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Professional Culture of the Specialist of the Future

**CITIES OF THE FUTURE: SOCIO-CULTURAL ASPECT OF
URBAN INNOVATIONS**

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Abstract

This paper investigates the issue of urban innovations and its socio-cultural aspect. With the increasing urbanization and modernization, cities become centres of innovations – the key indicator of economic growth. Cities are centres of social and cultural life as well and culture is the key to what makes cities attractive, creative and sustainable. The article states that culture is at the heart of urban development, evidenced through cultural landmarks, heritage and traditions. The paper presents an overview of the innovation theory and gives examples of modern innovative urban development in such areas as: infrastructure, culture and social life. By infrastructure, we mean transport, smart building construction, cultural spaces innovation. Speaking about culture in the future cities, our thoughts are based on glocalization trend, intercultural city communications and technological introductions into city life. The article gives an answer to the question of future city development, its priorities and areas of smartization for the future. The main topic of the article is city innovations in cultural and social spheres: cultural heritage, museums development, new challenges for universities and inhabitants behavior. The topic is very up to date as there is no doubt that the cities of the future will be influenced by innovative development, become centers of the fourth industrial revolution. Cities will be centers of economic growth, the basis for the latest knowledge and technologies, a testing ground for the most daring innovative concepts.

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Keywords: City' innovation' culture' infrastructure' future, society' glocalization' modernization, urban development.



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1. Introduction

Modern cities are the centers of economic development, the concentration of innovations in all spheres of life. They also turn out to be centers of social and cultural life. Today we can observe a paradigm shift in the city development: “office-city”, “machine-city” and “industrial city” are replaced by the “cultural city”, “city for life”, “a city that promotes a healthy life-style” model. The combination of approaches “the city as an innovative project” and the city - “the center of cultures” acquires a new look.

Historically cities were built around factories, now the industry has changed and we need less work force. The social system has also adjusted to this mode, so the new philosophy of urbanism is focused on the theory of a creative cultural city. The city of the future will be characterized as a place that fosters the implementation of innovative initiatives involving as many people as possible, a place where they approach the solution of socio-economic problems in a new way, the place of collective creativity of inhabitants - representatives of various cultural and social strata (Duxbury, Cullen, & Pascual, 2012).

Modern globalizing world creates many new opportunities for urban development. Megapolises are considered to be the most innovative hubs, where the technological and scientific progress, the economic, social and cultural development is concentrated.

By innovation we mean the activities of people and organizations to change themselves and the environment through the introduction of new processes, products, behavior. Urban innovations describe the development and application of ideas and technologies, which improve the goods and services or increase the efficiency of city life (Bylieva, Lobatyuk, & Rubtsova, 2017).

2. Problem Statement

Cities now are experiencing the strongest pressure of growing cultural diversity and social heterogeneity of the population. The population of cities consists of representatives of different nationalities, languages, religions and social levels and it will be more and more evident in the future cities.

Cities fulfill the socio-cultural function, proving to be places of custody of the cultural heritage of the peoples living in them. In the cities traditions, attitudes, norms of behavior that regulate the behavior of social subjects are formed. Through this function, the creative activity of individuals is realized, as well as their identification (Clammer, 2014).

Global changes in the development of cities are a distinctive feature of the modern world and definitely of the future. Today, the city faces completely new problems that require new, unusual solutions. The time has come to take a fresh look at the city, rethink the priorities of its development, prepare to solve the problems of tomorrow, and not yesterday's world (Brynjolfsson & Saunders, 2010).

The reorientation of society into information and knowledge as strategic development resources, virtualization and globalization of public life, approaches to radical changes in certain spheres of society and in the public organization in general. The society of the future is: “information society” and “knowledge society”, that will be characterized by introduction of information technologies in the production structure, improvement of global communication systems, growth of high-tech goods and innovative products (Sphunova, Rabosh, Soldatov, & Deniskov, 2017).

One of the most important conditions for sustainable urban development is the introduction of innovations. Innovative cities seek to link innovation issues in the economy with issues of sustainability

and governance at different levels of the city's power system, combined with comprehensive basic programs for urban development management (Atkinson, 2012).

Smartization of future cities will be seen in following areas

2.1. Infrastructure

Speaking about the urban infrastructure, it is necessary to re-equip former industrial premises in significant public cultural spaces. Modern renovation projects for industrial zones are already successful. For example, the world's largest collection of contemporary art is based in Tate Modern Gallery in London. The building was constructed after the Second World War for the power station "Bankside Power Station" and became a museum in the year 2000. More and more of new examples can be found every year in modern cities.

Speaking about transport infrastructure, it is necessary to understand that the innovative potential of in this field is paramount. The development of intelligent transport systems (automatic traffic control, parking, public transit systems) - the most important task of city authorities. Transport potential concerns both public transport, and private. In modern cities there are already intelligent stops of public transport with an indication of the arrival time of the transport, bicycle paths and a network of city bike rental stations, Wi-Fi is being introduced in the metro and ground transport. The services of an hourly rental car are already available, where a car can be opened without the help of a key, by just bringing one's smartphone with a specially installed program to the car (Aladyshkin, Kulik, Michurin, & Anosova, 2017).

The housing and communal services sector also has a huge potential for innovative development. "Smart buildings" and resource-saving systems will allow more rational consumption of city resources. "Intelligent electrical networks", "smart" use of water supply sensors and garbage collection systems can improve economic performance (Helpman, 2004).

2.2. Culture

To outline the cultural potential of future cities, we should remember that monuments of history and culture of world or state importance are concentrated in cities. It is necessary to implement projects in the field of digitalization of tourist and cultural spaces of the city, including a navigation system, mobile Internet for tourists and personalized online services, updating Internet sites of museums with the possibility of virtual tours on them. Museums and cultural centers of the world will often use the technology of virtual reality (Hosagrahar & Duxbury, 2016).

It is important to specify modern and future trends of the cultural city life:

- *Glocalization* (simultaneous processes of globalization and localization of culture). This trend can be defined as the desire to ensure that each culture realizes its "singularity" in a multicultural world. It is the process of interaction of global and local influence simultaneously on all systems, and on culture in particular. On the one hand, we see all the manifestations of a mass global culture, globalization has led to the fact that culture has acquired an international character and is based on dynamic processes of cultural communication. On the other hand, local culture takes on special significance. It is important to be aware of the diversity of cultures in cities and ethnic

minorities. It is necessary to develop tolerance, hold city events aimed at maintaining the various cultures of the city.

Tracking the shift in the understanding of political, economic and social systems from "global" to "local", urban research becomes an alternative geographic scale of analysis, particularly, when the national state loses its importance in increasingly integrating global space. Global social and economic changes blur the traditional identification of people with while weakening the role of the nation-state as a source of identification. In the self-identification of people, especially Europeans, the shift from "national" to "urban": belonging to the country becomes less indicative than belonging to the city, and sometimes to district of the city.

Wirth (1956), representative of the Chicago School of Urbanism, noted the role of decentralization in the development urbanization. Wirth pointed to the unprecedented growth of metropolitan regions, central domination of cities and the need for freedom for them in solutions. He also noted that centralization of power in the minds of many associated with tyranny and dictatorship, so in democratic countries there are tendencies to strong localization of power. The policy of localism is more likely to be approved at the state level, regulating the activity of local self-government. Direct involvement of residents will occur in different ways: polls, forums, meetings, consultations.

- *Integration* - the blurring of borders, and the universalization of norms and standards of the culture. Single information space emerged and direct contacts between all actors continue to grow. Now more and more researchers are inclined to the concept of "interculturalism". The model of interculturalism arose in response to liberal criticism of the multiculturalist concept. If the main principle of multiculturalism is the division of cultures and the preservation of cultural identity, interculturalism presupposes the possibility of mixing cultures. In the context of cultural policy, interculturalism includes: neighborhood support and social inclusion, management of the public environment and the development of creative industries. Public spaces and events should facilitate the dialogue of cultures (Gashkova, Berezovskaya, & Shipunova, 2017).
- *Technological support of culture*. Culture today is inseparable from the technological aspects of the development of society. IT technologies, together with creativity, become the most important characteristic of modern cultural space. Technological achievements are used in museums, archives, libraries, architecture, cinema and television. Modern technologies make the culture more accessible: digitization of paintings, books, virtual tours of museums, openness of data gives access to cultural objects of a larger audience. Many museums use the practice of multimedia excursions, and the potential of social networks is also widely used (Hall, 1995).

2.3. Social life

The city authorities set the goal of providing guarantees to achieve the appropriate level of social protection, promoting equal opportunities in housing, education, etc, combating social exclusion and discrimination. Speaking about innovative potential in the field of education, for example, it is necessary to note the importance of developing universities as centers of urban education. Universities should be centers of innovative ideas and training centers capable of implementing these ideas. The educational process should become more interactive with a variety of approaches to the problems. Intelligent education

is the transition from passive content to active. It is necessary to develop e-learning, which provides two-way communication between teachers and students, allows sharing knowledge, and it does not matter how far the interlocutors are from each other. Future universities will need new faculties to be able to teach new professions, necessary for the future. Educational sphere will need new specialists to be able to teach new technologies (MacCallum, 2009).

Urban residents also need smart social services. For example "smart healthcare" - an electronic registry, an electronic medical record, electronic prescription, laboratory service and personalized accounting.

A key feature of modern municipal government is the increasing role of public initiatives and we assume it will be used in future cities with more force. It's important to develop a civic stand, constructive criticism and creative city class.

An open information approach is necessary in the development of design urban solutions. It allows to make balanced and effective decisions that meet the needs of the population. The discussion of projects in the public space opens the prospects for the development of a mutually beneficial format of partnership relations and gradually becomes a demand of the residents themselves. The importance of supporting civil initiatives in shaping the goals and objectives of strategic socio-economic and spatial development of regions and cities in the era of global communications is growing rapidly. Tools used for collective positioning of city issues: citizen's advisory committees, citizen's jury, workshops and public hearings (Nikiforova, Bylieva, Lobatyuk, & Petrova, 2017).

3. Research Questions

This article puts the following research questions:

- What the city of the future will look like?
- What is the difference between the past and the future city?
- What is the role of culture in urban development?
- How will innovations influence the urban development?
- In what areas of life the smartization will be more efficient?
- What are the trends of cultural city life?

4. Purpose of the Study

The purpose of the research is to figure out how innovations influence the socio-cultural urban development. The goal is also to investigate how the city fulfils its socio-cultural function. The study aims to review the city of the future, how it will differ from the modern city. Moreover, researcher investigates the areas of smartization in which innovations are more likely to happen.

5. Research Methods

In recent decades, the interest in cities development led to the formation of a special area - urban studies. It appeared initially within the framework of economic geography and urban planning, engaged in

a comprehensive analysis and study of the problems associated with the functioning and development of urban centres and affirming the need for the creation and development of large cities.

Now urban research is a fusion of geographical, economic, social, anthropological, cultural disciplines. In recent years, among researchers around the world, awareness has increased that the metropolis is becoming a new marker that identifies national identity, reveals ethnic differences and brings to the forefront the diversity of cultures of different countries and regions.

The main theories on which urban science is based is: the economic theory, the theory of modernization and the civilizational concept of social development, the theory of innovations, the institutional theory of municipal government, as well as the theoretical and empirical basis of socio-cultural research.

To achieve the main goal of the research we reviewed a bulk of research papers on the topic of city innovations. Literature with different perspectives on socio-cultural aspect of city innovation has been selected and reviews to build an understanding of the process.

The theory of innovation is one of the most popular economic doctrines of modernity.

This theory justifies the role of scientific and technical knowledge in the development of economic and social systems. The founder of the theory of innovation is Schumpeter (1983), who in the early XX century explained the relationship of technical innovations to long-term economic growth. The modern stage of the theory of innovations develops on the basis of the theory of Schumpeter (1983) and his followers. The innovative doctrine is at the intersection of economic, social sciences, production, and other industries. Innovations in cities attract this series and urban studies, raising the issue of the interconnection between economics and other areas country's development.

The theory of modernization is also used by urbanists to reflect the questions of urban future development.

Modernization is understood as the process of large-scale changes, through which a certain society acquires the economic, political, social and cultural features inherent in the present. Among the properties of the modernization process, one can single out an increase in social mobility, a decrease in the number of employed in agriculture, demographic shifts and the concentration of the majority of the population in urban settlements characterized by cultural and social diversity (Martinelli, 2005).

6. Findings

So, summing up, we state several findings:

1. In the past – megapolis was a paradigm of something big in size, a large scale city with lots of industries and inhabitants. Now and in the future not the scale will be important but the heterogeneity of the elements: of people, spaces, activities, cultures (Parnreiter, 2009).
2. The city of the future will not be built around the industrial plant but should be formed around the creative cultural beginning.
3. Cities of the future will be the centers of the fourth industrial revolution - Industry 4.0 (the transition to automated digital production, controlled by intelligent systems)

4. In the cities of the future the demand for citizens' participation in all spheres will be growing fast. Citizens will like to take part in decision-making, be active in using all electric platforms where their opinions can be expressed.
5. Culture lies at the heart of urban renewal and innovation. Culture is key to what makes cities attractive, creative and sustainable. Culture is in the centre of urban development, evidenced through cultural landmarks, heritage and traditions. Without culture, cities as vibrant life-spaces will not exist in the future. It is culture that makes the difference. The future of the society will be formed in cities, in a context where it is no longer possible to imagine sustainable development without culture. Today, city centres are also defined by their cultural institutions: museums, galleries, theatres, academies and memorials. Cultural spaces, cultural institutions, museums etc. will be using innovations.

Urban social innovation will be important for improving the quality of life of people living in local communities.

The peculiarity of the modern socio-cultural reality is due to information and communication innovations, their use in culture leads to virtualization and globalization of the socio-cultural system. Virtualization and globalization of the socio-cultural system are, first of all, innovative socio-cultural processes that have in their foundation information and communication innovations and in the course of their development, transforming the modern socio-cultural environment

7. Conclusion

So, summing up, we note that introduction of innovations in cities is a complex of measures in various spheres of life activity. The needs of a modern inhabitant of the city grow, he seeks to live in a comfortable, friendly atmosphere, enjoying all the benefits of city life.

Absorbing the traditions and lifestyles of people coming, cities become centers of concentration of cultures and places of preservation of cultural heritage of many nations. Global processes have intensified differentiation of the population, which contributed to the formation of polymorphic urban cultures. Such cultures can enrich and strengthen the city, but also can serve as a source of contention and the basis of social exclusion.

Cities where culture, infrastructure and organization is concentrated, have long been the engine of progress and civilization centers of opportunity and prosperity. In developed and developing countries, cities offer unique opportunities for its people to raise revenue mobilization of political action and the provision of greater access to education, employment and social services.

Modern cities hold the most important socio-cultural function, proving to place the guardianship of the cultural heritage of nations and peoples living in them. The most important processes in society are manifested at all levels of social and cultural space of cities. Social macrostructure is a system of social relations between demographic, ethnic and cultural communities.

The city of the future will have to: ensure access for all to adequate, safe and affordable housing and services, provide access to safe, accessible and sustainable transport systems for all, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management, strengthen efforts to protect and safeguard the world's cultural and natural

heritage, support positive economic, social and environmental links between urban and rural areas by strengthening national and regional development planning.

References

- Aladyshkin, I., Kulik, S., Michurin, A., & Anosova, N. (2017). Information Prospects For Socio-Cultural Development: Contradictory Grounds. *RPTSS 2017 International Conference on Research Paradigms Transformation in Social Sciences, The European Proceedings of Social & Behavioural Sciences EpSBS, Vol. XXXV*, 19-25. doi:10.15405/epsbs.2018.02.3
- Atkinson, R. (2012). *Innovation in Cities and Innovation by Cities. The information technology and Innovation foundation*. Retrieved from <http://www.itif.org/files/2012-innovation-in-cities-by-cities.pdf>
- Brynjolfsson, E., & Saunders A. (2010). *Wired for Innovation: How Information Technology is Reshaping the Economy*. Cambridge: MIT Press.
- Bylieva, D., Lobatyuk, V., & Rubtsova, A. (2017). Smartmob: evolution from flashmob to smartcity element. *RPTSS 2017 International Conference on Research Paradigms Transformation in Social Sciences, The European Proceedings of Social & Behavioural Sciences EpSBS, Vol. XXXV*, 225-235. doi:10.15405/epsbs.2018.02.26
- Clammer, J. (2014). *Culture, Development and Social Theory: Towards an Integrated Social Development*. London/New York: Zed Books
- Duxbury, N., Cullen, C., & Pascual, J. (2012). Cities, culture and sustainable development. In H. K. Anheier, Y. R. Isar, & M. Hoelscher (Eds.), *Cultural Policy and Governance in a New Metropolitan Age. The Cultures and Globalization Series, Vol. 5*. London: Sage
- Gashkova, E., Berezovskaya, I., & Shipunova, O. (2017). Models of self-identification in digital communication environments. *RPTSS 2017 International Conference on Research Paradigms Transformation in Social Sciences, The European Proceedings of Social & Behavioural Sciences EpSBS, Vol. XXXV*, 374-382. doi:10.15405/epsbs.2018.02.44
- Helpman, E. (2004). *The Mystery of Economic Growth*. Cambridge: Mass
- Hall, P. (1995). The roots of urban innovation: culture, technology and the urban order. *Urban Futures. № 19*, 41-52.
- Hosagrahar, J., & Duxbury, N. (2016). *Why must culture be at the heart of sustainable urban development?* Retrieved from https://www.acpculturesplus.eu/sites/default/files/2016/02/19/agenda_21_for_culture_why_must_culture_be_at_the_heart_of_sustainable_urban_development.pdf
- Hosagrahar, J., Fusco Girard L., Soule J., & Potts, A. (2016). *Cultural Heritage, the UN Sustainable Development Goals, and the New Urban Agenda: ICOMOS Concept Note on Cultural Heritage and Sustainable Development*. Paris: ICOMOS
- MacCallum, D. (2009). *Social Innovation and Territorial Development*. Farnham, UK: Ashgate Publishing.
- Martinelli, A. (2005). *Global Modernization: Rethinking the Project of Modernity*. London, UK: Sage Publications.
- Nikiforova, N., Bylieva, D., Lobatyuk, V., & Petrova, M. (2017). The Problem of "Sign Field" Creation for the Russian National Technology Initiative. *4th International Multidisciplinary Scientific Conference on Social Sciences and Arts SGEM2017. Book6, Vol.1*, 117-124. DOI:10.5593/SGEMSOCIAL2017/HB61/S7.14
- Parnreiter, C. (2009). Megacities in the Geography of Global Economic Governance. *Die Erde, Vol. 140*, 4
- Schumpeter, J. (1983). *The theory of economic development*. New Brunswick, USA: Transaction publishers.
- Shipunova, O., Rabosh, V., Soldatov, A., & Deniskov, A. (2017). Interactions Design in Technogenic Information and Communication Environments. *RPTSS 2017 International Conference on Research Paradigms Transformation in Social Sciences, The European Proceedings of Social & Behavioural Sciences EpSBS, Vol. XXXV*, 1225-1232. doi:10.15405/epsbs.2018.02.144

Wirth, L. (1956). Localism, Regionalism, and centralization. In E. Wirth Mar-vick & A. J. Reiss, (Eds.) *Community life and Social Policy: Selected Papers by Louis Wirth*. (pp. 143—158). The University of Chicago Press.

2016 Culture urban future. (2016). *Global report on Culture for sustainable urban development*. Retrieved from <http://unesdoc.unesco.org/images/0024/002459/245999e.pdf>