THE NOTION OF ORDER AND THE SPATIAL LOGIC OF A NEW POLIS: THREE APPROACHES TO THE PROBLEM OF RATIONALITY IN THE CONTEMPORARY PHILOSOPHY OF URBANISM

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Abstract

Inspired by the questions about the sense of the city and the condition of contemporary urbanism, the author discusses the notion of order in the context of strategic and structural factors affecting spatial logic of a “New Polis”. Focusing on structural forces and decision-making patterns underlying the configuration of urban projects, he identifies three ways of argumentation where the possible answers could be found. These lines of reasoning can also be regarded as philosophical approaches to the problem of rationality in contemporary theories of urbanism. Using urban strategy-structure relations as the typological criterion, he distinguishes between three types of rationality – or three types of order: 1) morphological, 2) strategic and 3) synergic. In the first instance, the logic of urbanistic decisions is interpreted in the morphological context of urban structure and its dynamics. In the second case, spatial logic of urban form reflects neoliberal strategies focused on large-scale urban developments. In the third approach, called here as synergic configuration, it is assumed that strategies which pay more attention to the construction of physical and functional links between urban development projects will induce synergy expected in the overall strategy of a New Polis. Such a configuration of networked projects – and respective synergy of urbanistic construction – reflects the idea of strategic planning with a strong urban project gaming component. Focusing on structural implications of this type of urban synergy, the author proposes also the SAS (strategies – actors – structures) model. He illustrates this idea with the examples taken from the city of Krakow.
Introduction

Goal, objectives, the problem

The phrase: “back to the sense of the city” can be understood also as an invitation to revisit the concept of rationality in urbanism – the issue which identifies the philosophy of urbanism predominant for a given urban culture. This question, in turn, can be viewed from two perspectives: the idea of spatial order and the outlook of these urban theories which constitute the rationale of urban planning praxis. Basic assumption underlying the main message of this paper is that, in order to articulate features specific for the spatial logic of a “New Polis”, we have to go into the deeper layers of this complex structuring system and we should analyze both the interrelations between the types of rationality involved in the interpretation of urban form and the philosophy of urbanism affecting urban policies predominant in the planning culture of a given region.

The goal put forward by the author of this paper is to discuss the notion of order in the context of the above assumption. It can be argued that this discussion can be useful while making distinctions between neoliberal and post-liberal philosophy of urbanism as well as respective ideas of new polis and normative approaches to urbanity. These objectives, in turn, refer to the problem formulated as the set of questions regarding interrelations between the notion of order and the rationality of decisions affecting urban form as viewed from theoretical perspectives situated in the area common for three fields of urbanism: planning, design and architecture. In other words, the logic of urban form is discussed here as the art of integration: the art of designing urbanistic construction and the networks of public spaces integrating the nodes of urbanity. To be more specific, we chose – as their common denominator – the strategic and structural aspects of urban networks red out from geometric configuration of urban projects. This geometry, in turn, is considered vis a vis three ideas: the notion of spatial order, the concept of urban capital and urban synergy.

Hypothesis and approaches

The hypothesis underlying the arguments presented here is that – from a pragmatic point of view – the rationality of urban form can be traced and interpreted through the process of deciphering networks designated by various types of connections between urban projects. In other words: the notion of spatial order – or the logic of urban form – can also be viewed as an urbanistic construction: the network of urban projects linked and configured in accordance to

1 Although, in terms of the level of abstraction, and the types of values involved in our analytic model, these layers should rather be regarded as ‘higher layers of spatial order’.  
2 The notion of urbanity is one of the basic concept adopted – as a key word – by the authors of the book containing the comparative analysis of the best planning practice in contemporary EU cities: Stadtmachen, Eu. Urbanity and the Planning Culture in Europe (ed. Jessen J, Meyer U. M., Schneider J.), Karl Krämer Verlag, Stuttgart, 2008.  
3 To some degree, the concept of urbanistic construction can be compared with such ideas as “civic spines” or ‘spinal chords’ (see: Busquets, J., Urban compositions: City Design in the 21st Century, [in:] Graafland Arie, Leslie Jaye Kavanaugh (eds.), Crossover. Architecture, Urbanism, Technology, 010 Publishers, Rotterdam, 2006. p. 494-504.)
urban strategies predominant for a given urban culture. These configurations are the having various morphological types and differ in terms of potential for inducing urban synergy. Morphological approach (morphological order) is considered as the basis for further analysis: structural interpretations of urban policies and strategic analysis of urban connections characteristic for the approach known as “an actor-relational approach to urban planning”⁴. Consequently, using strategy-structure relations as the typological criterion of urbanistic rationality, we can distinguish between three types of rationality: morphological, strategic and synergic.

Contemporary philosophies of urbanism and the layers of urban order

In regional science and the contemporary theory of urbanism, the city is conceptualized as a nodal structure in the network of human settlements and as a complex system structured according to various “layers of order”. General principles of this order are usually discussed on six such layers: natural, cultural, socio-economic, technological, political and legal. Here, the concept of urban order is identified with the logic of urban form discussed on five thematic axis. These are:

- emergent properties of urban fabric (reference to urban morphology);
- CCC axis: contacts, connectivity, configuration (patterns of contacts, spatial connectivity and project configuration specific for a given stage of urbanity and predominant idea of urbanism);
- ‘plan – project relations’ reflecting systemic features of the process called by a neo-Marxist and existentialist philosopher, and urban sociologist, Henri Lefebvre as “the social production of space”⁵;
- land use controls and other tools of spatial policy (reference to the dilemma: strong public land use controls vs. neoliberal project-led planning);
- socio-economic and cultural modes of spatial integration (reference to the nodes of urbanity).

Morphological order

Rationality of decisions affecting urban change has been interpreted in the context of morphological dimensions of urban space. The type of rationality named here as morphological rationality or morphological order refers to a broad spectrum of approaches the analysis of urban form in which the logic of urbanistic decisions is examined and interpreted in the context of both: 1) morphological features of urban fabric and 2) the dynamics of urban structure. We can regard these theories as a basis for further studies where urban form is analyzed also in the context of decision making systems providing ideological, political, legal / regulatory and managerial frameworks for strategic, technical and operational planning decisions affecting

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urban change. In this case, the logic of urban form is dominated by technological and environmental factors and this type of rationality can be exemplified by the strategies known as:

- ‘classicising’ model proposals of the New Urbanism\(^6\) supplemented by Christopher Alexander’s theory of generative structures / generative codes\(^7\);
- Aldo Rossi’s theory\(^8\) of the ‘architecture of the city’ and theoretical trends which may be grasped under the common name: *urbanistic morphology*;
- contemporary versions of Christaller’s models of Central Places (e.g. models of nod places / nodes of urbanity);
- network models (geographical, transport, anthropological ones). To this group we can include also 1) models that tie in with the concept of the so called *relational space*, 2) models of the *Space Syntax* type\(^9\), 3) network anthropological models (Hannerz, 2006); and 4) transport models (e.g.: the ORION type model devised by Tadeusz Zipser\(^10\);
- models of *urban structural areas* and *urban structural units* (USU).

The concept of *structural areas models* and *urban structural units* (USU), applied in contemporary planning practice in Poland, can be regarded the modification of classical concept of urbanistic units used in modern urban planning. These models are a kind of a combination of:

1) morphological approaches,
2) approaches tying in with the models of social ecology that were introduced into the urban sociology through the representatives of the Chicago School in the 1920s, and
3) concepts of *structural urbanistic units* (e.g. *neighborhood units*).

As an example of such a structural interpretation of urban space, led in order to differentiate the decisions expressing principles of spatial policy, we can indicate the method of urban subdivision into *structural areas* and *structural units* implemented by the author in the ‘Preparatory land-use plan of the City of Krakow’\(^11\) accepted by the City Council in 2014 (Fig. 1).

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\(^11\) In Poland this type of planning document is called as ‘the Study of preconditions and directions of spatial development’.
Figure 1. Morphological map of the Inner City of Krakow: typology of urban fabric and delimitation of urban structural units


To identify the configuration of the nodes of urbanity in the inner city of Krakow, USU model should be supplemented with morphological analysis of the network of public spaces defined as the configuration of urban squares and street connections (Figure 2).

Figure 2. Inner City of Krakow: morphological map with the network of public spaces defined as the configuration of urban squares and street connections


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The concept of morphological rationality can also be analyzed according to technological and environmental factors. This type of rationality is exemplified by the strategies known as Smart City or Resilient City. Strategic projects and typologies of urban structural forms\textsuperscript{12} applied in urban design, spatial and strategic planning ought to be complemented with a commentary on the relationships between new territories of urbanity. They should also correspond with proposals of morphological systematic of urban tissue in the light of such theoretical notions as “the architecture of the city” or “space syntax”. For instance, following Aldo Rossi\textsuperscript{13}, Bill Hillier\textsuperscript{14} or Peter Calthrope we can ask about the possibilities of complementing their research on the morphological types of urban tissue and geometries of networks structuring urban space\textsuperscript{15} with motifs concerning: 1) architectural strategies matching urban operations carried out in relation to the implementation of a strategy for the development of a city; 2) anthropological questions related to the social results of implementing these operations.

\textbf{“Urbanism_PLUS”: strategic rationality}

\textit{The notion of order in neoliberal planning}

This concept of urbanistic rationality (strategic rationality or “urbanism_PLUS”, where PLUS is an acronym for: project-led urban strategies) refers to the formula of urban development strategies predominant in the time of neoliberalism. This type of urban rationality is exemplified by neoliberal strategies focused on large-scale urban development projects (LSUDP). As a reaction to the practical consequences of urbanistic doctrines of the Modern Movement, neoliberal urban planning devised an approach called as project-led planning. These project-oriented strategies became the major mode of promoting urban development through the policy tools which replaced rational model of planning – principal mode of development control in the time of modernism\textsuperscript{16}.

\‘Urban projects\’ and \‘urbanistic construction\’

Discussing conceptual aspects of the logic of urban form in neoliberal planning we should pay more attention strategic urban projects analyzed in their structural context. We call this context as the “urbanistic construction”. Here, this term is defined as, both, technological and natural spatial system integrating physical elements of space significant for urban life and thus – for land use management of the city. Urbanistic construction can also be interpreted as the connections linking key urban projects in order to achieve synergic effects. We can distinguish two following types of elements making up for the urbanistic construction:

- “nodes of urbanity”;

\textsuperscript{12} Cf. classifications according to the kinds of exploitation, the types of structural forms or divisions of the territory of a city into auxiliary types: estates, districts, neighborhoods, precincts etc., applied in spatial planning, distinguished on account of the necessity to administer and manage defined zones of urban life as well as to collect data / information responding to these zones (e.g. census districts and other statistical units); cf.: Tab.1.

\textsuperscript{13} Cf. A. Rossi, Architecture of the City, MIT Press.

\textsuperscript{14} Hillier, B., op. cit.

\textsuperscript{15} For instance, according to B. Hillier, configuration of a spatial network is the basic driving force which shapes models of mobility and, as a consequence, the generator of changes in the geometry of a street network.

“structural links” – significant connections between these nodes: functional and spatial links between strategic urban projects examined in the scale of the city (linear layouts of built up urban land linking urban developments).

Term: the “node of urbanity” can be defined as the place or a cluster of places which, because of their accessibility and other values, is having key significance for urban life. The meaning of this term covers much broader area than such basic urbanistic concepts as: city centers, district centers and the like. The identification and the typology of these urban nodes poses several question of methodological nature. For example, the nodes of urbanistic construction as well as nodal points in urban network, understood in more sociological term – we should be looking for an analogy with, or references to, such theoretical schools / approaches as: urban morphology, more contemporary versions of the central place theory adopting the Christaller’s regional model to an urban scale, certain transportation models explaining interrelations between mobility patterns and urban form as well as network interpretations of polycentric metropolitan structures based on new sociological\(^{17}\) and anthropological\(^{18}\) concepts.

The role of project-led planning approach in the development of a new model of city planning in the countries undergoing systemic transformation after 1990-ies deserves a separate study. Here, we can only refer to selected aspect of this planning transformation focusing on urban project significant for building polycentrism of the inner city of Krakow and relations between this urban policy and spatial distribution of the nodes of urbanity. Configurations of these nodes and urban projects, illustrated on Figures 3 and 4, present only fragment of this collection of maps elaborated within the study on the nodes of urbanity in the City of Krakow designated as potential metropolitan projects. These analysis are focused on the nodes – and potential metropolitan projects – significant also for the identification of networks of which could be regarded as a future urbanistic construction of the inner city of Krakow (Fig. 4).

**Figure 3. The Nodes of Urbanity in the City of Krakow: map of the urbanity nodes significant for polycentrism of the inner city of Krakow**

![Map of nodes of urbanity in Krakow](image)

Source: Maniecki M.; “The configuration of strategic urban projects and the inner city of Krakow” (forthcoming)

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Figure 4. Urbanity nodes the inner city of Krakow and potential metropolitan projects


Source: Maniecki, M.: “Configuration of strategic urban projects in the inner city of Krakow”.

Synergic configuration

Spatial logic of urban form and urban synergy

The approach called here as ‘synergic configuration’ – or ‘new structuralism’ – is based on the assumption that the logic of urban land use plan – integrated with socio-economic development strategy – should follow the principle of project configuration coherent with natural structuring mechanisms underlying the logic of urbanistic construction and thus inducing urban synergy in cases where strategic urban project are logically linked with this construction (the logic of “networked project synergy” – NPS). This idea combines the concept of network city with the notion of urban synergy induced by structural configuration of urban projects. It means that the performance of the urban system (measured according to a particular urban strategy) could be significantly improved if we could configure better development project treating them as the elements of urban network (Net City). This – in turn – implies strengthening their relations with infrastructural elements crystalizing the structure urban spaces / fabric according to the model envisaged in the long-term strategy.

Urban strategies and the synergy of the plan

Formulating the premises of a synergic model of city planning in the context of criterion of integrity of urban spatial structures and ‘pragmatic’ strategies and policies of its development one should refer to the theory of steering the changes in spatial development. In simplification,
one may presume that changes in urban space, linked to urban strategies, are the effect of superimposition of the following categories of changes and processes. These are:

- processes of self-regulation / self-organization (here also: market mechanisms);
- regulations of the public sector encompassing actions taken within the formal and legal framework ("regulatory") of instruments of spatial policy and influences of this sector by means of other instruments of this policy (economic instruments, infrastructural developments, territorial marketing, information policy etc.);
- investment strategies of individual private investors and influences between individual and group actors in the game of urban space which exceed beyond the above;
- innovations responding to the development of science and technology (cf. Smart City idea);
- changes in the macro- and micro-scale which are difficult to foresee and whose character exceeds beyond the scope of the notions: regulation and self-regulation as well as other, aforementioned influences (e.g. cataclysms, disasters, strategic conflicts).

Regarding potentials for inducing synergic effect of urban development as the assessment criterion of the plan, we can discuss the attributes of this plan which are appropriate to stimulate synergic functional links between the elements of land use arrangement, designed in a given planning document, and respective changes in socio-economic and cultural space.

Two situations can be identified as circumstances generating such effects. First type of preconditions is the above stated postulate to provide clear structural relations between strategic projects and “urbanistic construction”. Second significant type of preconditions for achieving synergic effects of the plan depends on the type of urban development strategies including the implementation strategy of key projects. Lessons learned from the cases of good practice in the area of operational urbanism indicate that mutually beneficial effects of interactions between key urban projects can be observed in case of implementation strategies where the respective rules of implementation are clearly defined with regard to urban construction of the planned land use layout. Significant role is also played here by the consistent implementation of the model defined in the long term vision for city development.

**Synergic configuration and integrated model of urban planning**

Techniques used in spatial planning and urban design differ substantially from the techniques used in socio-economic planning – both strategic and operational. This issue will gain importance with the progress of work on the introduction of a model of integrated planning. In this new planning formula, both written policy statements and respective graphic / cartographic notations: maps, diagrams, conceptual sketches and other forms of visualizations characteristic for spatial planning must be more coordinated with the techniques of notations used in strategic planning. In this case, strategic urban units defined in a preparatory land use plan will become a frame of reference for information and settlements within the policy of territorial development recorded in communal strategic documents. This task is related to three kinds of planning activities. They could be described with the following keywords: aggregating, tuning, configuring. In this case, ‘aggregating’ means grouping urban units according to the main structural areas in the city, such as its centre, suburban zone or middle zone (dominated by
estates built in the modernist period) with separated junction areas in the city centre and other ‘urbanity nodes’ forming the polycentricity of an urban structure. ‘Tuning’ refers here to a phase of conceptual activities where urban units receive actions responding to defined types of urban strategies. It consists of mutual tuning of the distinguishing features of a given unit with suitable conceptual assumptions for a general strategy of the development of a city that can be expressed in spatial categories. In this sense, we can talk about the ‘strategic tuning’ of a concept relating to the spatial management of the city. At this development stage in the conceptualization of an urban strategy, there should be another adjustment of general ideas and solutions – as well as strategic urban projects – proposed for the whole city to the local preconditions and local guidelines defined in a preliminarily land use plan. We should also check how – after such a tuning – these project can be “configured” vis a vis a logic of urban development process. ‘Configuring’ refers also to the process of grouping projects into larger packages so as to enhance the logic of connections between specific projects. This – in turn – may increase the probability of gaining synergic effects.

The inner city synergic network – a case from the City of Krakow

It is the story of KCK Project\(^\text{19}\) that can be used as an exemplary case study illustrating the impact of neoliberal model of urbanism on the development of the area designated as strategic in major planning documents of the City of Krakow for over 50 years. Obviously, the extend of this analysis goes far beyond the scope of this paper. Instead, we confine ourselves only to the comment on the map illustrating the main planning and design problem regarding the area of the Main Station Quarter (MSQ) (Figure 5). The map shows the pattern of strategic urban projects and new urbanistic construction: major mobility hub and other nodes of urbanity as the elements which should crystalize the most strategic cluster of urbanity nodes in the new structure of the Inner City of Krakow. Unfortunately, the map illustrates the lack of structural connections – insufficient links between urban projects envisaged in these potentially strategic areas for decades.

Figure 5. Main Station Quarter (MSQ), Krakow: mobility hub (KTC) and other nodes of urbanity crystalizing the New Urbanistic Construction of the Inner City of Krakow


\(^{19}\) KCK – in English: KTC stands for: Krakow Transportation Center – one of the strategic projects in the City of Krakow having over 50 years of design and planning tradition. It is located in the area initially designed as a New City Center of Krakow, later – after systemic transformation – developed as a combination of the main mobility hub and shopping gallery.
Metropolitan construction and the new logic of Polis

Strategic urbanism and the SAS model

New system of steering the changes in spatial development of cities should – among others – be conducive to the enhancing of decision procedures owing to which we shall reach better cooperation of various stakeholders in the planning process and regulations accepted in the name of protection of highly appreciated values shall be defined also with the awareness of the laws of market self-organization. One of the possible directions of searching for solutions in this respect are the proposals described under the name of strategic urbanism. This term means a model of urbanism whereby three kinds of feedbacks (modes of integration) are developed:

- new forms of cooperation between the public and private sector relying on project-led planning;
- providing better ties between spatial planning, strategic planning and urban design;
- better ties of local and regional layouts through the implementation of formula of territorial planning in the scale of urban functional areas – especially metropolitan ones.

The model called here as SAS (strategies- actors – structures) emphasizes significance of synergic relations between strategies of urban actors and structural elements of urban fabric.

Source: Wojtowicz, S., “Main Station Districts: Analysis of the Urban Construction and Strategic Projects”.

Here the logic of spatial urban form is discussed in the context of values and goals adopted by urban actors as well as the logic of relations between the development project and urban plan.

*Strategic urbanism and ‘Model European Cities’*

The influence of planning model called here as *strategic urbanism* on the praxis of city planning is confirmed by comparative analyses of such ‘Model European Cities’ as Amsterdam, Barcelona or Copenhagen.

In those cities, urban development projects regarding social and economic development are logically tied to the planning decisions pertaining to urbanistic structure and regulations regarding urbanistic composition are logically linked with the actions carried out within the framework of operational urbanism. In case of Barcelona we can talk about famous “urban laboratory” serving as a model for other cities experimenting with project-led planning and “new logic of urbanistic construction”. In the above mentioned report on the result of comparative analysis of planning practice in eight EU cities we can read that: “For two decades Barcelona’s urban policies have served as models for other large European cities. Through long-term planning strategies and ever-novel approaches to projects, the Catalan city has generated many models of urban planning action which have been adapted internationally, such as its early strategy of urban acupuncture, the idea of the ‘urban project’, and the deliberate use of large events to promote lasting urban development”.

*Figure 6. Map of Barcelona: strategic city development areas and urbanistic construction – a model structure exemplifying the spatial logic of the New Polis*

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Examples of best practice in strategic urbanism are supported by the experiences of cities which are famed for their successful key projects of urban revitalization in the continental EU cities (Barcelona, Berlin, Hamburg, Lyon, Nantes, Milan, Turin, Vienna). These accomplishments may be treated as signals pointing towards the rebirth of urbanism conceived as the art of building cities (Städtebau). In the version of strategic urbanism this direction finds its contemporary identifying sign in the form of a slogan: ‘Making Cities’.  

Summary and conclusions

The main message of this paper stems from the author’s conviction that, while analyzing various aspects of spatial order, we may discover mechanism of urban change much deeper than the ones declared in the official ideologies of urbanism. The logic of these mechanism, regarded here as the nature of order in urban space, is expressed through the layout of urban projects. Sooner or later, this layout will develop in the pattern in which synergic connections will be articulated (synergic form).

Morphological and strategic approaches to the question of rationality in urbanism, as well as synergic one, are interrelated. The latter one, however, indicates that the new philosophy of urbanism is needed. In the time of a ‘great tectonic movements’ shaking territorial and institutional structures of the European continent, neoliberal concepts of urban order are questioned and there is a growing expectation that new principles of urban planning have to be developed, new tools of development control devised. This – in turn – calls for a new conceptual framework allowing to define and evaluate resources called here as urban capital.

Defining urban capital, and linking this concept with the notion of order, we should also refer to cultural and political breaks as well as political tensions associated with growing economic disparities and social inequalities which, again, place the issue of social justice high on urban agenda. As a result, theoretical concepts of such famous urban thinkers as Henri Lefebvre and David Harvey, are revisited although this does not mean that we can accept neo-Marxist approaches as methodological instruments appropriate for contemporary urban analysis.

Equipped with new cognitive tools offered by ICT, we can reach deeper layers of urban order where general urban processes, such as integration, accumulation, networking, synergy, and adjustment, can be regarded as a matrix for the critical analysis of the rationale of individual urban projects and the logic of their configuration. This – in turn – may contribute to the development of new and more effective policy tools, crucial for resilient and sustainable development of European urbanized structures. In such a context, the main message of this paper guides the reader’s attention towards the structural logic of interrelation between strategic actors of urban game and values of urban capital interpreted vis a vis major axis of development conceptualized as urbanistic construction. This implies that structural and strategic logic of urban form can be conceived as the “games on the development projects”.

The question is, however, how the above issues – discussed on highly abstract level and having quite speculative character – can affect the practical side of urban urbanism? We should also ask about the specificity of the strategic situation of the Polish cities. Another question is: –

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What can we learn from the cases of best practice in EU metropolitan cities (Amsterdam, Barcelona, Copenhagen, Hamburg, Vienna) and how could we contribute to the development of urbanistic art in EU? The author presented here only selected aspects of the interrelations between new urbanity and possibilities for the definition of new urban planning formula according to the model named as SAS. This concept refers to urban strategies requiring new urban policy tools and even the reform of existing land use controls system. These changes should allow for better logical connections between spatial planning, strategic planning and urban design.

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back to the sense of the city