Power and regional communities in the context of digitalization: institutions, processes, technologies

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Abstract. The article is devoted to the possibility of applying the technological approach to political institutions. In particular, the issue of stability of state power institutions and regional communities in the postmodernization processes of social and political development associated with the introduction of information digital technologies into public policy is touched upon. The authors investigate current examples of the impact of these technologies on Russian political practices and propose relevant areas of work with Internet communication technologies. The authors consider the information society as a global space for political communications, drawing their attention to new potential and real challenges and threats associated with the use of digital information arrays.

1 Introduction

The current social state of J.F. Lyotard in the middle of the XX century. defined as a postmodern situation. Postmodernity brings multiple elements of the show into the political arena. In this sense, it can be assumed that the society of Guy Debord's performance preceded postmodernism, being its first act.

In Russia, there is now a stable trend towards the sustainable development of a digital society. At this stage, activities to expand, exercise and retain political power include competition for influence on minds, the generation of symbols, and the transmission of ideas and values to the masses.

In a postmodern situation, politics turns into a show. This show unfolds on the stage of both new and traditional media and information. Shows replace reality, create simulacres of reality and even form a new hyperreality. This situation dictates an innovative model of public policy perception, through the categories of hyperreality, as well as virtual and simulated reality.

Thus, we found ourselves in the conditions of postmodern information hyperreality. The new political reality has undergone a transformation, acquired the qualities of virization and mediatization, thanks to the interpenetration and splicing of public politics and the digital communication sphere, as well as the successfully continuing robotization of online networks. However, these processes can also have a negative side manifested in cyber attacks and theft of personal data for the following: blackmail; theft of material assets; collecting compromising evidence and even cyber espionage. For example, a significant
part of the identified victims of cyber attacks are civil servants holding high positions in the service hierarchy [1].

For the state, the consequences of cyber attacks are associated with large image losses and a decrease in defense capability.

In addition, cyberattacks can negatively affect the economic situation, be used to discredit civil servants, whose number in Russia continues to grow and has doubled over the past two decades [2]. Moreover, synchronously with the growth in the number of civil servants, the Russian state falls in the anti-corruption rating from 82nd place in 2000 to 137th in 2019 [3].

However, postmodernity offers new institutional practices and innovative technologies that in the future should replace the outdated ones. And one of these technologies is blockchain, which implies the possibility of decentralized storage and processing of data, as well as transparency and the impossibility of carrying out any falsifications.

The potential and capabilities of new digital institutions are most in demand in Russia, where, on the one hand, there is a fairly high development of new information technologies and, on the other hand, critically low public confidence in the institutions of state power.

2 Materials and Methods

Postmodernity is a time of rapid transformations taking place under the technological determinant of the fourth industrial revolution.

The methodological basis of our research is a set of scientific methods (event analysis, case-study, network analysis, etc.) and approaches that have received recognition in political science. In particular, we used such scientific approaches as: postmodernist; neo-institutional; constructivist. In a postmodern situation, the development of political communication technologies is actively progressing. In particular, these are studies of political manipulation, information warfare and «soft power».

Network communication has become the subject of close attention of researchers: D. Grabber, V. Neumann, R. Davis, R. Deibert, D. A. Porter, S. Cunningham and others.

A significant characteristic of postmodernity in politics is the widespread introduction of networkization technologies. M. Castells was one of the first to foresee these processes, raising the question of the upcoming qualitative transformations of society, as a result of which the structures of industrial modernity will have to give way to network information flows.

Taking as a basis the postmodern concept of communication (R. Barthes, J. Baudrillard), according to which communication is based on the production of signs, M. Castells comes to the conclusion that, in a sense, all reality is virtual [4].

Here he assigns a special role to the phenomenon of «mass self-communication», as an innovative model of interaction between individuals [5].

J. Urry and E. Elliott analyzed the trend towards a decrease in the size of the gadget required for the implementation of network mobility (miniaturized mobility). Thus, E. Elliott argues that mobile technologies transform the hierarchy of social relations [6].

In our country, electronic resources are becoming the leading sources of information for the population [7] and show a further increase in popularity [8], which reduces the importance of traditional communication channels. In addition, there is a significant «migration» of Russian users from desktop versions of sites to sites of mobile applications. For example, the Telegram audience has grown 10 times over 3 years [9], the WhatsApp audience has exceeded 38 million users [10]. Also, Facebook today is used more often on mobile phones, rather than on stationary devices [11].
3 Results and Discussion

The digital network society of postmodernity represents a society of a high scientific and technological character in comparison with previous societies. However, opportunities for upward social mobility in this society are not only not expanding, but rather narrowing. Elite groups are basically preserved and are only partially reformatted in the process of social transformation. Moreover, the transformation covers all spheres of social life.

Competition is increasing everywhere. It pushes to the periphery, leads to the marginalization of huge masses of the population, poorly adapted to the conditions of the information-digital social order.

The digitalization process, on the one hand, significantly expands the boundaries of human potential, but it, in its negative aspect, at the same time, can be an instrument for the implementation of all-pervading control over a person, her total subordination.

At its first stage, digitalization is carried out in the context of historical forms of political culture. For example, in China, the Internet information filtering system – «Golden Shield» is used. It has been officially operating since 2003 to protect the population from sites with an extremist orientation.

China has its own national analogues of world video hosting sites, search engines and social networks, for example: Facebook – Renren; Twitter – Weibo; Google – Baidu; Pinterest – Huaban; YouTube – Youku. The Cybersecurity Governance Commission also operates here and there is a law restricting the possibilities of online publications.

In Russia today, a single database is being formed for all citizens of Russia. It is assumed that the resource will contain both basic and additional information about any citizen. A single database will accumulate information from disparate registers of state structures: the Ministry of Defense; Ministry of Internal Affairs; The Pension Fund; Ministry of Education and Science; CHI Fund; Federal Tax Service, etc.

In addition, the Federal Security Service (FSS) and the Foreign Intelligence Service will be able to enter into the database information that was not previously recorded in other state and municipal information resources.

However, the very unified collection and analysis of this kind of data by robots creates additional risks of leakage of information about the personal life of civil servants, which can significantly threaten national security issues. Commonly used in the network environment, the term «bot» is a derivative of the concept «robot» [12]. Robots in the Internet space are special network programs used to perform both various routine functions and rather complex tasks, including at the level of artificial intelligence. Networked robots that mimic the identity of the Internet are called network bots or cyber simulators. The latter are significantly differentiated from simple robots - whose functions are to fill and correct network content, to the most complex cyber simulators operating on the basis of natural language algorithms. Researchers define them as «software controlled accounts that algorithmically produce content and establish interactions with other users» [13, P.121-133].

Professionally executed cyber simulators can successfully adapt to the online community, fill their own account with new information, and interact with virtual users of the network environment. Political strategists actively use cyber simulators with the aim of manipulative influence on target Internet communities. Moreover, their functionality can vary from the simplest, for example: the implementation of content reposts and the generation of likes, to professional algorithms for manipulative influence on the target category of recipients.

Robots of this type and the accounts they generate form communicative interaction on political topics using social networks and video hosting sites: Vkontakte, Twitter, Facebook, YouTube, etc.
Big Data technologies are so polarized today in China for assessing the social rating of citizens, they function through a face recognition system. In the future, this system will be improved and not only in China through the infrastructure of neural networks and a mechanism for targeting personal network content. An important innovation trend for the implementation of the e-government policy in Russia is the development of telecommunication networks, through specialized portals of public services, collectively called the e-government of Russia.

However, unlike China, Russia demonstrates a critical dependence on foreign technologies and gadgets, which, in the context of postmodern network standards, can pose threats to the state sovereignty of Russia and, in the long term, contribute to the transformation of our state into an externally coordinated territory available for external control. In this case, it is necessary to take into account the danger of total social exclusion. Since such processes break the usual pace of development of society and the model of socio-political balance, adjusting the long-term prospects and future algorithms of social development.

4 Conclusions

Our research shows a significant increase in technological capabilities to control the digital space. For example: political actions of certain groups of the population in the information space: publications and reposts; expression of approval or condemnation (likes or dislikes), everything based on Big Data technology can be used to monitor the political behavior of an individual and even certain target audiences.

Based on the analysis of account data, access to individual user frames is generated. And on their basis, Big Data generates an explanatory model of the political situation for each specific user. However, the widespread and total introduction of such technologies can become a generator of a new form of socio-political deprivation.

Robot programs replace real human communication - with simulacra, based on the use of the so-called «digital value-semantic capsules» [14, P.205-212]. Manipulative social and political technologies are successfully integrated into social networks, as a result of which the «robotization» of social networks is alarming in terms of their axiological and cognitive content. Moreover, their content often contains the implementation of «pre-established» values and meanings.

Individual digital gadgets purchased by the user at his own expense and formally on his own initiative, in practice, can become an effective tool for tracking a person on the part of institutions and organizations interested in this process. At the same time, the control itself can be carried out not only in a rigid format of «superintend and punish» (M. Foucault), but also in a manipulative mode, using technologies of «soft power» (J. Nye), which implies targeting information and communication flows adapted to requests specific categories of users.

On the one hand, many nation states are working to form controlled national segments of the Internet space. This practice, in our opinion, will be significantly expanded, which means that it is possible to predict an increase in pressure on the rights and freedoms of individuals from state institutions.

On the other hand, there is an increase in the digital interests of the commercial technology sector, which in the long term may lead to the emergence of new, supranational political institutions, which means that the sovereignty of the Russian state will be subjected to additional pressure.

Already, digital technologies create new risks, threatening the stability of the country's most important political institutions by replacing them with electronic services, programmable smart contract algorithms and unfalsifiable blockchain ledgers. In this case,
the constructive interaction of civil society and government bodies will help to develop scenarios for constructing network design options that ensure digitalization with minimal turbulence of the political regime.

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