# Yugoslav utopia of sustainable city – The synthesis of living environment and social order

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### Keywords

#### Self-management Socialism; Sustainable utopian concept; Synthesis; Integral organic planning; Marxist humanism

#### **Abstract**

Following the breakup with the Soviet model of Socialism in 1948, the search for an authentic Yugoslav path offered a novel politico-cultural agenda that was promoted, among other, via new humane architecture and urban forms. In the early 1960s, utopian concepts have been developed all around the World under the influence of Brutalism, Structuralism, English avant-garde, as well as the Japanese architecture that delivered a large number of utopian projects within the concept of Metabolism. Instead of static architectural and urbanistic compositions, these projects were based on the kinematic idea of generative, uniquely structured urban forms that are flexible and adaptable to future development of city. Yugoslav architects Vjenceslav Richter, Andrija Mutnjaković and Radovan Delalle accepted the ideas of Western avant-garde, and offered unique sustainable urban models that were based on an integral organic planning in the Socialist society. This article addressed the Yugoslav perception of sustainable structures of future cities taking into account the prerequisites and potentials of shaping the mega-structural architectural volumes that was based on the values of socialist self-management system. Aspiring to transform the selfmanagement concept into a real and palpable political function of living space, Richter focused on the problem of synthesis. His central thesis of 'Sinturbanism' was based on systematic approach to urban planning. On the other hand, Mutnjaković's urbanistic model 'Biourbanism' promoted the ideas of naturality and open and spontaneous growth, which he extracted from biological principles. His ideal was for the society to reach dynamic homeostasis as seen in the intact nature. The idea of continual growth was also present in the model 'Urbarchitecture' of Radovan Delalle. He presented urban structure as an aggregate of relations between all elements of that structure within a specific social-economic milieu. This paper starts from the premise that the ideas of sustainable city in utopian projects reflected an original ideological agenda of Yugoslav Socialism which was based on the values of International and Marxist humanism. The establishment of humane principles and the overcoming of alienation through the synthesis of living environment was the priority because of the need for harmonic relationships between an individual and the society which is focused on the human as an integral biological and social being.

## Introduction

Radical socio-political changes that took place in Yugoslavia between 1949 and 1953 induced the development of a unique model of self-management Socialism. Attempts to articulate the approach of Marxist humanism and to offer a novel platform for responsible critique of Soviet model of Marxism were important segments of politics and culture of self-management Socialism. Yugoslav intellectuals considered Marxism as a renunciation of any form of alienation, exploitation, injustice or repression against the new Socialist human. One of the starting points of Marxist humanism was that the shaping of human environment should correspond with the dignity of human nature and revolutionary and humanistic values of the society. Yugoslav political system represented an avant-garde Marxist concept that tried to establish utopian society, giving the priority to the visions of future over present. This system nourished the development of avant-garde cultural scene, which directed research in architecture and urbanism towards utopian projects of sustainable city. The vision of new

Socialist city called for creation for the sake of future generations that will be on a higher technical, economical and social level of development.

Starting from the early 1950s, Yugoslav politics initiated the implementation of ideas of the main movements of Western architecture, in relation to the aspirations after freedom of thought and expression, and democratization of scientific and cultural practice. According to Ivan Štraus, the end of 1960s and the early 1970s in Yugoslavia was a period of strong influence of Japanese architecture, which underwent phases of Brutalism, Metabolism and Structuralism (Kiyonori Kikutake, Noriaki Kurokawa, Arata Isozaki, Sachio Otani, and others), American New Wave (Ieoh Ming Pei, Kevin Roche, Moche Safdie, and others), and English avant-garde (Archigram group, James Stirling, Denys Lasdun, Norman Foster, and others) (Štraus, 1977). The application of avant-garde attitude, which was an important apparatus of critical thinking in Western societies in the 1950s, had a strong socio-political impact in Yugoslavia. Architects criticized Functionalist urbanism which did not meet the real needs of Socialist society, and promoted creative improvements of the environment which are interrelated with the progress. Within the critique of Functionalist Modernism during the first half of 1960s, theoretical models of integral space in utopian projects of cities that were developed by Vjenceslav Richter, Andrija Mutnjaković, and Radovan Delale, stood out. These utopian models shared the premise that the environment represents a system of intertwined functions, and that living space and humans are integrated in interactive processes, which show fully functional correlativeness in achieving sustainable urban living.

## 2.1. Sinturbanism by Vjenceslav Richter

Starting from the transformation of structures of society, Vjenselav Richter developed in 1964 the concept of organization and shaping of new poly-functional urban environment of Socialist city though the project of synthesis urbanism – Sinturbanism. Richter criticized Le Corbusier's urbanism which was analytical and had a distinctly separated functions of the city, and tried to develop an urbanistic concept that could enable rational use of time via synthesis of functions of urban living. The basis of Sinturbanism city lays in the integration of the following interests: a) economic interests – financial, technical, and productive; b) organizational interests – economy of time, transport and connections, integration of living functions; and c) ideological interests – conscience of collective, the management of complex of functions, positivistic philosophic approach to life and artistic expression.

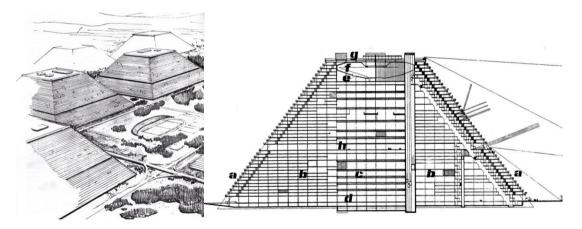


Figure 1 Ziggurat (Richter, 1964)

In the utopian concept of ambiental structure of cities of the near future, Richter contemplated the requirements and potentials of construction of mega-structural architectural volumes that should enable the fulfillment of objectives of Socialist society. Richter's million city was composed of one hundred sinturbanistic units. Each unit – ziggurat ('cikurat') represented a separate complex that autonomously provided an integration of the main functions of living (production, housing, recreation) for 10.000 people. Richter designed the unit of Sinturbanism – ziggurat, as a small town with all the basic functions, which should promote the sense of collectiveness and responsibility. The idea was to convert the vision of self-management into real and palpable political function of living space. All the objects in the city were designed according to the equal structural and functional qualities in order to follow the principles of Socialist society. Ziggurat was designed as a megastructure of pyramidal shape with dimensions of 300 x 300 x 150 meters. It is important to note that visionary projects with pyramidal design and terraces, which required specific constructive solutions, were relatively frequent in the 1960s. In contrast to such projects, Richter proposed a utopian model of sustainable city which was in accord with self-management model of Socialism. The life in ziggurat is not static. The core is elastic with multiple possibilities for remodulation of space that are aimed to support 'pulsations of ever-changing life' (Horvat-Pintarić, 1970). The

hall ('asambleja') for 6.000 people represents the instrument of administration, where all decisions are made by plebiscite/referendum. The production was also placed inside the ziggurat. The explanation was that zonal industry is not efficient in creating a healthy urban atmosphere, and that other measures are needed, such as 'waste filtration'. A working day in sinturbanistic city was named by Richter as 'sintak', referring to the synthesis of thinking and kinetics. Sintak was a form of organization of life that was based on the synchronicity and complexity of actions and which possible only in Socialism. Richter noted that Capitalism was burdened by individualism and analytical thinking, which promoted the development of individual components that may be a good solutions per se but do not deliver a coherent and inter-connected whole (Richter, 1964). Richter contemplated that the concept of sinturbanistic city would result in the synthesis of life and compactness, since the ziggurat system should impact all manifestations of life and spread integrative concept on production, system of thinking, behavior, and organization of time.

## 2.2. The concept of Biourbanism by Andrija Mutnjaković

Andrija Mutnjaković found the theoretical starting point for sustainable Socialist city in biological principles. Mutnjaković referred to visionary urbanistic research of Yona Friedman ('Ville spatiale'), Paul Maymont ('Ville flottante'), Jonasov ('La cite intra'), and Geoffrey Jellicoe ('Motopia') that delivered 'post-Corbusier' upgrades of design of contemporary ambient. For him, the city is a complex organism of human life, where specific functions, such as house, street, park, cannot be viewed separately; there is only one function – the city (Mutnjaković, 1964). Mutnjaković tried to design a city that functions as an 'organism of inter-pervaded spaces' with free and organic composition that is incorporated into the landscape. He was inspired by biological homeostasis and harmony, and compared the society with biological ecosystems (Kritovac,1975) . An ideal was to establish a dynamic balance as in intact nature.

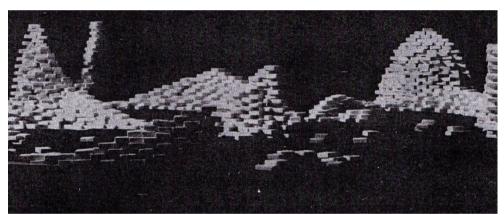


Figure 2 The competition for urbanistic design of residential complex for 30.000 people on the bank of Sava river in New Belgrade (Mutnjaković, 1982)

Promoting the ideas of naturalness and open and spontaneous growth, Mutnjaković defined the urbanistic model of 'Biourbanism' (Mutnjaković, 1982). Mutnjaković applied the concept of Biourbanism in the urbanistic design project 'Biograd for Belgrade' for residential complex for 30.000 people in New Belgrade in 1965. The concept of Biourbanism was manifested in formally concave lines, symmetrical arrangements, and terrace organization along all three axes which resulted in opened panoramic view towards green areas of all residential units. Mutniaković concluded that the quality could be achieved only by a well developed concept. On the other hand, the organization of apartments should be left to the residents, their wishes, hobbies, needs and taste, which should aid the community to function as a living organism. The involvement of residents in the building of their own homes is aimed at enabling human biological instinct to have an impact. Mutnjaković further proposed that microarea center ('mikrorajon') should be in the visual and organizational focus of the residential space and that all apartments should be oriented towards the center. Microarea centers are further organized into macroarea centers ('makrorajon'). The principle of addition and growth builds a community of microarea centers that retain their characteristics. The city has number of macroaraeas that are organized in a circular way and have 'rajon' center in the middle. The main theses of Biourbanism are growth, naturalness, openness, richness in individuality, spontaneity, freedom which is related to the concept of freely developing and spontaneously growing organic shape. Mutnjaković's views encompassed a tendency towards a 'total space' and integral approach in the design of living environment.

## 2.3. Urbarchitecture concept by Radovan Delalle

Radovan Delalle first proposed Urbarchitecture, a utopian concept of organic urban development, in 1964, during his work on experimental urbanistic project of Marindvor in Sarajevo. The concept was further developed in competition projects, studies, and exhibitions. The starting point of Urbarchitecture was the relationship between the human and the physical structure, which reflected in urbanism and encompassed specific socioeconomic relations. Urbarchitecture analysis investigated interactions and dependences between: 1. The elements of physical structure (topography of terrain, urban topography, architectural topography, and urban typography); 2. Humans and physical structure (phenomenological approach, ecological psychology, cognitive maps, mental images, ambiental and symbolic values of urban space); and 3. social relations (production, interpersonal relationships, space use, urban sociology, urban practice, etc) (Delalle, 1988).

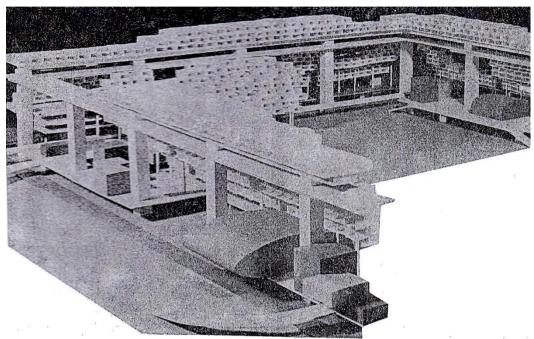


Figure 3 Urbarchitecture project of experimental residential community (Delalle, 1973)

The main goal of Delalle's Urbarchitecture concept was socio-political engagement within the self-management Socialist community in order to stop the lotting of urban space and to give back the human values to the city. Urbarchitecture was aimed at overcoming the alienation, lostness, and an incapability to act in the 'rhythm of society'. Delalle proposed that a microspace, an imaginary minimal space that is needed for each human to achieve harmony with the surroundings, has to be present within the spatial structure. The continual process of growth represented the main characteristic of the new urban structure, which was defined by the entirety of relationships between all elements (Delalle, 1973). In this concept, Delalle created a new urban life in which change and growth of urban space follows the changes in the society. Function, structure and form are not analyzed separately; they are components of an integrative approach. On the Yugoslav competition for the 'Urban design of Mišeluk area in Novi Sad' (1979-1980), Delalle further developed the concept of socio-spatial organization with maximal openness, flexibility, and polyvalence space. His project was designed to enable the development of individual, family, social group, and society needs. The principle of pluralism of territorial needs and practice of different social groups was based on specific form of self-management (Delalle, 1988). Urbarchitecture was conceived to become an integral part of life of society. The flexibility and polyvalence of space are aimed at enabling a permanent orientation towards changes in intrinsic urban structure and new ways of life of new generations.

### 3. Conclusion

The realization of a new quality of life was an integral part of Yugoslav self-management Socialism, avant-garde culture and critical attitude. The politics of Yugoslav Socialist society used a specific cultural concept that embraced progressive ideas of International and Marxist humanism to promote the research in architecture and urbanism in the context of humanistic values and the synthesis of living space. The avant-garde in architecture and urbanism in the second part of XX century was mainly related to the design that promoted technology

development and to utopian projects. Utopian concepts were asserted by the carriers of radical social and cultural thought with the aim to create a better society. The case study of three utopian models that were developed in the same period showed that they had the same starting principle: conceptual consciousness of space was built through realization of socio-urbanistic synthesis in the context of self-regulated development that followed the needs of self-management society. The establishment of humanistic principles in the context of synthesis of living environment was the priority of Socialist system and politics of avant-garde Marxist humanism, which led to the concept of the human as an integrated biological and social being. Instead of static architectural and urbanistic compositions, utopian projects promoted the concept of generative structure of urban forms which showed unique characteristics, specific associations of human relationships, openness to change and growth, appreciation of local nature and climate, and flexibility in planning over time. Modular space facilitated different routes of further development of urban community. The critique of utopian projects, which emerged in the early 1970s, showed that the proposed structures suffered from one-sided formal and technical viewpoints. Nevertheless, utopian projects of sustainable city increased the awareness and interest of society for environmental improvements, which became a predominant theme in Yugoslav Socialist society in the late 1960s.

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