

prof. Mykola Gabrel

dr Josef Khromyak

dr Nataliya Lysyak

Department of Basic Training, Institute of Business and Innovative Technologies
Lviv Polytechnic National University

Social potential in spatial organization and urban development in terms of forming of informational society

INTRODUCTION

People play priority roles in all theories of urban development and in the human dimension is seen as a generalized variable in urban space planning¹. Urban (territorial) population is described by various characteristic features such as age, sex, qualification, etc. Both quantitative (number, density) and qualitative (spirituality, education) characteristics are used for the analysis of the human dimension planning urban space. The authors also propose to introduce the characteristic feature of social relations.

Unfortunately, Ukrainian urban science is not very interested in social relations (social potential of urban development). The notion of social capital is more often used in economics and social sciences and it is attracting increasing attention. The measure of interest in social capital is due to its obvious practicality as stated by foreign researches (Woolcock, 1998; Putman 1995; Baker 2000). The need for increased role of social capital that enables the activation of developments in social and economic systems is stressed in this article².

Changes in priorities of factors of social-economic development are currently being observed, going from *financial* capital (what we have) in the past, through *human* capital (what we know and we can) nowadays to *social* capital (who we know and what connections we have) in informational society. This fact is evident at different levels, from individuals to big social groups and in

¹ М.М. Габрель, *Просторова організація містобудівних систем* : моногр. / М.М. Габрель; [Інститут регіональних досліджень НАН України]. – К. : Видавничий дім А.С.С, 2004. – 400 с; Н.М. Демин, *Управление развитием градостроительных систем* / Н.М. Демин. – К. : Будівельник, 1991. – 184 с.

² М. Woolcock, *Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework*, „Theory and Society” 27 (2), pp. 151–208.– (1998); В. Fine, *Theories of Social Capital: Researchers Behaving Badly*. Pluto Press, 2010.

different territorial systems including cities. It can be assumed that social capital gains importance it will present new conditions for the development of urban planning systems as well.

The increasing popularity of social capital compared to other types of capital in system development is not unconnected with the new challenges posed by a flexible market oriented at quality. Such a market model requires innovativeness, harmonized cooperation and professional behavior of the participants. The higher level of social capital is, the lower the expenses to conduct the activity are and the higher the activity efficiency is.

SOCIAL CAPITAL IN THE FORMATION OF THE INFORMATION SOCIETY

Social capital is considered as a complement to human capital. Even if the most intelligent person had all advanced facilities and the most innovative ideas at his disposal, it will not be sufficient if such a person does not have access (contacts, relations) to other persons and / or social groups. In other words, human capital seem to concentrate on individual elements, social capital on the other hand dwells on connections and relations between people. The ability of societal constituents to cooperate, trust and stick to the patterns and standards influences the structural characteristics and functioning of the entire system.

Social capital can improve management decisions by creating such social features as trust, behaviour standards and connections. Trust increases activity, enhances open innovative actions and risk capability. Such approaches can increase efficiency in the dynamics of developing urban planning systems and can improve societal living standards. Mistrust leads to passiveness, precaution, opportunism, increase in social distance and generally decreases social potential (apathy, lack of desire to participate in activities and make decisions in resolving problems). This issue becomes the more important for big cities where the social and economic situation is viewed as a crisis. Multidimensional approach to urban functioning and coordination of different dimensions can be the way out of this situation.

The article is an analysis of spatial elements of social capital and an outline of the *social potential* for spatial organization and urban development. A study of social potentials is important for a wider use of new trends of urban development potential in urban planning practice as well as for the efficient incorporation of the human dimension into this process as this would involve considering not only the demographic component but also urban labour resources. The urgency of this research is corroborated by the analysis of the urban planning documentation that was recently renewed.

RATIONALE OF THE STUDY

The article aims at researching links between urban social potential and architectural urban planning organization. The article focusses primarily on dealing on the following *tasks*.

1. To study the theoretical background of the issue of social potential for the aims of urban planning.
2. To choose the methods of research.
3. To characterize Lviv social potentials considering its biased and unbiased characteristics.
4. To identify the links between social potential and space of Lviv and spatial localization of this potential.
5. To outline ways of spatial changes based on structuring requirements and efficient use of social potential.

The research material is thus presented based on the formulation of tasks.

The theoretical foundations of the study

The following fundamental categories, i.e., urban social potential, space architectural organization and connection between them require the study of theoretical literature on the aims of urban planning. It is important to comprehend the system of characteristics to be able to evaluate inter-relationships between social potential and architectural organization of urban space as well as urban development characteristics.

The multidimensionality of social potential explains the fact that this notion is complicated to be formalized for research. Analysis of social capital concepts would enable the identification of its component parts i.e., trust, standards, values and forms of relations network. It therefore becomes possible for characteristics and criteria features to be included (level of trust, conformity of standards and values to social efficiency and democratic values; density, limits and intensity of capital network). If it is assumed that social capital encompasses such components as trust, standards, values and forms of network relations, then social potential could consequently serve as an characteristic aggregate of these elements.

Architectural organization is a structurally-parametrical and spatially-temporal accomplishment and harmonization of the components and connections of urban space that ensures development of systems. This includes three types of tasks i.e., location of elements in space; functional zoning (flat tasks); communication (planning of street network – linear tasks).

Efficiency of interaction between social potential and urban planning organization can be evaluated using the following factors:

- economic (influence on business activity of population);
- social (quality of life);
- ecological (hazardous consequences of human activity);

- architectural (aesthetics of urban space, convenience in use).

Quality of life can be evaluated by employing nonbiased characteristic features and considered as a system of the state of human activity such as the state of its natural and cultural environment; financial status, social conditions and healthiness of individuals. However, relations between these factors differ as the financial state for one person can bring gratification while simultaneously being insufficient for another. Healthiness becomes the most important criteria in quality of life for someone who is ill. The state of a natural and cultural environment is of different significance for persons of varied levels of cultural awareness. Thus, human life should be considered from the perspective of individual's viewpoint, and their impersonal evaluation of prevailing situations. Sense of comfort or discomfort depends on the pattern of needs, individual value systems and understanding of the meaning of life.

The following unbiased characteristics of the quality of life are taken into consideration in this article: state of the natural and cultural environment; financial status; social conditions; state of health.

Ecological parameters are partly included into the group of parameters that characterize quality of life. However, it is important to determine hazardous consequences of human activity in terms of interaction between social potential and architectural solutions.

Architectural parameters include such parameters as functional zoning, territory planning and location of separate elements in the urban space as well as parameters of urban development (territorial enlargement, changes in space concentration and its aggregated elements).

Assessment of interactions existing in the studied phenomena is conducted in accordance with the methodology where each variable is defined by its measure of impact on a given situation i.e., improving it or not. It is assumed that deterioration is defined between 0 and -1 while improvement is between 0 and 1.

Such a theoretical understanding of the problem allows for the proper specification of research methods and the direct analysis of outlined relationships in Lviv city.

Research procedures

The following traditional methods were used to assess existing interactions between social capital and city space: *cartographic* for the analysis of different spatially located social groups'; *statistical* for the analysis of socio-demographic situation, state of different social groups' space; *social surveys* for empirical materials clarification.

Expert methodology, i.e. the competent experts' survey was applied during the research study. It should be stressed that there is no efficient methodology for the examination of this problem. The main experts' objective was to evaluate the results of research on urban aspects of the individual components of social potential. The panel of experts consisted of 15 urban architects. The components

of urban planning activities relative to spatial organization and urban development as well as expected results from social potential activation were established based on results of their researches.

The following criteria were taken into account in the Lviv social potential research: age, education, professional employment, political orientation, spiritual values and material situation, i.e. its quantitative and qualitative characteristics. It is, therefore, possible to develop a typology of social potential so long as the main social groups and relevant interrelations between them are developed by these characteristics.

Social potential characteristics of the city of Lviv

Social potential interpretation requires information not only on the level of the studied phenomenon with respect to the outlined categories (age, education, professional employment, political orientation, spiritual values and material situation), but also within the categories (communication networks, trust and social norms). Such features in modern cities determine approaches to space organization and ways of its development.

The statistical data Hus collected and surveys undertaken point to a high level of Lviv city social potential accomplishment, particularly with regard to political orientation, spiritual values and material situation. Lviv citizens are characterized by a high level of compliance to social norms, which forms the basis of its social potential. The pragmatism displayed in the city plays the main role here.

Moral relations in the context of social potential development and use became the basis of trust between people and guarantee of cooperation in the implementation of joint intentions. In this regard, the high level of citizens' religiousness and their identification with a particular religious community as well as the high level of religiousness among the youth should be noted.

Social groups that are formed on the basis of the *financial situation* require the analysis of the interaction between incomes, living conditions and spatial localization in the city. Overall satisfaction with life (family, work, financial capacity, satisfaction with one's life and its components) differs in the different groups studied, which leads to the emergence of wealth oases and poverty enclaves. An interesting combination of poor living conditions and a high level of satisfaction with life (and vice versa) can be observed. Expert estimations point to low percentage of people satisfied with their financial status and living conditions as the most important characteristic feature of quality of life.

Professional employment in the social potential of the Lviv city. In general, it is declared that Lviv citizens are people with high entrepreneurial potential and they show great interest in entrepreneurial activities. In reality, this potential is much lower, which can be explained by the negative experiences and disappointments in the state, that have significant impacts on the foundations of entrepreneurship.

It is known that business activities define social status and that it depends on the social and cultural conditions, psychological nature of the person as well as gender, age, profession and education. Employment patterns are variables of residents' socio-demographic characteristics. It should be emphasized that people with low social status also have these qualities. Research of the residents' entrepreneurship phenomena has become especially important for the tasks of urban development.

Therefore, Lviv city overall potential is quite low and is created by small social groups. Residents' self-identification is also low. There is a tendency to its development in the city space, but it is still unstructured and scattered.

INTERACTION BETWEEN THE SOCIAL POTENTIAL (CAPITAL) AND THE CITY SPACE

The collected empirical data indicate the existence of the existence of interactions between social potential (capital) and city space. The existing relationship between observable phenomena could not be verified by quantitative indicators but could only be identified by its qualitative features. The general effects of social potential on space differentiation (biased and unbiased estimations) as well as on the architectural and landscape organization of separate fragments of city space were established.

The fact that higher level of social potential leads to better spatial organization was confirmed. Accordingly, it can be assumed that this component of spatial potential greatly influences urban policy and on resolving of local problems in the cities.

Space quality depends on the type of social potential and various social categories (age, education, profession, political orientation, spiritual values and material situation). The greatest effect of biased and unbiased evaluation can be observed in such types of potentials where all the constituent elements, i.e., communication network, trust, common values, and behavioral norms are revealed. This being due to the fact components of the social potential are interdependent although each of them performs its own function.

Assessment conducted in selected social groups confirm that the spatial diversity of the city influences not only on the level of social potential but also its type. Space for the realization of social needs was most positively evaluated by students. They are characterized by all dimensions (communication networks, social norms and trust) and can find the possibilities for self-realization both in local residence space (campuses) and in the entire city. Positive reviews refer to both biased and unbiased parts. This can be explained by the traditional image of Lviv as an educational city.

In referring to existing *interactions between social potential and ways (prospects) of the city development*, the importance of not only the level of social potential but also its type that evolved due to existing financial situation as well as age should be emphasized.

Entrepreneurial activities are conducted more actively by people who have the greatest social potential resources (relations, trust and common norms). Entrepreneurship should have great influence on ways and forms of city development. Social potential, to some extent, diversifies the examined interrelation because the differences in city development approaches constantly increase in accordance with different types of social potential. Planning of a city's social spaces network is an effective mechanism for improving the city's social potential. The requirements of space allocation and appropriate architectural organization of group space in the city play pivotal roles.

CONCLUSIONS

The methodology of pre-project research and verification of urban planning decisions, particularly in the context of comprehensive consideration of the human dimension and research of social potential should be changed, especially in relation to the development of information society. It is necessary to move from the interpretation of a person as a means of production to the consideration of its socio-demographic features as well as to the simultaneous verification of necessities of labor resources for the development of city-forming and city-servicing area groups.

Recognition of public opinion and social relations should become obligatory in the development of urban planning documentation and architectural projects. Community and its social groups' opinion should become a precondition of public support for proposed solutions, thus integrating local communities by identifying them with a certain city space.

LITERATURE

Габрель М.М., Просторова організація містобудівних систем : моногр. / М.М. Габрель; [Інститут регіональних досліджень НАН України]. – К. : Видавничий дім А.С.С., 2004.

Демин Н.М., Управление развитием градостроительных систем / Н.М. Демин. – К. : Будівельник, 1991.

Woolcock, M., *Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework*, „Theory and Society” 27 (2), 1998.

Putnam, R.D., *Bowling Alone: America's Declining Social Capital*, „Journal of Democracy” 6 (1).

Fine B., *Theories of Social Capital: Researchers Behaving Badly*. Pluto Press 2010.

Summary

This article investigates the relationship between the social potential of city and the architecture and town-planning organization. As such the problem of public potential for urban planning tasks was analyzed on theoretical basis and research methods were selected. The social characteristics of Lwow were identified in the light of the city objective and subjective properties. An association between the social potential and the spatial potential was identified. A justification of the ways in which spatial changes are based on the requirements of structuralization and the effective use of public potential.

Potencjał społeczny w organizacji przestrzennej i rozwoju miast w kontekście tworzenia społeczeństwa informacyjnego

Streszczenie

W artykule przedstawiono relacje występujące między potencjałem społecznym miasta a jego architekturą i organizacją urbanistyczną. Problem znaczenia potencjału społecznego w zagadnieniach planowania urbanistycznego przedstawiono w ujęciu teoretycznym i dokonano wyboru metod badania. Scharakteryzowano społeczny potencjał Lwowa z uwzględnieniem jego obiektywnych i subiektywnych właściwości. Wskazano na powiązania występujące między potencjałem społecznym a obszarem oraz przedstawiono przestrzenną lokalizację tego potencjału. Uzasadniono kierunki przestrzennych zmian na podstawie wymagań strukturalizacji i skutecznego wykorzystania społecznego potencjału.