Cities in the New Media Reality: Between Freedom of Creativity and Digital Control

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Abstract. In this article the authors consider the contradictory effects of the digitalization process of urban media environment and implementing a wide range of «smart city» technologies, namely: the rapid increase in the speed and quality of communications, on the one hand, and the possibility of establishing total digital control over all transactions and movements carried out by urban dwellers, on the other hand. Thus, the new media environment and the service infrastructure of the city form a significant potential for improving the quality of life, but at the same time significantly reduce the scope of personal freedom and the possibility of creative development.

This dilemma is revealed by the authors using an example of Singapore - one of the leaders in modern digital technological development. Another case considered by the authors in the article concerns the comparison of the specifics of urban digitalization policy models on the example of Moscow and St. Petersburg. The authors analyze them in the context of the new social, economic and political risks posed by the COVID 19 pandemic.

The general conclusion is the need to ensure an institutional environment that reflects the new conditions of technological development and is based both on the principle of self-restriction of the technology introduction into a person's personal space and on a new «digital» ethics.

Keywords: New Media, Digitalization, Communication Channels, Serendipity, Transaction Costs, Network Structures, Quality of Life, Creative Spaces.

Introduction

The 20th century entered the world history not only as the era of bloody wars, great discoveries and the end of global ideologies, but also as the century of ultrafast urbanization: «in the 20th century, cities flourished, despite the persistent efforts of people to destroy them with the help of bombing from the air and constant growth of suburbs» [1, p.13].

The statistics on urban population growth are probably comparable only with the growth in the amount of information consumed and analyzed during the scientific and technological revolution of the second half of the 20th and beginning of the 21st centuries. If in the 1900s. the urban population of the planet was no more than 200 mil-

lion people, by the end of the 1990s it exceeded 3.5 billion people, and by 2050 at the current dynamics of resettlement (daily up to 200 thousand people), it will reach 70% of the total number [2]. By the end of the 21st century, the urban population of the Earth is predicted to grow up to 8 billion people, with a total population of 10 billion, which will radically change not only the structure of the population, but also its designed landscape.

Such a rapid growth of the urban population is explained not so much by the desire for a higher income (which remains an illusion for many immigrants), but rather by an increase in the chances of education, career growth and an increase in social status.

Moreover, the quality of life is determined in the context of the Fourth Industrial Revolution, first of all, by the degree of involvement in global digital flows, the ability to select and apply relevant knowledge. In this regard, the potential of urban communication infrastructure is crucial.

Despite the ubiquity of digital technologies that makes digital communication available in hard-to-reach corners of the planet, cities remain key communication hubs of the global media network: «The city is a powerful communication technology that provides real-time communication between different individuals and groups, as well as the rapid dissemination of new ideas and practices. Even in the age of instant digital communication, cities still provide constant contact with the strange, with the unfamiliar, with the unknown» [3, p. 236].

Hence the main goal of the article is to analyze the advantages and risks of digitalization and the development of a new media environment in relation to the formation of new forms and methods of urban policy. The context of the global pandemic, which has significantly influenced both the dynamics of digitalization and the tightening of the citizens' behavior control procedures, makes this issue particularly relevant.

The new network media environment called Geomedia, which is defined by S. McQuire as the process of convergence and ubiquitous distribution of digital devices and platforms, the use in everyday life of the location data of services based on geolocation and also the increasing penetration into ordinary life of distributed feedback in real time, is turning into a powerful force that shapes the contours of public space, and they are beginning to play an extremely important role in the politics of modern public space [6, p.35].

As the space of cities is becoming more and more saturated with mass media, the old ways of forming territorial boundaries, which previously determined the geometry and rhythm of everyday life, are undergoing serious revision. The function of urban public space as a locus for the implementation of certain practice of social interaction and communication is largely reconfigured under the influence of a new logic, opening new possibilities for recording, archiving, analyzing and extracting various streams of information [6, p.36].

1 Theoretical Frameworks

One of the most important functions of cities is to multiply diversity, a bizarre combination of different cultures, behavioral styles, social and professional groups, etc. like

in a kaleidoscope. This function of a modern city contains an exceptional creative potential. Cities are not only centers of science and education in the organizational and institutional sense, but also a space, where the creative potential of a person can be developed unhindered and receive support. To analyze the effectiveness of the creative potential realization, the authors propose to use the concept of «serendipity», which today is not so common in scientific works.

In the context of our theme «serendipity» is understood as the possibility of randomness, uncertainty range of the interactions, the clash of various factors, formed the urban environment, since it is a city providing the infrastructure to enable development of intuition.

It is to this dimension of the study of this phenomenon the famous sociologist R. Merton devoted one of his latest works, emphasizing the influence of serendipity on creative, innovative activity, the possibility of scientific discoveries, which is extremely important for the development of the modern urban environment. Merton wrote of «serendipity pattern» as a way of coming to unexpected scientific discoveries [4].

This approach is close to the synergistic concept of social development, which describes the processes of new forms of social order emergence from chaotic, random interactions and mutual influence of various actors. Hence, another important theoretical concept is the concept of «bifurcation», defined in synergetics as the behavior of complex systems in a nonequilibrium state when the system makes a transition from one dynamic mode to another [5].

In the new conditions of an extremely complex, turbulent media environment, the question arises of the information relevance, its truth or false. The thesis is quite provocative, but true as social networks (in particular, Facebook) has managed to change the answer to the question: «What do I need to know?» «You need to know what your friends and friends of friends already know, but you still haven't» [3, p. 241].

Social media turned out to be an effective tool for both grouping and their subsequent autonomization, deliberate or accidental separation of them from the other social world. In this sense, the phrase of the American journalist and media space researcher Paul Carr, who suddenly realized that he's «existing in a little twitter bubble filled with people close in racial, political, linguistic and social senses» is indicative [3, p. 241].

It is chance meetings that make city livable, stimulating creativity and ultimately safe. Areas with small neighborhoods where pedestrians are easy to move around combine residential, commercial and recreational functions, with vital energy that can be found neither in typical, purely residential areas, nor in central neighborhoods that become unpeopled in the evenings when offices are closed. The source of this energy is in chance meetings between people using the area for various purposes [3, p. 246].

Open source urbanism is characterized by more horizontal, multiple, and sensitive feedback between urban dwellers and the city. However, Sassen warns that the smart city concept may turn into a technocratic fantasy of a totally controlled space [6, p. 20].

As a result, a new disciplining reality arises, very similar to the state of society that Gilles Deleuze defined as a «control society», in which the old pro-governmental

strategies of segregation and physical isolation, typically occurring in Foucault's disciplinary regimes, are replaced by the ubiquitous digital modulation [7].

Scott McQuire very accurately noticed the ambivalence of a digital society and a digital city, in which the tension between the potential for new forms of citizen engagement and self-organization and the tendency towards marginalization inherent in similar projects under the influence of new forms of technocratic control, which they themselves often produce, is becoming ever stronger [6, p. 20].

2 Between Freedom of Creativity and Digital Control: Case of Singapore

The dilemma of weakening of personal freedom and increasing of digital control is clearly shown through the example of Singapore - one of the leaders in modern digital technological development. As Professor John Curtis Perry accurately described, «Singapore is a controversial subject, described as "The Big Apple of Asia," or "Disneyland with Capital Punishment." On the one hand, there are those who admire its efficient government and material accomplishments; on the other hand, there are those who deplore its antipathy to freedom of expression. We can all ask how much an authoritarian government stifles the creativity necessary to nourishing a productive society» [8].

Singapore presents a special set of regime political and administrative characteristics. Firstly, the city-state, which gained independence in 1965, has developed over the years within the framework of the de facto one-party (the People's Action Party has been in power since 1959) and the authoritarian political system as a whole, and accordingly, has not experienced the consequences of a competitive political struggle. Secondly, political ideologies in the country have been clearly secondary (in contrast, for example, with China), and politics as a whole has had rather a technocratic content. Therefore, the stability of the course and the management team in Singapore has always been very high, with an extremely low level of corruption (4th place in the world according to 2019) [9]. This, in turn, has ensured the effective phased implementation of the «intellectual territory» project, called Smart Nation.

The goal of implementing Singapore's Smart Nation concept is to make Singapore «an outstanding city in the world … for people to live, work, and play in, where the human spirit flourishes» [10]. The program is aimed at improving the quality of public services, strengthening communication with citizens and introducing innovations in the private sector. According to Singapore laws, the use of data collected by Smart Nation does not require the consent of citizens or the permission of the court. This approach seems undemocratic. Moreover, it violates the rights of citizens. In addition, with a possible cyberattack, the security of a huge amount of private data may be at risk. In general, many aspects of life in Singapore, including public transportation and housing, are controlled by state-owned companies. While the population of Singapore is more than 5 million people, approximately 80% of citizens live in government apartments. And, despite the fact of Singapore being recognised as a democratic state, democracy here has national specific features: the country, as mentioned earlier, is de

facto led by one party; voter's identity card should be indicated on the ballot papers; and the right to freedom of speech and expression guaranteed to Singapore citizens by the Constitution is violated by total censorship.

Thus, the civil society and government feedback system in Singapore has a number of features related primarily to the centralization of the political decision-making process and the relatively weak participation of civil society institutions in it. According to the Press freedom index 2019, Singapore took the 151st place, which is significantly lower than many post-Soviet states, including Russia [11].

The total digital control over all transactions and movements carried out by the townspeople has allowed Singapore to create a stable basis for high-quality technological development and innovation.

3 Digital Transformation in the Structure of Communicative City Management: Comparative Analysis of Moscow and St. Petersburg

The new global challenge of the COVID19 pandemic, which at the beginning of 2020 covered the most technologically advanced countries in Europe, North America and Southeast Asia, repeatedly updated the problem of determining the content and main directions of digital technologies development. Moreover, the range of problems associated with digitalization is very wide: from ensuring public safety and controlling the spread of the disease to developing effective forms of distance learning. All these problems are related to the issues of digital control and restriction of citizens' freedoms, which requires a deep ethical-philosophical, legal and political analysis. Today, the whole range of pandemic consequences is difficult to objectively assess, however, it is important to note the importance of choosing the digital development strategies of individual territories, which laid the foundation for the rapid development of digital technologies in a crisis situation caused by the pandemic. From this perspective we will briefly compare two Russian cases: Moscow and St. Petersburg.

Moscow and St. Petersburg have formed the basis for knowledge-based urban development management as part of a global trend and a federal strategy for improving public administration.

The construction of the information and communication system for managing the metropolis in Moscow went through several successive phases. They can be provisionally structured as follows:

Phase 1. 2000-2011. The development of urban infrastructure and electronic society technology within the framework of the state target program «Electronic Moscow».

Phase 2. 2012-2017. Informatization and centralization of electronic public services, carried out in the framework of the Information City program adopted in 2012.

Phase 3. 2018 - present. Development and implementation of a full «smart city» concept [12].

The success of Moscow in the process of a «smart city» organization is ensured by several factors. Firstly, it is a broad administrative and resource support of the city authorities. Secondly, the emphasis on advanced research and world best practices in

the field of smart cities designing, as well as drawing the attention of representatives of market leaders, scientific and expert organizations. Thirdly, the dominance of the information and communication technology industry in the structure of the city's economy. By 2017 industry enterprises registered in Moscow produced more than 70 percent of the total industry in Russia. Fourth, the availability of a sufficient number of highly qualified world-class labor resources in the city [13].

In St. Petersburg, the implementation of the urban development concept on the principles of multidimensional knowledge was sequentially behind federal programs without accelerated development and significant regional features. The phases of building an information and communication management system can be structured as follows:

Phase 1. 2002-2015. Development of urban infrastructure and e-government technology.

Phase 2, 2015-2017. Open government technology development.

Phase 3. 2018 - present. Development and launch of the «smart city» concept.

Although the current phase allows us to evaluate only the experience of conceptualization and partial implementation, the existing approach to implementing the strategy in St. Petersburg differs significantly from the Moscow one primarily by institutionalizing this process as part of a consortium with ITMO University, which is responsible for determining development priorities and the implementation format of the «smart city» concept.

Firstly, the main emphasis is on the management architecture (basic principles: a comfortable environment for citizens, coordination of management, development of urban infrastructure, process monitoring, joint design of the environment, human capital), and not on the target qualities of controlled environments and the level of innovative development. While for Moscow, priorities were chosen: improving the living environment of citizens, citizen participation in management, the use of machine intelligence, a barrier-free environment, the involvement of science and business, digital document management, the use of end-to-end technologies, import substitution, and environmental protection). It should also be noted that the conducted sociological studies recorded a common perception of the «smart city» concept among public servants and urban dwellers in St. Petersburg, who expect from the implementation of this concept to improve the quality of urban governance and, as a result, the quality of citizen's life.

Secondly, the claimed method for assessing the strategy goals achievement includes only 5 separate indicators for St. Petersburg, compared with 2 complex indexes based on dozens of indicators for Moscow.

Thirdly, despite the declared principles of co-management, the current implementation of smart St. Petersburg strategy follows the principles of project development based on internal expert selection, which leaves a limited range of opportunities for implementing an open innovation model that has already proved its competitiveness in terms of solving the problems of breakthrough city development as part of a collaborative strategy and global competition. At the same time, the data of expert surveys record the high role of risks related to both information security (hacking elec-

tronic networks, cyber terrorism) and the inflexibility of authorities in relation to expanding forms of citizens and businesses participation.

To determine the degree of the smart city technology development in Moscow and St. Petersburg in a comparative perspective, we used the typology proposed by Bill Hutchinson, executive director of the EY smart cities development center, in which he conditionally identifies three stages of the development: smart city 1.0; «Smart city 2.0»; «Smart city 3.0». The key difference is based on the degree of coordination and «convergence» of the overall strategy for the «smart city» concept implementing, as well as the degree of balance of the technological and socio-humanitarian components: «Smart City 1.0» is similar to those old systems for business and government, some elements of which were automated without general strategy. «Smart City 2.0.» carries out basic «strategic consolidation». «Smart City 3.0» conducts a comprehensive «strategic consolidation», and basic intellectual technologies are integrated into its infrastructure [14].

Assessing the current stage of the «smart city» technology implementation in Moscow and St. Petersburg through the prism of this approach, taking into account the above technological, managerial and institutional features, we conclude that Moscow has already reached the «Smart City 2.0» phase and is preparing to the transition to the «Smart City 3.0» phase, while St. Petersburg is only completing the transition from the first to the second phase of the smart city technology development.

Conclusion

In the Fourth Industrial revolution innovation development process in general has become much more unpredictable and less controllable by both the business and the state. A particular relevance in this regard belongs to the problem of finding ethical and moral foundations for further technological development, as well as the danger of establishing total control over a person and, as a result, erosion of the democratic foundations of modern society and urban governance, in particular. There is a devaluation of the value foundations of politics and governance, in which new technocratism, selfish rationalism and utilitarianism become the dominant principles. Multiplied by the effects of modern information and communication technologies, they lead to the spread of the so-called «Post-truth politics», blurring the line between truth and fiction.

The development of the «smart city» digital technologies leads to dual effects. Firstly, this is a significant multiplication of communicative interactions, which allows «everyone to communicate with everyone», which makes it possible to obtain information almost instantly, send back a reaction to it, correct and express one's own position [15]. Such an opportunity certainly makes the feedback system of the conditional subject and the control object the most effective in a network environment.

But on the other hand, attention should be paid to the designers of these technologies and their direct owners (global IT corporations) who become owners of a huge amount of data (visual, interpersonal contacts, personal «tracks» in the Internet, social networks, etc.), the use of which practically is not subject to any kind of public scruti-

ny. Thus, we are speaking of the possibility of total targeting, that is, conscious control and behavior direction (economic, political, social) of a huge number of these technology users.

It is not a coincidence that many experts note a significant transformation of culture, which «is becoming a means of obtaining data (intimate coordinates) that are used to compose portraits of consumers, send targeted messages and direct communication in the right direction» [6, p.40-41].

Therefore, it is necessary to ensure an institutional environment adequate to the new conditions of technological development, based on the new «digital» ethics and the self-restriction principle of technologies introduction into a personal space.

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