Geographical assessment of region’s parameters

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Abstract. The variety of geographical studies of a region is as great as the diversity of its “portrait” – characteristics and phenomena associated with it. A region has never been considered in isolation from its synonymous concept “district”. The most common interpretations of ‘region’ in the scientific environment and in the information space, its generally accepted definition remains the subject of scientific research, disputes and discussion. In accordance with the tradition established in recent years, the minimum administrative-territorial area in the territory, called a region, is a constituent entity of the Russian Federation. The article analyses foreign and domestic studies of the definition of a region, clarifies the author’s interpretation, and evaluates the parameters of the territorial taxon. The main problems of common features of the visualization of a region, its attractiveness, socio-economic factors of the vital activity of the population (standard of living, living conditions, quality of life), attitude to their region from the point of view of substantiation of their genesis and subjectivity of parameters are formulated. The article presents the results of a sociological survey conducted within the framework of quantitative-qualitative methodology among the respondents of the Volga Federal District. The analytical assessment of the most mass responses of the survey participants is given, visualized in the form of graphs.

1. Introduction
Geographical study of regions has a developed empirical basis. After the creation by P I Rychkov of the first model of the regional description “Orenburg Topography” (1762) in Russian science, special attention was paid to the regions from the late 1950’s – early 60’s. At that time, works of N N Kolosovsky, S A Kovaleva, N N Nekrasov and others were published, which laid the foundation for subsequent geographical research on problems. In the process of studying territorial differentiation and the public environment, almost every scientific direction of geography came to the problems of a regional organization. In the works of V V Pokshishevsky, G A Isachenko, B B Rodomana, S Yilmaz, J Hegedus, M E Bell [1-4] many aspects of the concept of region were addressed for the first time. Depending on the goals and objectives set, research emphasis was placed. The development of a hierarchical system of integral forms of the territorial organization of society is associated with the definition of the primary “indivisible” territorial part of society, which, in fact, is the primary object of regional studies. To determine simple, indivisible to smaller independent parts of territorial objects, E B Alaev introduces the concept of “simplex” [5], A G Topchiev – “operational territorial unit” [6], A Yu Skopin – “locality” [7]. In studies of this phenomenon of recent years, scientists consider, as a rule, private issues: the justification of the transcontinental mega-region of Steppe Eurasia [8], the economic stability of the countries of the Greater Baltic Region [9], the natural resource zoning of the Far Eastern Macroregion [10] and others.
The purpose of the article is to present a comprehensive analysis of the concept of “region” on the basis of the conducted research and to make a geographical assessment of its individual parameters taking into account the characteristic characteristics of the territory.

In our study, the use of the concept of “region” requires additional clarifications of its content, since in the theory and methodology of scientific knowledge, the universal concept of “region” is more widely used, first of all. Today, geographical thought focuses on the fact that the category “region” is not an analogue of the concepts of “geographical space” and “territory”, but a term expressing the field of creative activity, which best records typical manifestations of “place”.

Modern scientific discourse provides for the use of the term “region” in several mutually exclusive meanings. A huge set of entities, usually called “regions” actually covers a wide range of completely different phenomena. Many foreign researchers agree that the region implies some “geographical proximity and contiguity” [11], “interdependence” [12], “geocultural homogeneity” [13], “a sense of community within the integrity of the territory” [14], “regional consolidation of social space” [15]. In the context of system analysis, the term “region” in the meaning of “subsystem” has been introduced into circulation. Its interpretation refers to large geographical areas, for example, such as: Foreign Europe, Africa, the Middle East, etc. At the same time, scientists often refer to administrative regions, economic regions, working regions and statistical regions [16].

From the point of view of G Goke, M Huther [17] the region is considered from the position of an independent subject of social activity, an actor of the fields of political, social, economic and other. Methodologically significant attempt by a number of researchers (R Jovovic, M Draskovic) in justifying modern approaches for analysing regional development in the context of the transition to a new model of sustainable growth. The first approach is that the region provides the people with the resources and conditions that determine the social and political development strategies of the territory. The second is based on fundamental processes, the implementation of which in the region is determined by the concept of regional planning [18].

In general, the definition of a region does not go beyond the geographical subsystem. In terms of understanding the domestic experience of interpreting the concept of region, significant interest is given to the works of Yu N Gladkogo, A G Druzhinin, V A Kolosova, A A Chibilev, A I Chistobaeva [19-22]. Scientists consider the space of the region as a certain environment of political, geographical, economic, intercultural and other communications, limited by the framework of relative homogeneity. “The term ‘region’ in most cases is characterized by a large-scale criterion” [19, p. 27].

Regions as organized social spaces in scientific research of recent years are ranked according to certain constitutive functions: donor regions and recipient regions, industrial and agrarian regions, etc. Geography cannot be limited to any certain range of phenomena of nature or human life, it should “cover all kingdoms of nature at once and, at the same time, man” [23, p. 136].

In the “Basic Provisions of Regional Policy in the Russian Federation” region means “a part of the territory of the Russian Federation that has a community of natural, socio-economic, national-cultural and other conditions. The region may coincide with the borders of the territory of a subject of the Russian Federation, or unite the territories of several subjects of the Russian Federation” [24]. These are the subjects of administrative, political and economic activity of the country; the term “regions of Russia” currently implies 85 constituent entities of the Russian Federation.

The main methodological problem is the study of four parameters: the general features of the visualization of the region, its attractiveness, the socio-economic factors of the life of the population (standard of living, living conditions, quality of life), attitude to their region.

The concept of territory includes not only a specific amount of information and knowledge, but also some figurative ideas about it in the imagination of individuals and communities [25].
2. Materials and Methods
The methodological basis of the study is:

- methodology of geographical science and spatial cognition, fundamental ideas of cognitive design of images of the region in public consciousness and their representation in culture;
- the method of situational analysis, in particular SWOT-analysis, among those applied in the selection of strategies for the development of the research object;
- sociological method of research within the framework of quantitative and qualitative methodology: questionnaire survey of residents of the Volga Federal District (N=180); interviews with representatives of management structures of the Orenburg region (N=12).

3. Results and discussion
The situation of self-isolation in the conditions of the spread of COVID-19 dictated the need for the use of online research. The survey was conducted in the form of an anonymous questionnaire via the online platform Google Docs. Recruitment of respondents was carried out in April 2020 using the official group of the program on the social network Facebook, and e-mail questionnaires. The questionnaire included four blocks of closed and semi-closed questions related to common features of visualization of the region, dominants of attractiveness, socio-economic factors of vital activity of the population (standard of living, living conditions, quality of life), attitude to their region. The sample was 32% of the total population; it was formed randomly according to the territorial principle and was dependent on the readiness of the interviewees to provide data characterizing their own position in relation to the region of their permanent residence. The socio-demographic profile of the participants is represented by 180 people aged between 20 and 45 (average age 27), 62% of women and 38% of men. The study involved students of the specialty No. 44.00.00 “Education and Pedagogical Sciences” from 8 higher education institutions of the Volga Federal District. The geography of the survey is represented by cities: Orenburg, Ufa, Samara, Nizhny Novgorod, Saransk, Naberezhnye Chelny, Perm, Glazov. Interpretation of the results was carried out using a package of computer programs for statistical processing of data IBM SPSS Statistics.

3.1. Visualising a profile (“portrait”) of the region
The logic of the study was based on the identification of objective ideas about the region. “The presence of a geographic image actually ‘marks’ region” [26, p. 229]. For residents of the Volga Federal District, the region in an archetypal-shaped context is identified as an “organized social space” with a community of natural, socio-economic, national-cultural and other conditions. The first set of questions in the questionnaire asked respondents to assess the “portrait” of their region (Figure 1).

![Figure 1. Respondents’ assessment of the “portrait” of their region, % (compiled by the authors).](image-url)

About 84% of respondents named territoriality, location, presence in a certain geographical context among the main region-forming factors. Geographical space in the image of the region appears as the most meaningful within the framework of a particular historical epoch by 67% of subjects. Cultural-historical and natural cognitive saturation of the region is reflected in the most striking features of its image, as pointed out by 73%. In the context of the methodology of the territorial
approach, it was fundamentally important for us, during the analysis of the questionnaire results, that
the respondents consider the territory not as a factor, an inert environment or a resource, but as a creative
beginning, which recreates its image, the environment of forming region-forming connections and is
inseparable from regional development processes. In other words, the region as a territorial formation,
formed in the course of historical development, cannot exist outside the territory, which acts as a
dominant in the representation of its image.

3.2. The attractiveness of the region
The second set of questions concerned the respondents’ assessment of the attractiveness of their region.
Regions use not only their territory's potential, but also various political and economic tools to create an
attractive environment. Regional marketing is one such tool. It is designed to provide a favourable image
of a region in order to “attract” investors. In regional terms, the picture of the region's attractiveness
looks very optimistic (Figure 2). The majority of respondents (63%) favoured a region's attractiveness
as one of the most important conditions for stable regional development. More than 60% of respondents said that the combination of a favourable investment climate, dynamically
developing infrastructure and accumulated experience in supporting major projects makes regions more
attractive in terms of investors.

![Figure 2. Respondents’ assessment of the region’s attractiveness, % (compiled by the authors).](image)

Among the reasons for the declining financial attractiveness of the regions, 58% of those surveyed
cited the introduction and expansion of sanctions against Russia, unstable oil prices, and the unstable
position of the rouble against the dollar. In third place, respondents ranked the region's tourism
attractiveness. Over 43% of respondents make temporary trips away from their permanent place of
residence for therapeutic, recreational, cognitive, physical and sports, professional and business,
religious and other purposes without engaging in activities attributed the availability of tourist resources
and the level of infrastructure in the region.

3.3. Socio-economic factors of the life of the population in the region
The third set of questions in the questionnaire was aimed at assessing by respondents the socio-economic
factors of the life of the population in the region. Unlike natural-climatic factors, which determine the
external conditions of life of the population, socio-economic factors are both the conditions in which
life takes place and the characteristics of its components. As a rule, the demographic, social and
economic conditions described by the relevant indicators are the socio-economic factors. The same
indicators describe the very vital activity.

Socio-economic factors (in their broadest sense), in combination with environmental ones, are
reflected in a number of integral concepts, among which the respondents primarily indicated the standard
of living, living conditions and quality of life. These three categories are closely interrelated,
complementary, partially intersecting (Figure 3).

As indicators of the living standards of the population in the region, 67% of respondents indicated
the size of wages of workers and pensions, average per capita income, social payments, income
differentiation by population groups (including the gap between the richest and poorest), the share of the
population with an income level below the subsistence level.
When analysing living conditions, the respondents (70%) were more likely to choose housing conditions (area, quality, quality of housing), transport accessibility, environment, employment, and working conditions from a wide range of indicators. When assessing the quality of life in the region, 76% of respondents noted the degree to which material, spiritual and social needs were met. Young people (54%) also noted the importance of the conditions in the region for the mobility (social, spatial, academic) of the population.

Figure 3. Respondents’ assessment of socio-economic factors of population life in the region (compiled by the authors).

As a concrete example, we give the answers of respondents to the Orenburg region. Residents of the region were asked to evaluate the improvement of Orenburg (Stapel scale from $-5$ to $+5$ was used for the assessment). The results of the answers also took into account the answers of non-residents who visited Orenburg, that is, only 66 answers were taken into account: the minimum score $-330 = 66 \cdot (-5)$, and the maximum $330 = 66 \cdot 5$ (Figure 4).

Figure 4. Assessment of city improvement by local residents (compiled by the authors).

Figure 4 shows that citizens negatively assess the condition of roads, express concern about the high proportion of traffic accidents and are generally dissatisfied with public transport. To the question regarding the desire to leave Orenburg, 69% of respondents answered positively, explaining their choice by dissatisfaction with the standard of living in the region. At the same time, 80% of Orenburg residents are confident that the city is known outside the region.
3.4. Attitude to their region
The fourth set of questions implied an assessment of the respondents’ attitude towards their region (Figure 5). The assessment by residents of their region is quite unanimous: 38% of respondents answered positively this question. Most of the responses were negative. What connects residents with their place of birth? The leading statement among the Russian-speaking population of the regions was “presence of relatives” (about 44%), and among the representatives of the title nation – “family ties” (“I was born and grew up here”) – 56%.

At the same time, respondents noted that in large cities of the regions “family ties are lost” and “their value is lost”. Of no less importance in the region are elements of the historic natural landscape framework (60%), the planning and architectural structure of the settlements (52%), the presence of large residential areas with ensembles of main streets (47%), squares, parks, boulevards and public gardens (43%), as well as sports and recreation facilities (41%).

Interestingly, more than 53% of respondents cited “having a good job” as a reason for living in the region. It should be noted that the criteria for a “good job” differ from one type of region to another. That is why a significant proportion of rural’ and small town’ residents believe that they “have nothing in common with this region and would like to leave it” - 19% to 26%, respectively. And despite their critical attitude towards their region, the majority of respondents identify themselves primarily as residents of their region. Residents were also asked to name circumstances that “link” them to their region of residence. The majority of respondents (68%) have a “negative” reaction to the region and would like to leave it.

4. Conclusion
In the course of the conducted research, the approaches, in which the region acts as a subject of scientific research of foreign and domestic scientists, have been analysed. We interpreted the concept “region” in the methodology of territorial, systemic and phenomenological approaches. In the context of the territorial approach it is fundamentally important to consider the territory not as a factor, inert environment or resource but as an independent acting beginning which creates its “portrait”, environment of formation of region-forming relations and plays a significant role in the processes of regional development.

In other words, the region as a territorial formation developed in the process of historical development cannot exist outside the territory that acts as a dominant in visualizing its essential features. In a systemic approach, the region is a complex entity consisting of a set of elements (structural parts) that interact: nature, population, economic base and infrastructure. With all the multiplicity of regional structures (physical-geographical, socio-economic, ethnol-demographic, etc.), each such system has integrity (a single goal of functioning), autonomy (conjugation of structural elements) and stability (equilibrium of development parameters). Reliance on the principles of the phenomenological approach makes it possible to understand the figurative and geographical potential of the region. In the usual contexts of perception, each of the elements appears in the form of powerful, bright and large-scale
geospatial signs, symbols, characteristics that describe the image of the region. These images relate mainly to “exogenous geographical images” (D N Zamyatin), that is, to those in the formation of which adjacent (neighbouring) images play a significant role.

In our study, the integration of these three methodological approaches reflected the dialectical unity of their constituent components, a certain integrity, satisfied the condition of relative completeness. At the same time, it was taken into account that the approaches under consideration provide a specific “local connection”, cover a versatile range of regional ideas, organically embedded in the design of “local manifestations”, complementing and enriching each other. The results of the sociological survey show that the respondents of the Volga Federal District showed the greatest interest in the parameter “socio-economic factors of life in the region” out of the four sets of questions of the survey.

The weighting of living standards, living conditions and quality of life largely determines the level of well-being achieved in each individual region, the social environment of the population and its settlement, taking into account internal territorial interrelationships.

The results of this study will be useful for the development of author’s concepts, design of territorial strategic development programs by regional authorities, implementation of effective mechanisms to improve the attractiveness of the region, as well as in the practical activities of educational organizations.

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