RESEARCH PAPER

LEADING GLOBAL CITIES IN THE RUSSIAN-LANGUAGE SEGMENT OF INTERNET: HOW DO THEY LOOK LIKE AT THE BEGINNING OF THE 21ST CENTURY?

Andrei V. Korobkov[1], Svyatoslav S. Kuzovlev[2], Elena S. Rykunova[3*], Nikolay A. Sluka[2]

[1]Middle Tennessee State University, Department of Political Science and International Relations, 37132, Murfreesboro, TN, USA

[2]Lomonosov Moscow State University, Faculty of Geography, 119991, Moscow, Russia

[3]KIMEP University, Faculty of General Education, 050010, Almaty, Kazakhstan

***Corresponding author:** rykunova.es@yandex.ru**

Received: December 15th, 2022 / Accepted: November 14th, 2023 / Published: December 31st, 2023

https://DOI-10.24057/2071-9388-2023-2682

ABSTRACT. In the XXI century, the factors of the development of megacities are changing rapidly, the competitiveness of which increasingly depends on their image in different social environments. The purpose of the study is to identify main common features of the current image of the leading global cities (London, Paris, New York and Tokyo) in the Russian–language segment of the Internet (Runet). The research was based on a combination of methods of socio-economic geography, quantitative and qualitative methods of sociology. To reflect the objective reality of megacities, international statistics were used; to assess the role of Internet information resources influencing the formation of the image, the number of search queries in Runet and the context of publications about cities in social media were analyzed; to identify the configuration of the image, the data of a sociological survey were studied. It was revealed that the perception of megacities in Runet is based on a comparable volume of information flow in social networks (the number of published messages is 20 thousand per day for Paris and London, 15 thousand for New York, 4 thousand for Tokyo) and on similarity of publications' context (2/5 are in the categories "entertainment" and "personality"). Despite certain limitations of the methods used and the relevance of the digital artifacts obtained, the image structure of the centers under consideration is characterized by the predominance of objective over subjective and cognitive (knowledge and ideas about "physical" givens) over affective (emotions, feelings, sensations) components with the key role of four collective categories: common features of large cities, idealized imagery of the country, prestigious urban locations and world architectural brands; as well as high stability in time and space. The continuation of research based on the proposed principles, while improving the methodology and involving cities of different classes, will contribute to the adaptation of foreign experience in designing of images of ambitious Russian cities in the face of new global challenges.

KEYWORDS: image geography, leading global cities, image support frame, social media, Runet

CITATION: Korobkov A. V. , Kuzovlev S. S., Rykunova E. S., Sluka N. A. (2023). Leading Global Cities In The Russian-Language Segment Of Internet: How Do They Look Like At The Beginning Of The 21st Century?. Geography, Environment, Sustainability, 4(16), 72-81

https://DOI-10.24057/2071-9388-2023-2682

Conflict of interests: The authors reported no potential conflict of interest.

INTRODUCTION

In the conditions of the information society development, the ratio and structure of endo- and exogenous factors in the formation of a large city, which is recognized as a complex phenomenon in social geography and related disciplines, and traditionally considered as a focus of political, economic and cultural life of territorial systems of various scales, are changing significantly and rapidly. New global challenges, including, in particular, the COVID-19 pandemic and sanctions have sharply limited the possibilities and scope of direct contacts. Such situation vividly reflects the growing dependence of the successfulness and international attractiveness of metropolis not so much on the scale of its economic resources - land, capital, labor (i.e., territory, population and GDP), but on the established reputation. This trend was noticed by a number of well-known scientists who stated that: "in our age of rapid development of mass media, ideas about the world replace the world itself" (Kolosov, Tikunov, Zayats, 2000) and proposed the concept of *symbolic capital* (Bourdieu, 2001; Toffler, 2003). Being formed on the global stage the image of the city determines the attitude towards it, which ultimately finds expression in the development of economic, political, social and other ties at all territorial levels. It is increasingly becoming a necessary tool not only for attracting foreign investment, branches of foreign TNCs, human capital, international tourists, etc., but also for the formation of a sustainable competitiveness of the city in the long term period. As a result, in the age of communication development, the image becomes not an abstract concept, but a specific one; it acquires an important economic meaning.

The image of the city is the totality of ideas about it that exists in the mind, according to Vizgalov, "not necessarily systemic and correct", often not only positive, but also negative, problematic. The most significant of them can be considered as a supporting structure or frame that provides sufficient strength and stability for the image of each metropolis; and their identity for a group of equivalent objects - like a generalizing portrait or a supporting frame[1] - is a kind of bond that gives the proper configuration to the image of cities of a certain class. It shows both generalization, and connections, and differentiation of phenomena, including spatial ones. Identification of the supporting frame of the image of different categories of cities is of not only scientific and educational, but also applied values. It represents a starting line of action for ambitious cities, including Russian, aimed at increasing international influence and increasing role in world politics, economics, and culture.

The study of the image support frame of the modern elite of urban formations and the most eminent world centers becomes to be of great value in determining the main guidelines and specific priorities in constructing the perception of each metropolis in the international community. A special group among them is represented by global cities that are maximally integrated into transnational networks - multidimensional political, economic, social, religious and other interactions over and beyond state and territorial borders. The phenomenon of a global city was theoretically substantiated in the works of S. Sassen (Sassen, 1991) and has got the primary empirical interpretation in the works of the international research group "Globalization and World Cities" (GaWC). According to the founders of the concept, the international significance of the city is directly linked to the quality of service for the transnational capital and is identified by the concentration of headquarters and branches of highly specialized companies and knowledge-intensive services. The leadership definately belongs to four centers - New York, London, Paris and Tokyo (Beaverstock, Smith, Taylor, 1999; Sluka, Karyakin, Kolyasev, 2020). The concept, focused on the assessment of intercity interaction, highlighted the process of increasing cooperation and, at the same time, fierce competition between centers. That actualizes the study of both modern key competencies of megacities that provide competitive advantages, and strategies for achieving them, including by improving the image.

The general ideas and a number of models of symbolic politics as one of the technologies for creating an image are well known. (Efremova, 2015; Potseluev, 2012; Edelman, 1964; Meyer, 1992; Sarcinelli, 1987). The problem of its creation is closely related, on the one hand, to the multiplicity of factors, including territorial affiliation, status, historical past, quality of the environment, the level and quality of the city's power structures, etc., and on the other hand, with the to the multiplicity of target audiences, which requires "the activities of the circle of actors aimed at the production and promotion of certain ways of interpreting social reality" (Malinova, 2010) and the selection of special tools for each "consumer" of the place. The concept of "positive image" and its frame in relation to the city for different categories of people sounds differently.

The purpose of this study is to identify the image support frame of the leading global centers in the Russian-speaking segment of the Internet (Runet) using the capabilities of social media.

MATERIALS AND METHODS

The study is based on the one hand on the theories of a world and global city (Geddes, 1915; Friedmann, 1986; Hall, 1966 and others.) and on the other hand – on a conceptual basis of image geography, marketing and city branding fundamentals (Vizgalov, 2008, 2011; Zamyatin, 2006; Zamyatina, Harutyunyan, 2005; Kalutskov, 2008; Tokbulatova, Kolosov 2018; Okunev, 2020, etc.), as well as the elaborations of foreign research structures (IFUS[2], 2018; Ipsos[3], 2020) and consulting companies (Resonance[4], 2018; Reputation Institute[5], 2018). The conceptual scheme for studying the global city image relies on a large set of objective and subjective factors that characterize the object of perception itself, the carriers of perceptions and the specifics of the relationship between them. Image formation factors reflect the reality. Building the image of an object depends on the transmission link between the real world and the perceived world - a complex of existing mechanisms, among which, along with school and in-depth knowledge, special place belongs to personal experience, electronic media information sources occupy a special place. Some of them (third-party initiative) are aimed at promoting of the properties of the city outwards, and some (personal initiative) are associated with satisfying the interests and preferences of the audience itself. In this case a set of features of the city perception appears, which is built mainly on the basis of three types of categories: cognitive - knowledge and ideas about the "physical" components; *affective* - emotions, feelings, sensations; *behavioral* - actions of the recipient in relation to the image inductor (Kiryanova, 2015).

The lack of recognized ways to verify the image imposes additional obligations on the researcher to verify, clarify and update the findings, which can be achieved by using a set of methods that allow assessing the phenomenon from different angles and relying on different sources. The methodological apparatus of this study is based on a combination of general scientific and classical methods of social geography, including comparative geographical method; as well as qualitative and quantitative methods applied in sociology (public opinion polls). The first set of methods allows obtaining information about the views dominating within the audience directly from their carriers, while the latter methods are focused on the analysis of social media content, which are both a tool for the development of views and their partial reflection (Tokbulatova, 2020). When collecting actual data, the Internet metric method was actively used, combining the use of special Internet services and remote interaction with respondents from social networks. The conceptual scheme for the implementation of the study is shown in Figure 1.

The primary research database was collected on the eve of the COVID-19 pandemic, from March 2017 to February 2018, and consists of four main blocks. The first is a set of statistical data and international ratings, which allow to create a general idea of the leading global cities "portraits" from the standpoint of classical geo-urban studies. The second is the number of search queries in Runet for each center, given by the "Yandex. Choice of words" tool. The third is the frequency and context of mentioning the cities, using a number of qualitative categories such as economy, politics, personalities, entertainment, infrastructure, etc. in the combination of social media, e.g. VK, Facebook,

[1]The idea of the frame approach was actively developed by many russian economic geographers. According to I.M. Maergois, the notion of a frame is highly informative (Lappo, 1983), and by virtue of this alone can and should be effectively incorporated into imaginative geography.

[2]Institure for Urban Strategies (IFUS). City perception survey. https://www.mori-m-foundation.or.jp.

[3]IPSOS https://www.ipsos.com/en

[4]Resonance Consultancy. https://resonanceco.com/

[5]Reputation Institute. Most Reputable Cities 2018. https://www.reputationinstitute.com/city-reptrak.

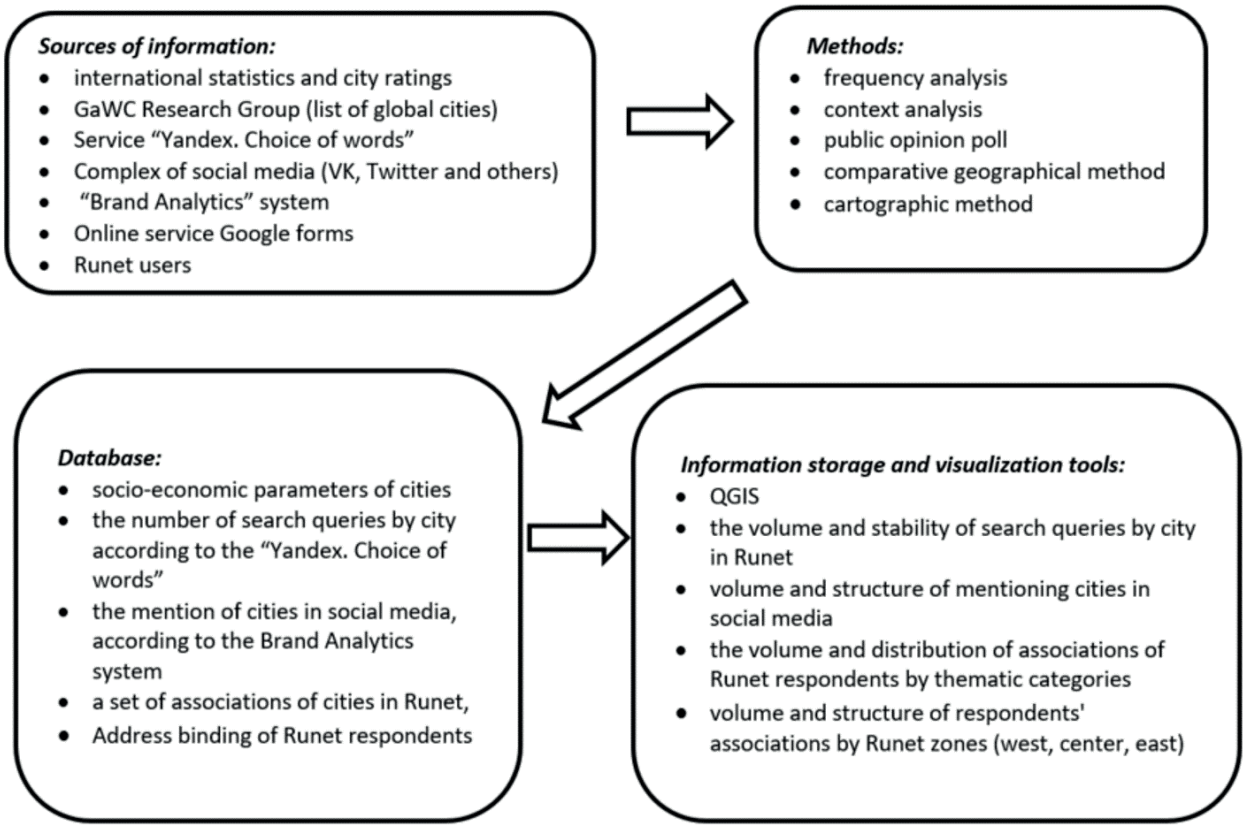


Fig. 1. Image of the leading global cities in Runet: conceptual scheme of the study

Instagram, Twitter and others[6]. These data are obtained with the help of a special setting of the Brand Analytics system[7], a business intelligence and reputation management tool developed by the Russian company I-Teco. The fourth block is presented by the results of a sociological survey among Runet users by a special method using the Google form service and aimed at understanding the main features of the city's image. About 2,000 respondents were involved in the survey, mostly from the regions of Russia[8]. The structure of respondents was distinguished by gender equality, an increased proportion of young people, and a variety of levels of education and qualification. All received data were processed and systematized, summarized in statistical charts and visualized as a system based on the consolidation of tabular data and spatial relationships using the functionality of QGIS.

RESULTS

Four global cities in the system of objective reality indicators

Characteristics that reflect objective reality are the basic component of the image frame of any territory (Vizgalov, 2011). Leading global cities are often comparable to entire countries in terms of geographic size parameters (Sluka N., Tikunov V., Chereshnia, 2019). They occupy special positions in the international division of labor, act as focuses of the globalization process and transnationalization of the economy, and their meaning and identity go far beyond their home countries. The role of *world capitals*, on the one hand, and the multifunctionality of centers and the attractive qualities of the urban environment, on the other hand, are well revealed both by individual quantitative indicators[9] (Table 1) and by numerous complex ratings, e.g. the Global Power City Index, Global City Competitiveness Index, Global Financial Centers Index 29, The Sustainable Cities Index, etc. Dozens of indicators of different qualitative fields and spheres of life and their groups are used while compiling these ratings.

By most indicators, the leading global cities are far ahead of other centers and, as a rule, "share" the leadership among themselves. The hallmark of each of them is the concentration of various government bodies, the large number of international organizations and business structures, leading universities and research institutes, accommodation facilities and cultural institutions, including primarily a rich museum fund. They are clearly distinguished both by the quality of the urban environment and by their integration into the system of global communications and flows. For example, flights are regularly operated from New York to 223 direct air routes, from Paris - 286, and London - 355 (Rating of innovative attractiveness ..., 2023, p. 174). At the same time, against the general background, Tokyo is primarily distinguished by its colossal population, the power of the economy and the development of higher education, New York - by a vast territory of the agglomeration and the representativeness of successful business, and European capitals - by performing a political function, and by the function of hospitality.

The scale and international significance along with multi-dimensionality and originality of the key competences determine a very broad start platform for building the perception of global cities by different audiences and social groups. A number of properties such as status, geographical location, country of origin,

[6]The initial data of the study were collected before the introduction of a ban in Russia on the social networks Facebook and Instagram and the recognition of the American company Meta, which owns them, as extremist along with its products.
[7]Brand Analytics. http://branalytics.ru
[8]Questionnaires of respondents from other countries were selectively taken into account during expert verification and clarification of the features of the «support frame» of the image.
[9]Demographia World Urban Areas. URL: http://www.demographia.com/db-worldua.pdf (access date 30.03.2023).

Table 1. Key Indicators of Leading Global Cities

Indicators	New York	London	Paris	Tokyo
City category in GaWC rating	α++	α++	α+	α+
Population of agglomeration, million people	21,6	10,6	10,9	38,1
Built-Up Land Area, sq.km	12093	1738	2853	8231
GDP, billion dollars 2021 (estimates)	1330	1064	1036	2205
Number of diplomatic missions	93	151	150	146
Number of TNC headquarters	107	75	55	149
Number of headquarters of international organizations	764	1242	1054	295
Number of unicorn companies	110	41	26	8
Number of leading universities	20	22	16	45
Number of scientific publications, 2016–2020, thousand	245	255	205	249
Number of congresses/participants, thousand people	47/…	177/78,8	190/111,7	117/27,9
Number of international tourists, million	14,0	19,6	19,1	10,4
Passenger air traffic, million people	135,5	170,9	105,2	126,3
The most popular cities in the world by the number of hashtags in the Instagram network, million	95,5	107,6	91,7	40,8

Compiled by the authors based on the data of international statistics and city ratings.

history, culture, security, etc. are integral. Part of them are especially significant for the global elite (for example, prestige, functions, business environment, location of the head offices of TNCs), part of them are for various segments of the vast and rapidly progressing global periphery, which has enormous human potential and natural resource base (accessibility, accommodation facilities, prices, tourist attractors).

The City Brand Index 2020[10] is aimed at comparing the perception of the largest cities among the widest possible audience. Its methodology involves the evaluation of 50 centers within 6 categories: *Presence* – international status, *Place* – external attractiveness of the city, *Prerequisites* – accommodation options and accessibility of public spaces, *People* – the friendliness of residents, *Pulse* – the activity of city life, and *Potential* – the prospects for education and business. The research is based on online interviews with 5,000 respondents aged 18 and over from 10 countries: Australia, Brazil, UK, Germany, India, China, Republic of Korea, Russia, USA and France. Online user data is weighted by key demographics and education levels.

Over the past 10 years, the leading group of ranking centers with a predominance of European cities has been fairly stable, but the leadership has changed periodically. According to the Index, calculated on the basis of data on the eve of the COVID-19 pandemic, London was at the head of the hierarchy. The top 10 cities after Sydney included two other leading global cities: Paris and New York. They were followed by Rome, Amsterdam, Vienna, Vancouver, Melbourne and San Francisco. Tokyo took only the 16th line of the rating. At the same time, the leading global cities differed quite significantly in terms of the set and combination of strengths. According to the international audience, London's positions were especially high in the categories *Presence, People* and *Potential*; Paris - in the category *Place*; New York - *Pulse* and *Potential*; and Tokyo - *Presence* and *Pulse*.

According to its purpose, the Brand Index contributes to the monitoring of the ranking table of cities, but is not devoid of the subjective component of the formation of respondents' ideas (other people's opinions, stereotypes, rumors), which, however, is very difficult to avoid in general; is not able to take into account the influence of information flows and the ratio of the main operating mechanisms in the perception of the centers (third-party and personal initiative); and besides, it is schematic, which seriously limits the possibilities of indicating the primary element base or the image frame of the studied agglomerations.

Global cities in the Runet information flow

A significant role in the image construction is played by both the traditionally increased creativity and eventfulness of the megacities' environment, and the power of the own mass media industry, which ensures the central positioning of the leading global cities in the international information flow, and their high attractiveness for the *external world*. This, in turn, is expressed by a huge number of relevant hashtags on the Instagram[11] network (Table 1). The capacity of the information base for building the image of the leading global cities in the Runet audience is very significant and surpasses all other large centers, but differs significantly with a high correlation in the distribution of sources of different genesis - the number of search queries and the frequency of mentions in social media (Table 2). In both cases, Paris and London share the lead by a noticeable margin, which can be considered natural, given the specifics of the development of political, business and cultural ties between Great Britain and France, on the one hand, and Russia, on the other. Cities consistently enjoy special prestige among the Russian establishment and popularity among the population as world-class tourist centers. In 2019, each of them was visited by more than 19 million international tourists, including tens of thousands

[10]IPSOS https://www.ipsos.com/en

[11]Social network banned in Russia.

Table 2. Leading global cities in the Runet information flow

City	The mentions of cities in the total social media, according to Brand Analytics, million	The search queries by city, according to Yandex. Selection of words, million	Search queries per number of mentions
Paris	6,522	24,345	3,73
London	5,801	22,358	3,85
New York	4,052	14,931	3,68
Tokyo	1,468	10,392	7,08
Los Angeles	1,138	5,913	5,19
Singapore	1,125	5,680	5,19
Seoul	0,961	2,910	3,03
Hong Kong	0,839	3,971	4,73
Shanghai	0,638	4,233	6,63

Data are given for a number of other global cities for comparison.

from Russia. It is also indicative that, according to our data, 42% of respondents visited the capital of France, and only 25% - the UK capital (Sluka, Kuzovlev, 2020). New York and especially Tokyo are far behind the European centers. The public information in the media about these cities is partly closed through the personal settings of Internet search engines.

Among the permanently acting sources of the cities' image, the influence of the discourse formed by the media is highly important. According to the histogram of published messages on the Internet in Russian (Fig. 2), the information base for building the leading global cities' image is quite stable throughout the year with a slight decrease in the summer period and, however, does not depend on seasonality in general. For example, for Paris and London, it averages about 20,000 messages per day; for New York – 15,000; and for Tokyo - about 4,000 messages a day. It is natural that its total size is largely adjusted by a combination of accidents (terrorist attacks, strikes, Khvorostovsky's[12] death in London) and major international events (presidential elections in France, governmental visits, international exhibitions, economic forums, etc.). Some of them, due to the inertia of forming any object's perception, are left in the minds of the audience and for a long time remain among the important features of the image. For example, Brexit has become a hallmark not only of Great Britain, but also of its capital.

According to Brand Analytics, the structure of published messages on the Internet in Russian is quite specific and generally similar. In the case of the four cities, the category *incidents* accounts for about 10%, the sphere *economics and politics* 10-15%, and the main part - more than 2/5 – is taken by only two nominal thematic areas - "entertainment" and "personality" (Fig. 2). For example, in Paris - 22% each; and London - 16% and 35%, respectively. In the case of Paris, this is determined by the targeted promotion of the strong points of urban infrastructure, services and tourist attractions (sights, museums, hotels, restaurants, cafes, etc.). In the case of London it can be explained by satisfying the existing interest of the audience in famous historical personalities (great military leaders, politicians, artists, architects, artists, etc.) and the modern elite of the creative class (Florida, 2005), serving as a role model and forming public opinion, being actively involved in the global world.

"Support frame" of the global cities' image in Runet

The nature of the information flow, along with some other mechanisms, largely determines the private images or features and properties of the city, which make up its holistic perception in the recognition of the selected audience and the image frame is being formed. You can study them from different perspectives. One possible approach is to rely on two categories. The first one is the "common field" or "richness" of the image as the combination of all private images. Theoretically, their number is infinite and includes many thematic aspects of both the real and imaginary worlds, but in practice it depends on the competence of the respondents and is reasonably limited. The second category is the *focus* of the image - the level of identification or recognition of the object's features by a group of respondents. It can be both mass and very selective. It can occur on the basis of one or more properties of an object. The combination of the "general field" and "focus" scales allows to operate with a series of models of the "support frame" of the image. At one pole there is a model with a large number of features and a high localization of associations around one feature of the city (image-core), at the opposite - with a small and discrete associations. Naturally, there are a number of transitional options between these poles (Fig. 3).

Based on the proposed views and relying on the results of a sociological survey conducted by an Internet questionnaire using the Google Forms service, the *support frame* of the leading global cities' image in Runet is described by a single model with a very wide field richness and a polynuclear structure. They are identified through hundreds of associations, with a maximum for Paris and a minimum for Tokyo, which, when generalized, are reduced to almost two dozen main components of a predominantly cognitive category (Fig. 4). At the same time, the repeatability of the stereotype of ideas about a common modern city as is especially high (beautiful, crowded, multi-ethnic, expensive, fashion, culture) and its main functions - political, business, financial, transport, cultural. In contrast to the City Brand Index, the general construct of perception of global centers in Runet practically does not reflect their international status, accommodation opportunities, the goodwill of residents, the prospects for education and business are not assessed. In addition, there are no mentions of the largest global agents of the economy - parent TNCs and politics - the UN (headquarters

[12]Dmitry Khvorostovsky – famous Russian opera singer.

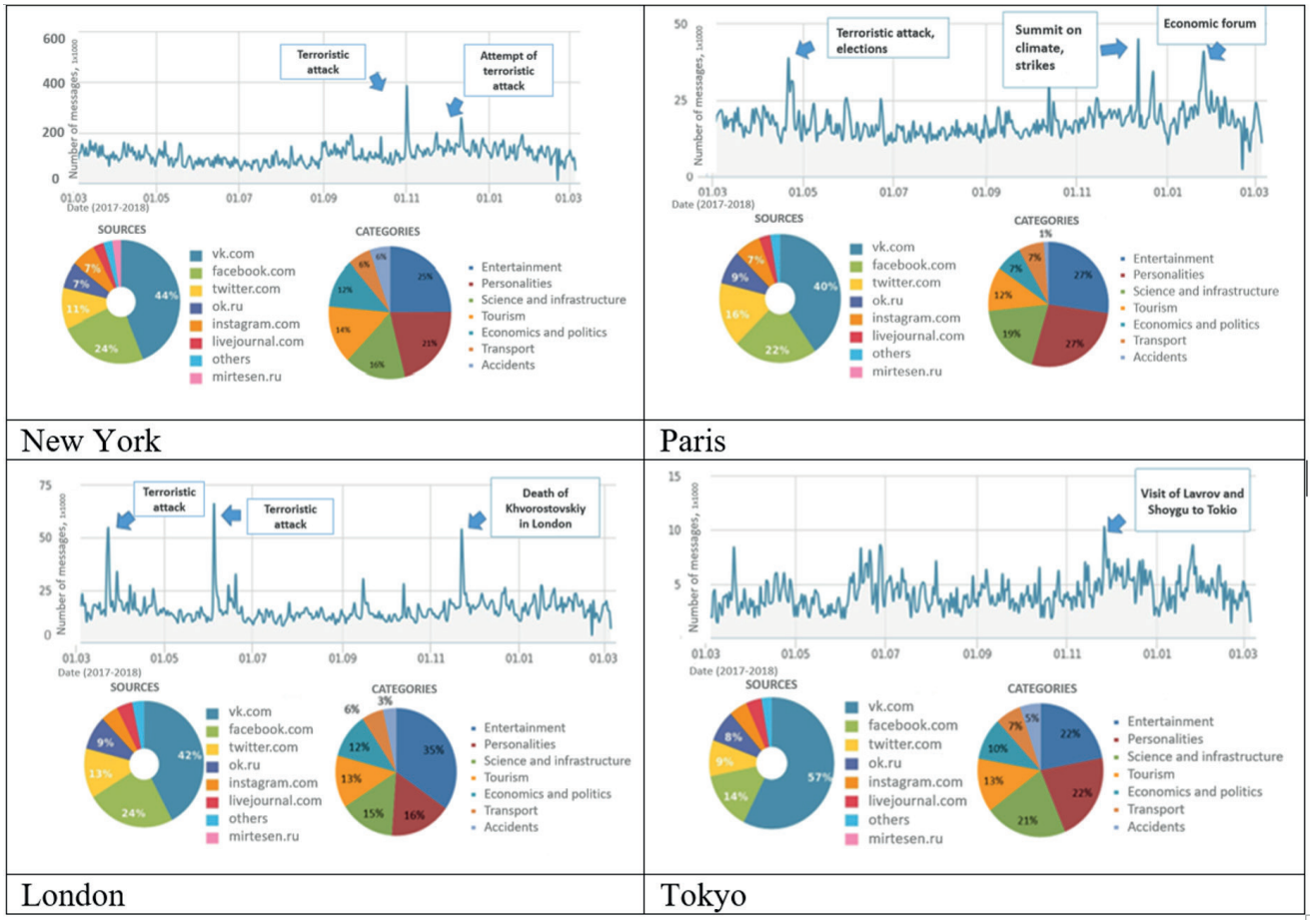


Fig. 2. Distribution of published messages about New York, Paris, London and Tokyo in Russian on the Internet

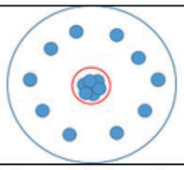
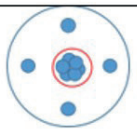
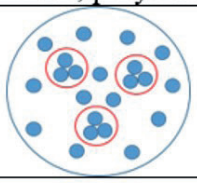
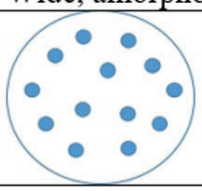
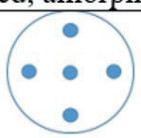
Features		Image field richness (number of images)		
	Subcategories	High	Medium	Low
Variants of the "image framework"				
Image focus (number of core images)	One	Wide, mononuclear	Limited, mononuclear	Narrow, mononuclear
				
	Several	Wide, polynuclear	Limited, polynuclear	Narrow, polynuclear
				
	None	Wide, amorphous	Limited, amorphous	Narrow, amorphous
				

Fig. 3. Theoretical models of the city's image support frame

in New York) and its specialized agencies such as UNESCO (Paris), the International Maritime Organization (London), the UN University (Tokyo), etc., a very modest number of associations with products of mass culture such as literary heroes, characters of television series and the film industry. It is curious that in the latter case, London is perceived primarily through the characters of fiction books (Sherlock Holmes, Harry James Potter), Paris – through music (classical Moulin Rouge cabaret; singer, composer and poet Charles Aznavour), New York – through cinema (comedy-drama television series Sex and the City, Christmas comedy HOME ALONe), and Tokyo is not identified in any way.

The polynuclear nature of the image support frame of the leading global cities, in addition to the block of above mentioned stereotypes and functions, is determined by at least three more major elements. The first one of them is being an official and unofficial capital. In contrast to the international audience, the Russian-speaking segment of the Internet is characterized by building an idea of the metropolis place not in the entire world, but primarily at the national level. The identification of the city and countries occurs in a variety of ways, starting with physical and geographical data, historical events, political and administrative structure, cultural traditions and ending with the specifics of national cuisine. For example, tags for Paris are croissants, baguettes, onion soup, frog legs, etc., for Tokyo - sakura, anime, fish and seafood, sushi, etc.

The second element is a combination of prestigious urban locations and their parts – business centers, historical districts, shopping streets, parks, etc. The most popular component for New York is Manhattan, for Paris – Montmartre and Champs Elysees, for London – City, for Tokyo – Shibuya. At the same time, for the capital of France, the "local Manhattan" - La Defense, and the nearest

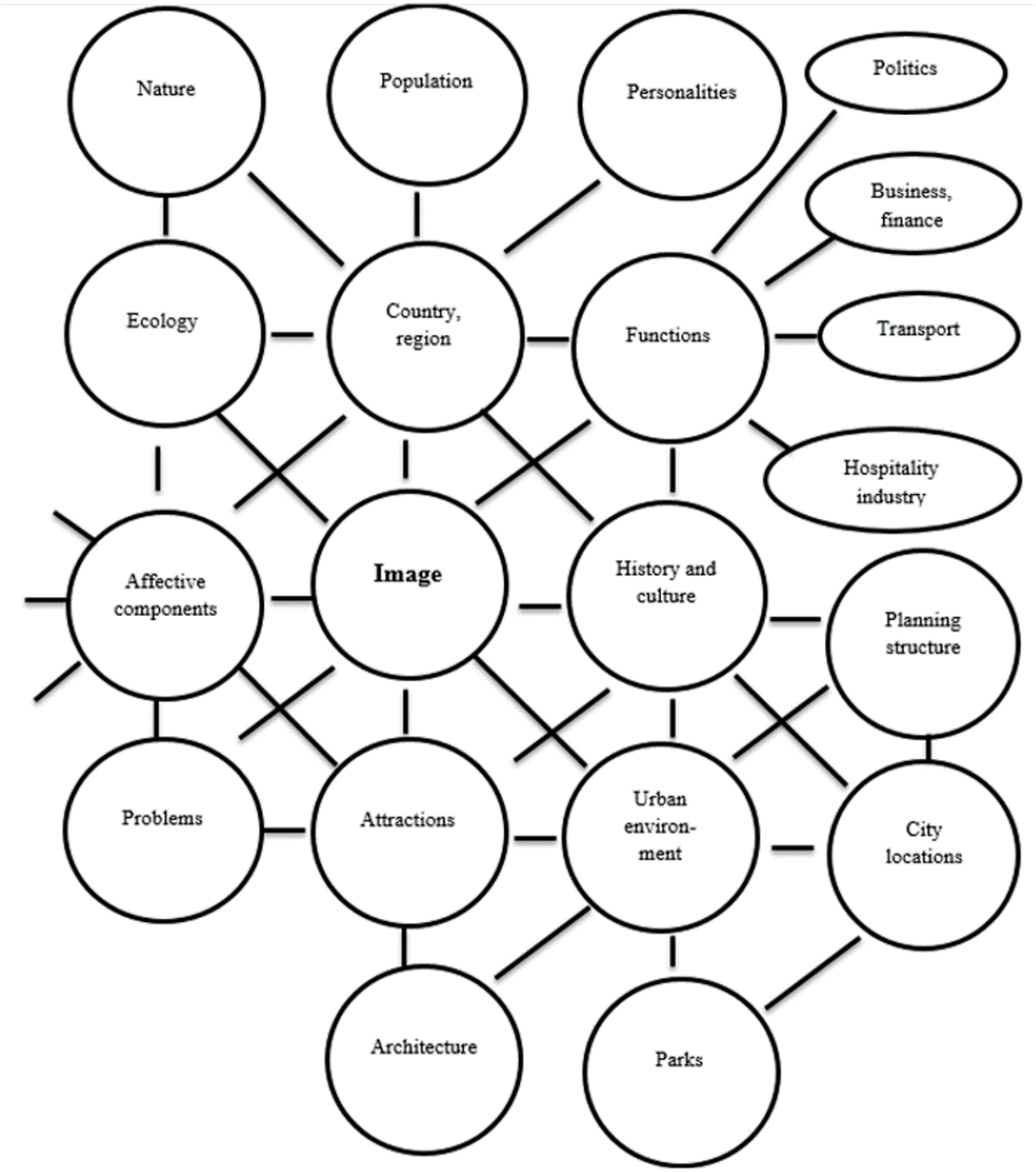


Fig. 4. The construct of the image support frame of the leading global cities in Runet

suburbs, including Versailles, are not mentioned, as well as the Docklands - a young business district, part of which - Canary Wharf, the second financial center of London.

Finally, the third element is the world-famous architectural landmarks of cities, the vast majority of which clearly gravitate towards their historical center (the Louvre, the Eiffel Tower, Big Ben, the Statue of Liberty, etc.). Compared to museum valuables, which require in-depth knowledge to assimilate, it is probably the face-to-face or distance visual acquaintance with the brands of cities and countries that makes a special contribution to their perception.

With a common support frame, the detailed configuration of the leading global cities' image is highly individual. This is already noticeable through a very diverse ratio of the cognitive and affective categories of the image. Thus, with the equivalence of the general field and the structure of the image due to the contribution of emotions, feelings and sensations, the perception of Paris differs noticeably from London, New York and Tokyo, which is well read when visualized through *tag clouds* (Fig. 5). In the first case, there is an emotionally sublime idea of the city (tags - romance, spring, love, etc.), which probably has developed as a result of a long and deep penetration of French culture into the minds of the respondents. In particular, it is known that many generations of Russians were brought up on the outstanding French national historical and adventure novels and their screen adaptations[13]. In other cases, much colder tones of perception of the cities are obvious: for London - with a relative emphasis on political aspects, dating back to the days of the British Empire; for New York with its dry business style; and for Tokyo through technological advancement as a result of the "Japanese economic miracle".

With the overall stability of the image support frame of the leading global cities in Runet space, its configuration is modified in the meridional direction. This may be partly due to both the quality of the audience (age, education, qualifications, etc.) and the distance factor - the remoteness of a particular object from the place of residence of the respondents and, accordingly, the mass tourism, which provides a more critical perception of the city. Thus, according to our data, about 60% of respondents from the regions of the European part of Russia visited Paris, and from the Asian part - less than 40%. As a result, in the western segment of the Runet, in addition to the classic features, a number of aspects are especially marked, including manifestations of environmental and socio-ethnic problems, e.g. traffic jams, dirt, strikes, homeless people, immigrants, etc. In Moscow, national brands in fashion, gastronomic delights and the entertainment industry have an increased weight in the structure of the image of the metropolises. In the east, the capital of France is identified mainly through architectural and historical and cultural attractions such as Eiffel Tower, Louvre, Montmartre, Champs Elysees, etc. (Fig. 6).

DISCUSSION

The proposed research algorithm based on a set of methods and the use of social media analysis capabilities on the eve of the COVID-19 confirmed its efficiency in general and made it possible to identify pandemic following results:

- The high attractiveness of the leading global cities among Runet users and their clear superiority in terms of the information base for building an image over other large

Paris

London

Tokyo

New York

Fig. 5. Image tag clouds of Paris, London, New York and Tokyo

[13]As noted by L.N. Nabilkina: "More has been written about Paris than about any other city in the world. Hemingway and Victor Nekrasov, Balzac and Henry Miller, Ilya Ehrenburg and Alexei Tolstoy, Victor Hugo and Erich Maria Remarque wrote about Paris. ... It is either cold and gloomy, as in the works by Henry Miller, or joyful and affable, like by Ernest Hemingway, or attractive and deceptive, like by Honore de Balzac, or hospitable and attractive, like by Alexandre Dumas» (Nabilkina, 2012).

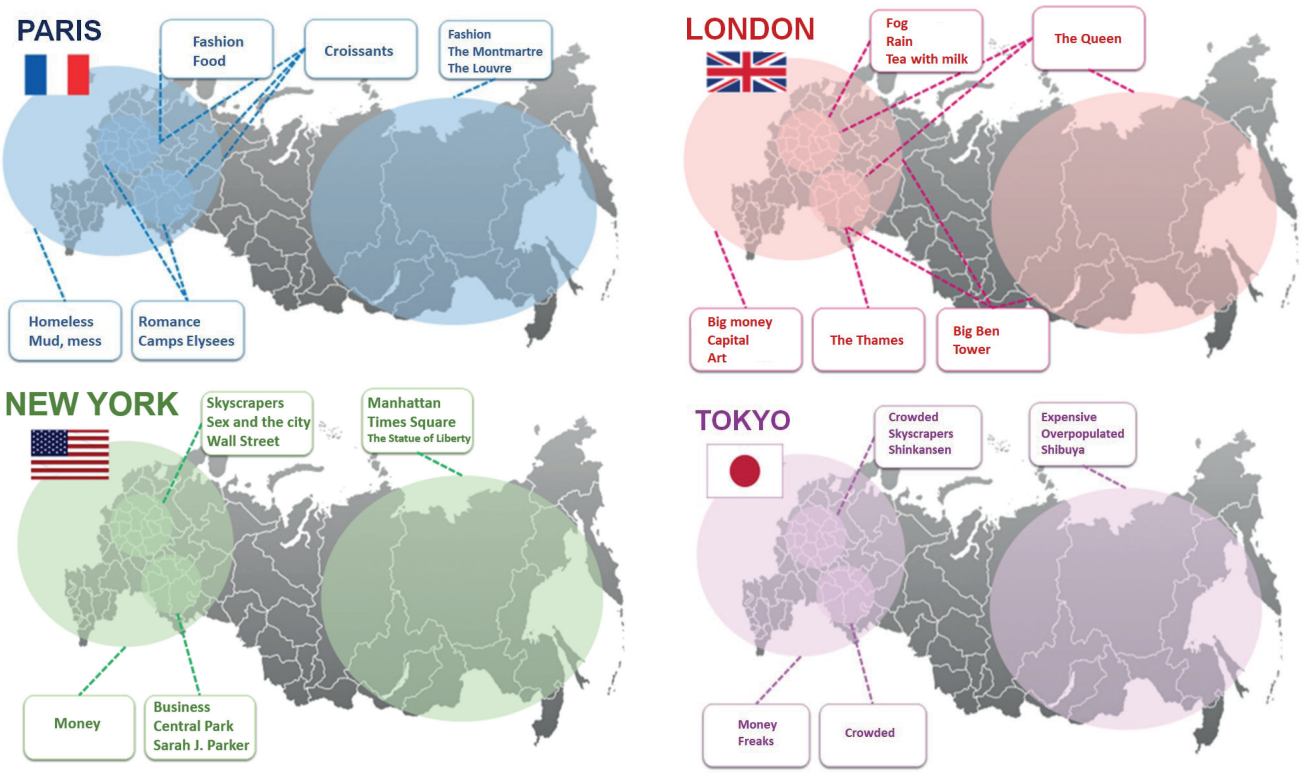


Fig. 6. Priorities in the global cities' image support frame by territorial zones of the Runet (fragments)

agglomerations, with the obvious leadership of European capitals and some backlog of Tokyo;

- The similarity of the structure of the proposed social media content with significant differences in the ideas that dominate the Runet audience, which, with a certain degree of generalization, are largely consistent with the uniqueness of the key competencies of cities;

- A very wide field for the formation of the image frame of the centers, often with a reflection of the "unique, special, individual" (Mironenko, 2001), but with a noticeable predominance of the objective over the subjective component, cognitive over affective components and the tangible weight of the latter in the case of Paris;

- The stability of the image frame in time and space can be partly corrected, on the one hand, by the eventfulness factor within a particular object, and, on the other hand, by the factor of its geographical proximity to the zonal segments of the Runet audience;

- The unity of the model and the relative limitedness of the image support frame, with the key role, on the one hand, of the stereotypes of a large city, and on the other hand, three broad collective categories: official or unofficial "metropolisness", prestigious urban locations and world architectural brands.

At the same time, it should be noted that the used approach cannot claim to be universal and comprehensive. The authors acknowledge: firstly, despite the solid body of scientific work, the incompleteness of the discourse within the framework of the theory of global cities and the absence of a definition and clear criteria for their identification. Although, the authority of the quartet of world centers - New York, London, Paris and Tokyo - is beyond doubt. Secondly, certain limitations of the methods used and the relevance of the resulting digital artifacts. In particular, a big problem is cleaning the raw data from advertising products. Thirdly, the possible variability of the research information base, depending, on the one hand, on the choice of a set of social media, and on the other, on the representativeness and quality of the Runet audience and its territorial zones. The study revealed, for example, significant differences in the perception of cities by respondents who have visited them and those who have not. However, real data on the totality of Runet users and their spatial differentiation are not yet available in reliable sources. Fourthly, the relative inaccessibility of widespread use of the resources of the Brand Analytics system. Fifthly, the analytical capabilities of the proposed approach and research methodology have not been fully studied at the moment; they require further clarification and testing, as well as broad scientific and applied understanding. The authors see prospects in monitoring the image of leading global centers in the post-COVID period, expanding the research area to include cities of different classes, developing and testing methods that make it possible to more accurately select the composition of respondents, attracting new data sources, for example, mobile operators, analyzing international experience and best practices of symbolic politics. The implementation of these directions will allow us to gain new knowledge about the image frame of the largest cities in the world, the features of its formation and to formulate a package of practical recommendations for interested consumers.

CONCLUSION

The revolution of recent decades in the field of communication, production and processing of spatiotemporal information has led to the revival of many areas of geographical research that faced insurmountable technological problems in collecting data at the end of the twentieth century. They had a particularly painful impact on the development of imaginal geography, based, according to N. Zamyatina, on a certain way of organized, internally holistic information about a place. New possibilities for using the Internet metric method, revealed and tested in the article on the example of leading global cities, made it possible to continue the traditions of the Maergoiz school of geographical study of cities of the foreign world and the figurative approach developed at the Department of Economic Geography of Foreign Socialist Countries (now Geography of World Economy) of the Geographical Faculty of Lomonosov Moscow State University more than 30 years ago. It seems useful to continue research at the intersection of international geo-urbanism and imaginary geography on the proposed principles to solve both scientific, educational and educational problems, and to develop a program for ensuring the growth of competitiveness and international influence of Russian cities in the face of ever-new global challenges.

REFERENCES

Beaverstock J.V., Smith R.G., Taylor P.J. (1999) A Roster of World Cities. Cities. 16(6), 445–458.

Bourdieu P. (2001) Practical meaning. Saint-Petersburg: Aletheia. (in Russian).

Demidova M. V. (2014) «Symbolic capital» by P. Bourdieu and «capital» by K. Marx // Bulletin of Vyatka State University for the Humanities. 11, 27-32. (in Russian).

Edelman M. (1964) The symbolic uses of politics. Urbana: Univ. of Illinois press.

Efremova V.N. (2015) Some theoretical features of the study of symbolic politics // Symbolic politics. Collection of scientific papers. Ser. «Political Science» of the Russian Academy of Sciences. INION. Issue 3 Political functions of myths. Moscow: INION RAS. P. 50-65. (in Russian).

Florida R. (2015) Cities and the creative class. New York - London, Routledge.

Friedmann J. (1986) The World City Hypothesis. Development and Change. 17(1), 69–84.

Geddes P. (1915) Cities in Evolution: An Introduction to the Town Planning Movement and to the Study of Civics. London, Williams &Norgate.

Global Cities Innovation Index: 2023, Moscow, HSE Publ., 2023, 316 p. (In Russian)

Hall P. (1966) The world cities. London: Weidenfeld & Nicholson.

Kalutskov V.N. (2008) Landscape in cultural geography. Moscow: Novyj hronograf. (in Russian).

Kiryanova L.G. (2015) The model of the image of a tourist destination within the marketing approach to the management of tourist regions. Vestnik Kemerovskogo gosudarstvennogo universiteta. 2 (62). Vol. 7. 3. 191-195. (in Russian).

Kolosov V.A., Tikunov V.S., Zayats D.V. (2000) The world in the mirror of the media: the use of anamorphoses in politico-geographical analysis. Moscow: Vestnik Moskovskogo Universiteta. Ser. 5. Geografiya. 2, 15–22. (in Russian).

Lappo G.M. The concept of the supporting frame of the territorial structure of the national economy: development, theoretical and practical significance. Izvestiya of the Academy of Sciences of the USSR. Geographic series. 1983. No. 5. pp. 16–28. (in Russian).

Malinova O.Y. (2010) Symbolic politics and the construction of macropolitical identity in post-Soviet Russia // Moscow. Polis. Political studies. 2, 90-105 (in Russian).

Meyer T. (1992) Inszenierung des Scheins.Voraussetzungen und Folgen symbolischer Politik. – Frankfurt am Main: Suhrkamp.

Mironenko N. S. (2001) Country studies: Theory and methods. Moscow: Aspekt-Press. (in Russian).

Nabilkina L.N. Paris in the Mirror of French Literature. Mir nauki, kul'tury, obrazovaniya, 2012, no. 1 (32), p. 249–251. (In Russian).

Okunev I.Y. (2020) Capitals in the mirror of critical geopolitics. Moscow: Aspect Press. (in Russian).

Potseluev S.P. (2012) «Symbolic politics»: The history of the concept // Symbolic politics. Collection of scientific papers. Center for Social Scientific and Information Research Department of Political Science; Executive Editor: Malinova O.Yu.. Moscow: INION RAS. 17-53 (in Russian).

Sarcinelli U. (1987) Symbolische Politik. Zur Bedeutung symbolischen Handelns in der Wahlkampfkommunikation der Bundesrepublik Deutschland. Opladen: Westdeutscher Verlag.

Sassen S. (1991) The Global City: New York, London, Tokyo. Princeton, New Jersey.

Sluka N., Tikunov V., Chereshnia O. (2019) The geographical size index for ranking and typology of cities. Social Indicators Research. 144(2), 981–997. DOI: 10.1007/s11205-019-02069-0

Sluka N.A., Karyakin V.V., Kolyasev E.F. (2020) Global cities as hubs of new transnational actors. Kontury global'nyh transformacij: politika, ekonomika, pravo. 13(1), 203–226. (in Russian). DOI: 10.23932/2542-0240-2020-13-1-11

Sluka N.A., Kuzovlev S.S. (2020) The modern image of Paris in the Russian-speaking segment of the Internet. Vestnik Moskovskogo universiteta. Seriya 5: Geografiya. 2, 110–114. (in Russian).

Toffler A. Power Shift. (2003) Moscow: OOO «Izdatel'stvo AST». (in Russian).

Tokbulatova ZH.E., Kolosov V.A. (2018) The image of Kazakhstan in Russia in the mirror of public opinion. Regionalnye issledovaniya. 2 (60), 58–67 (in Russian).

Vizgalov D.V. (2001) Branding of the city. Moscow: Foundation «Institute of Economics of the city». (in Russian).

Vizgalov D.V. (2008) Marketing of the city. Moscow: Foundation «Institute of Economics of the city». (in Russian).

Zamyatin D.N. (2006) Culture and space: Modeling of geographical images. Moscow: Znak. (in Russian).

Zamyatina N.Y. Harutyunyan K.M. (2005) The relationship of the images of European countries in the press (based on the newspapers The Times and The New York Times. Vestnik Moskovskogo Universiteta. Ser. 5. Geografiya. 5, 60–65. (in Russian).