

Urban Space as the Commons - New Modes for Urban Space Management

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Abstract. The significant growing of urban population, globalization of social-ecological systems, fuzzification of spatial structures, the diversity of actors in spatial development, their power and interest in using the resources including space, especially in high-density urban areas. Spatial development is connected with a high concentration of economic activities and population in urban systems. In many cases very rapid processes of urbanization and suburbanization approach natural spatial/territorial limits, such as carrying capacity of land, transport and infrastructural systems, absorption capacities of recipients and others [1]. Growing shortage of space and problems in their accessibility (physical, functional, etc.) leads to growing tension and conflicts among the actors/users of urban spaces and represent the initial phase of space deprivations processes. There is a parallel with “tragedy of commons” as defined by Hardin [2] and was reinterpreted by many other academics and researchers. Urban space can be clearly interpreted as the commons or commons good for their community of users and relevant actors, so innovative governance modes overlapping defined “tragedy of commons” representing a possible approach for a new concept of urban public spaces management. This paper presents a possible new approach to the management of urban spaces reflecting the current challenges in spatial development based on the theory of commons and innovative governance modes. The new approach is built on innovations in institutional regimes, the algorithm of decision-making and economic expression and interpretation of quality of the space. The theory of the commons as the base source for this approach has been broadly proved in practice and Elinor Ostrom as the author of this theory [3-5] was awarded by Nobel Prize in 2009.

1. Introduction

The significant growth of urban population, globalization of social-ecological systems, fuzzification of spatial structures, the diversity of actors in spatial development, their power and interest in using the resources including space, especially in high-density urban areas are the contemporary trends and challenges for spatial planning. Spatial development is connected to a high concentration of economic activities and population in urban systems. In many cases very rapid processes of urbanisation and suburbanization approach the natural spatial/territorial limits, such as carrying capacity of the land, transport and infrastructural systems, absorption capacities of recipients and others [1] .

The society in euphoria after the industrial revolution and the following scientific and technological transformation was approaching the development through the optics of economic priorities and rights of an individual for self-realization without the knowledge of and acceptance of the real interconnections with the rest of the societal system. The overconsumption and extensive use of resources became the



main engine of the development. Physical limits of the environment, though, clearly demarcate the boundary the society cannot overstep. Therefore, it is crucial to plan the further development while respecting these limits and propose the development within these limitations [6].

The intensive growth of population and its overgrowth into the space which used to be untouched by human hand is creating a significant pressure on effective management of space as the basic asset of the further growth of the society. Substantial threat is expansion of urban structures into the natural areas causing its irreversible devastation. The solutions proposed by the world society are pointing at the need to densify the existing urban structures and localizing the greatest amount of both the existing and the future population within these areas. Nonetheless, this also necessitates significant orientation of spatial development strategies on the quality of urban structures and the related quality of life.

2. New approaches to spatial management

When attempting to outline the new approaches to the spatial management, it is important to define and more closely characterize the most crucial challenges in relation to the context of urban development. These include:

Increased complexity of urban ecosystems

The traditional approaches to the management urban areas were built on clearly defined rules of the system's behaviour and proposals of accurate sequential steps and measures necessary to implement in order to achieve specifically chosen objectives. The management was using a wide range of tools which could be using contemporary vocabulary considered as hard tools. It includes planning on the basis of exact and detailed analyses, strict statistical and mathematical calculations and particular tactical steps and procedures coming out from traditional models which objective is unmistakably specified. Nonetheless, the reality of the evolution of the urban ecosystems and many other failures provide evidence that the current level of knowledge and understanding of the behaviour of such systems is imperfect and limited [7]. Consequently, it necessitates leaning towards management based on intuition as opposed to pure rationality of the hard tool approach. The core issue of the traditional systems is the fact that all the models they were based on are simplified. The other problem is the incorrect understanding of how these models work, they do not simulate what will happen, but they rather provide margins of potential scenarios. Lack of understanding of such models leads to their demonization and subsequent culpitrization.

However, while planning the spatial development it is not possible to ignore some groups of factors. It is unimaginable to ignore the quality of life of seniors at the expense of economic balance of the social system or to omit the ability of space to create preconditions for creating community groups in context of profit for renting the plot to a developer with primary objective to make a profit.

Sustainability

Devastation and degradation of both physical and societal structures is a common phenomenon of today. It is the price for extensive use of these structures without accepting their true limits and boundaries. On the other hand we are confronted with the dominance of economic perspective at the expense of social and ecological aspects of the development leading to occurrence of deformations and crises within social urban ecosystems on all levels. The key objectives and parameters of the development are the economic constants non-respecting the social and ecological impacts of these parameters. Similarly the problem of sustainability is connected to the issue of social dilemmas such as the rights of an individual and the rights of the society as a whole. In reality we are confronted with neglecting the basic principle of the sustainability, the principle that the right of an individual ends where the rights of the other individuals are affected. This simple rule is the basic braking mechanism with

unlimited regulatory ability, however in the practice of traditional approach to the management it is frequently omitted.

Government vs governance

The globalization, the existence of increasingly more sophisticated information and telecommunication systems, growing spatial, cultural and value-related integration have all an influence on the management of urban ecosystems and specific goods which are creating these systems. The increase in complexity of the systems is putting pressure on the approach to the top-down management. On the other hand, the view from the top causes considerable simplification of understanding of the systems with real impacts on a specific area. Without respecting the local specifics leading up to substantial unification of management approaches, which from the strategic point of view is not necessary a crucial issue, but from the point of view of the implementation the insufficient understanding of the local conditions and specifics and it leads to oftentimes opposing impacts of the measures in a specific area. Last but not least, such an approach represents increased rate of vulnerability to unsustainable overuse of goods and resources of given territory [8].

Quality vs economic parameters

Preference of the economic parameters before the qualitative parameters oftentimes leads to imbalanced redistribution of the benefits stemming from various spatial activities. This gradually opens the social scissors among individual communities. The issue with preferring the quality over economic profit is the inability of the current authorities to clearly define and at least partially quantify the qualitative parameters of spatial development. On the basis of this the groups focusing on financial gain are having an advantage before the groups chasing the quality which economic benefit is frequently very difficult to quantify based on the contemporary set of parameters and indicators.

3. Space as a common pool resource

Space as the basic framework for implementation of the processes related either directly or indirectly with the society localized in this space is possible to be characterized as the key good fulfilling the specifics of common pool resource for the society. Unrelated to the ownership rights to this space, although having impact on the management of this space, the externalities from this space are possible to be understood as common pool goods.

Increasing shortage of space and problems in their accessibility (physical, functional, etc.) lead to growing tension and conflicts among the users of the urban spaces and represent the initial phase of space deprivations processes. There is a parallel with “tragedy of commons” as defined by Hardin [2] and was reinterpreted by many other academics and researchers. Urban space can be clearly interpreted as the commons or common pool resources for their community of users and other relevant actors.

Three basic assets of the common pool resources are defined and these together are creating the goods:

- resources;
- users;
- rules [9].

In case these three elements are reflected onto the space perceived as commons, the following basic categories of capitals and assets are identified, Figure 1.

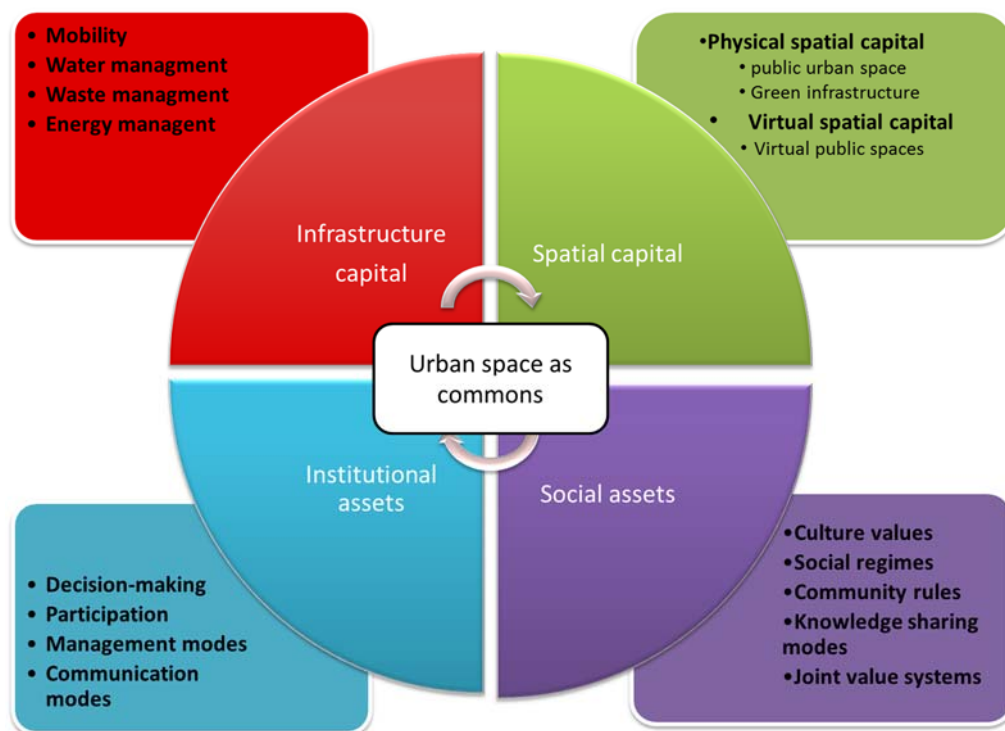


Figure 1. Urban space as common

4. Main principles for a new concept of urban public space management

In order for the new concept of urban public spaces management to face the challenges as they were defined above, it should include the following four basic principles:

Collective regimes of management

Collective regimes of management represent an evolutionary step in the development of individual regimes. These are the regimes based on the common/community-based decision making about the use and an approach to the management of ecosystems and goods which carry the characteristics of common pool resources. Such management regime within which an individual (owner or user) is directly involved in the decision making about the regime of its use, maintenance and care about the resource or goods. This regime is clearly appropriate for common pool resources. The basic monitored quality is sustainability meaning the maximal sustainable yield.

Algorithm of collective decision making

If we want to apply the collective regimes of management of goods in practice, it is necessary to understand the logics of individual decision making as well as collective decision making. Identification and understanding of the algorithm of the decision making in n-member community with presence of uncertainty and complexity is the basic precondition of success of common pool resource management. Is an individual able to put away individual interest to the background on behalf of the interest of the group? Is it a utopia to withhold for individual his immediate benefit in name of the future generations? Behavioral experiments have the power to answer these questions which enable researchers to extract the basic decision making mechanism of an individual in a group within a variety of conditions. Therefore, while creating strategies using the tool of collective decision making and this way increasing the level of public participation, it is important to respect this algorithm of behavior.

In the space of urban structures an example of the collective use of a common pool resource dilemma is sharing the public spaces and defining their functions and regime of management. The reality of today is the loss of function of the public spaces leading to their gradual degradation. In practice, it further leads to gradual pressure on changing the ownership which in the end often ends up in public space losing its function and its transformation into private property and losing the benefits of the community in the area.

Based on numerous experiments and coming out of works of Elinor Ostrom [3-5] it is possible to define the basic principles that should be followed when designing collective decision making regimes. These include participative principle of the decision making, effective model of communication, heuristic processes and users' own sanction and regulatory rules.

New economic paradigm

Profit in its financial representation (profit minus expenses) is at the moment the basic criteria for deciding about the implementation or refusal of the majority of measures and projects. This leads to deformations with far-reaching consequences for other ecosystems which do not dispose of any effective instruments to intervene. The followed quality is the economic benefit for the capital owner without direct liability for the externalities taking place during implementation of the activity. The inability and unwillingness of the current societal system to accept the principle of internalization of externalities leading to collecting of the financial benefits to a narrow group of individuals on the one hand and on the other hand to transfer of the expenses for maintenance of the externalities to the other part of the population. Such an approach is unsustainable and requires totally new value system following not quantitative but qualitative indicators. Quality of life, sustainability, education, health or quality of public spaces are qualities which should be monitored and looked after by the development strategies. Nevertheless, this requires new economic models and quantificators. Humanization of economy and respecting human and his requirements is needed as the basic monitored quality. The challenge remains looking for the new urban economy respecting the mutual interconnections of economic, social and ecological sphere of the society and respecting their mutual interactions. The basis is the application of the principle of internalization of externalities not only in context of ecological damages, but also in social sciences as a whole.

New approaches to the management

One of the ways how to deliver innovations in the approach to the spatial management is the application of innovations proved from company practice into the field of spatial management. Obviously, it is not possible to mechanically adapt individual processes and tools, but when the basic principal differences are watched, it is possible to apply the concepts of the management focused primarily at companies in spatial level even if they can differentiate according to the mission and the tasks of the subject of spatial management within the legal system.

The basic common denominator of all the approached is the element of humanization the approach to the management and concepts which can be characterized as 'soft'. Therefore, it is appropriate to lean towards soft planning approach which can be characterized as a shift from traditional goal-oriented approach which objective was perceived as static target value. This target value, to which all the processes were adjusted to without respecting the externalities these processes are often causing in time and considering the fluctuant external environment which is not possible to predict, this value needs to shift to a new approach orienting more towards management of the processes leading to the objective [7]. Fuzzy logics not in the context of mechatronic systems but as a planning approach is the challenge for the new approaches to the spatial management.

5. Conclusion

Based on this, all the mentioned approaches require multidisciplinary approach to the management because management of both space and company long time ago already overstepped the frame of one discipline and looking at it from one discipline is insufficient. The current situation requires complex and integrative approach. Therefore, it is necessary not only for practice in the spatial management to develop multidisciplinary and integrative theoretical concepts. The spatial planning and its three basic principles (strategic, urban and landscape) records ability of complex and integrative approach incorporating the broadest range of spatial factors into its planning model.

Acknowledgment(s)

This contribution is the result of the project implementation: SPECTRA+ No. 26240120002 "Centre of Excellence for the Development of Settlement Infrastructure of Knowledge Economy" supported by the Research & Development Operational Programme funded by the ERDF and national grant scheme Vega 2/0038/14 and Vega 2/0013/17.

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