework.

Finally, we may realize that all the particular conflicts of governance, coordination and agency could be traced within legislative regulatory, executive, external and internal controlling substantive, technical, managerial and financial procedures, identified by MAS-ANT methodology.

5 CONCLUSION

Knowing that the way cities function shapes the expectations and actions of all the urban actors involved, who also influence the constitution of the city itself; MAS-ANT concept is based on the notion of an open-ended future, which implies that uncertainty must be accepted and managed. MAS-ANT methodology enables us to make a crucial change in approaching urban development in post-socialist cities that can then be circumscribed by the rise of the global concept from static to itinerant and dynamic and susceptible to

¹⁰ The exception is the capital (Belgrade) and the autonomous province of Vojvodina. They adopt implementation plans and strategies for their respective territories.

¹¹ Another important role on the national level was assigned to the Republic Agency for Spatial Planning, in charge of strategic and tactical documents, programs and tasks on the national level such as: (1) preparation, coordination and monitoring of spatial plans, (2) technical assistance for plan preparations, and (3) spatial planning training programs. However, the Agency has been recently discontinued according to the new Law on blablba

¹² For the city of Belgrade, which consists of 16 municipalities, this is conducted on the citywide scale by the city administration.

¹³ Any Urban Development Projects, Schemes or Land Subdivision Projects are subordinate documents to these 3 hierarchical types of urban plans.

change through continual iterations. This dynamics of relations and influences between different layers of decision making and urban key agents indicates opportunities for altering post-socialist urban planning by analysing:

- (1) how all the processes and procedures are interrelated within an urban agent profile (such as institutional design of urban planning framework),
- (2) in which manner regulatory framework relates to urban actors and address spatial issues,
- (3) what urban patterns and social impact result from these actions and induce spatial, social or institutional changes.

Therefore projecting the urban development on a post-socialist urban environment or a city could be only the final product of an overarching decision making procedure that comprises and reconciles all its different levels and the way how each of them address urbanity as its constitutive reality and urban development as its ultimate positive goal.

6 REFERENCES

- Alexander, E. R. 2005. "Institutional Transformation and Planning: From Institutionalization Theory to Institutional Design." *Planning Theory* 4 (3): 209–23. doi:10.1177/1473095205058494.
- Bousquet, F, and C Le Page. 2004. "Multi-Agent Simulations and Ecosystem Management: A Review." *Ecological Modelling* 176 (3–4): 313–32. doi:10.1016/j.ecolmodel.2004.01.011.
- Djordjević, D., and Dabović, T. 2009. "System of Spatial Planning in Serbia: A Critical Overview." *Dela* 31: 143–57.
- Estrin, Saul. 1991. "Yugoslavia: The Case of Self-Managing Market Socialism." *The Journal of Economic Perspectives*, 187–94.
- Ferber, Jacques. 1999. *Multi-Agent Systems: An Introduction to Distributed Artificial Intelligence*. Addison-Wesley.
- Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford; New York: Oxford University Press.
- Maksić, Milica. 2012. "European Experiences as Guidelines for Public, Private and Civil Sector Role Redefinition in Spatial Policy Formulation Process in Serbia." *Spatium*, no. 27: 40–45. doi:10.2298/SPAT1227040M.
- Stojkov, Borislav, and Dobricic, Milica. 2012. *Prostorno Planiranje u Srbiji aktuelne teme*. Belgrade: Republicka agencija za prostorno planiranje.
- Vujošević, Miodrag, and Maricic, Tamara. 2012. "The Conundrum of a State Spatial Plan Implementation: The Spatial Plan of The Republic of Serbia (2010)." *AESOP 2012*. Ankara.
- Vujović, Sreten, and Petrović, Mina. 2007. "Belgrade's Post-Socialist Urban Evolution: Reflections by the Actors in the Development Process." In *The Post-Socialist City*, edited by Kiril Stanilov, pp. 361–83. *The GeoJournal Library* 92. Springer Netherlands. http://link.springer.com/chapter/10.1007/978-1-4020-6053-3_18.