1. Introduction

The main purpose of this article is to highlight the functional role of regional development. We can assume that the regional issues pose a need for additional derivation and updating of the applied conceptual apparatus. This means the introduction of a number of clarifications and building a system model for the functional nature of regional development. In this direction, the emerging COVID-19 crisis has brought to the fore new demographic and urban problems that may change the overall functioning of the modern nation-state. On the other hand, the process of globalization further brought to the fore the importance of information technology which became dominant together with the views of the new green policy. This concentrates spatial development on the demographic, territorial and geoeconomic problems of the modern world with an emphasis on urban planning and the economy of the departments of spaces and territories. In practice, this new geoeconomy is increasingly regionalizing,
but in search of complexity, adaptability, competitiveness and sustainability. This further directed our focus on regional development and on search for its practical application. Thus, regional development is changing its intensity and modeling and now requires more dynamism and temporal processes to set new stereotypes for the management of territories of different ranks. Here is the place to frame a claim that regional development is a fundamental science that studies space and territory with a focus on the study of regional achievements in the field of population-territory – organization and management with an emphasis on solutions of a practical nature (Hartshorne, 1939). On this occasion, it is important to outline the necessary tools achieved by us in the practical and theoretical training, related to solving a number of management tasks in regional development. In some cases, regional development can be considered as a system of functional connections with socio-economic orientation which have a territorial character. Thus, regional development tends to decrease differences, and in other cases, when it is ineffective, the differences increase. In this regard, a number of issues can be raised related to the search for opportunities to expand decentralization and subsidies in the management of regional development, increasingly engaging the regional level in the implementation of a regional development policy, compensating for insufficient „regionalization“ and linking national strategies and programs, including those co-financed by EU funds, with the needs and potential of regional and local communities and territories (Georgiyev, 2006). Within this theory, it is important to point out the methodological construction that shows why something is so. On the other hand, the economic system alone is in many cases unable to achieve an acceptable equilibrium. Therefore, when developing policies aimed at a more even distribution of income between people, groups and territories, we need to derive certain methodological patterns. In this direction, economic activity in Europe is highly concentrated in large cities and urban agglomerations. Regional policy proposes easing tensions in large cities by directing part of the economically active population to other areas. The pan-European regional policy allows one country to engage in policies that stimulate economic activity in the territories of other countries. Solving territorial problems leads to a chain reaction, accumulating positive effects that spread beyond the borders of the individual state, affecting other countries as well (Dimitrov, 2021). During all stages of the development of human society, regional science has had its focus and sharpness and has manifested itself through active processes at the local level. In practice, however, regional development is an unconscious priority, which does not allow us to predict in which direction to go with regional development and how to form a sustainable framework. Here is the place to emphasize that a person cannot pass without knowing the environment in which he lives and carries out his work. Thus, the research of space and territory in the 21st century regains its relevance.

2. Implementation of new regional development policies

The regional development of Bulgaria before 1989 was mainly determined by the spatial location of economic sectors and the impact through regulations by the departments. Improving the territorial organization of the economy is a dynamic process that is constantly evolving. This new reality, in turn, reflects on the development of social relations and the achievements of the various socio-economic parts of the world (Karastoyanov, 2008). This gives impetus to develop more regional processes and phenomena of different order. In general, regional development has its roots in geography, but geographical science does not remain the same. On the other hand, regional development is gradually arguing its integrity and at the same time strengthening, expanding and deepening its interests and capabilities. At the same time, it gradually sets itself a more complex task of having a functional role that explores the whole complex of socio-economic and natural processes and phenomena, their complex relationships and the impact between nature and man. Thus, regional development becomes the basis for the development of projects for economic development of the countries, the economy and the development of the territories. Regional development reaches the foundation of its subject - the study of the territory in its various states. On the other hand, the problem of the interaction of society with nature comes down to raising a group of questions without a clear and distinct answer. For example – How does the society influence the nature or the nature the society, and respectively, how is the regional development built into these interrelations? This raises the question – what plays a decisive role in the process of interaction, society or nature? In this complex conundrum, regional development is important, and it is designed to answer many of these questions. Thus, from a regional point of view, we accept that nature must be seen as an integral part of public life. It is obvious that in accordance with the dialectical logic, when it comes to the unity of society and nature,
one must keep in mind the role of regional development as a structuring system in which both nature and society are its components and not independent; they are considered in a certain dependence or commitment. It is natural to conclude that regional development is a kind of bridge between nature and society (Dimov, 2008).

But, in addition, the nature of regional development lies in the assessment and analysis of ongoing demographic and socio-economic processes at the national, regional and local levels. In practice, the existing problems and contradictions at the local level give grounds for seeking concrete solutions, which, however, must be balanced with and open to the national interests of the modern nation state. In this direction, we can assume that regional development in the 21st century is at a turning point, which sets the benchmarks for the next 50 years. This undoubtedly strengthens its applied nature and its complementarity with the economic tools and economic management. This makes the post-COVID-19 period from 2022 to 2027 a turning point in the emerging technological change embodying a different geoeconomic environment of socio-economic development. The world is setting new contours of the geoeconomic reality, which will affect not only the main geopolitical players, but also a number of peripheral countries. In this transitional period, the extremely complex and serious problems of structuring regional development in the direction of its complexity and functionality stand out particularly clearly (Karakashev et al., 1989). The focus of regional development can again be placed on conditions of change in historical development and cultural traditions in different parts of Europe. We are witnessing the tolerance of the departmental approach in the policy for regional development and as a result – deepening of the regional disparities, which despite the complicated tendencies in Bulgaria have achieved significant progress, given the uneven regional development and the emerging information change. In practice, this change will embody the model of development of nation-states, which will have to impose new rules and constitutional models of functioning of the systems. This will also affect regional development. The functioning of regional models will set the stereotypes about the different speeds of social change in different spaces and regions. This will exacerbate inequalities in social and economic development. Over time, this problem will become more acute and will increasingly lead to the need for intervention to overcome the discrepancies. Thus, the role of the state will be more of a regulator than a carrier of change.

In this area, the demographic factor will acquire new significance, and the ability of regional business to enforce market rules will prove to be an essential element for the reliable functioning of the systems. On the other hand, the technical and social tasks for the development of very important practical problems with a strong regional character are gradually increasing, the need for business innovation and new cooperation with science will develop. In this direction, we need to look for the consolidating importance and understanding of the location of regional development in the whole system of sciences. Regional development is defined as an intermediate science, as a kind of integrator of the so-called management, and hence public, as well as the natural (natural) block of sciences. This is a great chance for regional development, which gives it priority in solving complex interdisciplinary problems (Dimov, 2008).

The question also arises as to what the boundaries and the object of study of regional development are. In principle, they cannot be definitively determined, because most sciences partially cover their object of study. With a certain conditionality, the environment for social development (oikumena) or in other words our environment and economic activity in it can be defined as the main object of study of regional development. To a large extent, our environment has its own geographical nuance, which is why we need to emphasize the connection of regional development with the block of geographical sciences (Hagget, 1979). This largely corresponds to the fact that the geographical environment includes our environment. We can assume that the geographical environment is part of the geosphere, which is largely assimilated by man, and involved in active economic activity and the material basis for the existence of human society. The main task of regional development is the creation of a scientifically based forecast for the development of our environment (including geographical), related to human society and the spatial systems of the productive forces in the conditions of increasing influence of nature from scientific, technical and technological progress (Petrov, 2015). It follows that regional development is a science of the dynamic spatial systems formed on the earth's surface as a result of the interaction between nature and society, as well as the laws of their development and management. Regional policy is a key tool for regulating the development of society, bringing balance and bringing regions closer together in terms of living standards. The availability or provision of serious resources is essential for the management of regional development. The provision of resources for regional development is linked
to material, labor and, above all, financial balances at the public level (Cheung, 2005).

3. Factors influencing the implementation of regional development policies

Without aiming to make a critical analysis of the nature of regional development in the various known scientific approaches and countries related to regional science, it is necessary to note that in the Anglo-Saxon scientific literature the regional paradigm prevails, which develops in different directions (Kimble, 1951). More precisely, the focus of regional development is derived from leading researchers who believe that regional development seeks to obtain complete knowledge of the territorial differentiation of the Earth and, therefore, distinguishes phenomena that change territorially only by their territorial significance or, in other words, by their relation to universal territorial differentiation. The statement that the methodological basis of regional development is the spatial principle and the category of space is the leitmotif of any regional study is becoming increasingly important.

This gives grounds for bringing to the fore chronology, accepting three postulates of regional knowledge – the doctrine of the natural resource complex, the chronological or spatial concept and the theory of management of regional development. In addition, the solutions for regulation and management of territorial development should be sought in the skillful combination of the means of state regulation with the market mechanism. Regional policy depends on legislative decisions regarding the type of administrative-territorial organization and division of the country, local self-government and administration. In practice, in Bulgaria, regional development as a scientific field is relatively new. It is based on some European scientific schools, which shows a tendency to form a solid foundation for regional research, based on the accumulated theoretical and practical experience of the most developed nation states (Yokomichichi, 2005). Regional development as a scientific field related to the state of territorial systems studies objects that represent a significant complexity at each level – global, regional and local. Therefore, a precise logic of scientific arrangement is needed, which must make the appropriate efforts to turn intuitive understanding into a clear fundamental and clear theoretical concept of regional development. In this direction, the initial statement must be based on the position that every science uses basic concepts represented by terms. In addition to basic concepts, any scientific theory is based on obvious facts. These simple and very simple, elementary facts play a role in regional knowledge, similar to axioms in mathematics. The difference between them lies in the fact that axioms in mathematics can derive whole mathematical knowledge in a purely deductive way, while in regional development it is necessary to constantly supplement and collect new details and facts and data about them, analyze and summarize these facts in order to derive the results, as well as to accumulate knowledge to complete the given stage of research. The regional development is based on and uses analytical developments, new methods of informatics and others with which it interprets the analyzed facts. It is well known that the process of differentiation dominates in various sciences. A similar process is taking place in regional development. Regional development is internally differentiated and forms a system of sciences, which includes five subsystems: General Regional Studies (complex), Foreign Studies (natural regional complexes), Regional Development Management (management and administration of public space), Regional Economics and Theories of Regional Development. In practice, together with the process of differentiation of regional development, another opposite process of integration is carried out, aimed at unification of the regional sciences, at their internal theoretical integrity. This gives grounds for opening new scientific directions on the basis of regional development, mainly three directions: Geoeconomic development, Geourbanistics and urban management and Strategic planning and forecasting of regional development (Lavrov, 1989). On the other hand, the integration of a fundamental science does not aim at the destruction of its branches and directions, created in the process of its differentiation. The aim is to unite their common theoretical concepts. Otherwise, regional development will lose its importance as a basic science and will become a kind of collection of theoretical and applied sciences in the field of management and administration. In principle, integration and differentiation are objective trends in the development of each of the basic sciences, but unlike other sciences, these processes must be further scientifically substantiated and focused in an indisputable way. As regional development emerges as a new scientific field based on socio-economic and geographical knowledge, which determines its border with the natural and social sciences, there is a need to derive methodological tools for spatial patterns, and they have the need for competition between socio-economic and natural resource knowledge to outline the territorial and spatial processes and phenomena. Notwithstanding this dichotomy, it can be assumed that regional
Methodological problems before regional development in the conditions of post COVID-19 governance

In this direction, it is necessary to assume that „regional development“ is a functional process of attitude to our environment, and hence a clearer definition of the content of spatial relations between the elements of the considered territorial systems (Hartshorne, 1979). So a system and other geo-systems located in a certain area can be analyzed and monitored in order to conduct certain policies on them. Thus, these relations in a purely regional focus operate between natural and social phenomena, having a territorial definition and regional significance, in which they have a multifaceted impact. In trying to further define the problematic area of regional development, we come to the conclusion that the more urban a territory is, the more conditions are created in it for the implementation of many managerial and administrative measures related to the management and functioning of regional communities. To a large extent, this can give grounds for assuming that regional development is a scientific field that is a superstructure of social management and socio-geographical sciences. This gives reasons to look for the practical and applied nature of regional development (Naydenov, 2017). The combination of scientific tools related to the manifestations of the individual territory and measuring the state of the economy in the region or territorial community determines the scope of management measures and activities that are called to implement economically and politically active population to achieve development in a purely local and regional scale. To a certain extent, this can strengthen the scope of regional development by imposing a series of other measures, including administrative and legal ones, to optimize the territorial division or spatial planning.

In practice, the administrative-territorial changes related to the merger, division or optimization of administrative-territorial units is a key mechanism for the effective functioning of government and the state, which helps to build a modern and stable state with a certain type of socio-economic system. Anthony Cheung, one of the leading authors on administrative-territorial reforms, suggests that global administrative reforms can be seen as a „new public management“ to regulate spatial development processes (Cheung, 2005). This new approach to the new public management is a critique of the traditional model of public administration based on state bureaucracy and is expressed in the general failure of effective government management in a territorial aspect, far exceeding the state in which the private interest or the interest of privileged groups dominates the interest of society. Cheng accepted the thesis of more effective territorial structuring of administrative structures so that they have high regional competencies in order to be able to prioritize and help local authorities to manage territorial communities more effectively (Cheung, 2005). This view is also supported by Kiyotaka Yokomichi. According to him, after decentralization, within the relevant laws, municipalities are expected to perform all administrative activities, independently and by virtue of the principle of independent decision-making and delegation of responsibility. Yokomichi suggests that a real de-concentration of governance could lead to a greater focus on regional issues. The aim is to emphasize the promotion of strengths in the regional specifics of each municipality or territorial community (Yokomichi, 2005).

4. Imposition of innovations and new practices in the management of regional development

Based on the knowledge of physical geography, which deeply comprehends and defines the features of various natural and geographical phenomena with their impact on the anthropogenic factor, regional differences and specifics are derived as an important feature of the territorial system. Such an approach requires the search for more modern approaches in the study of regional specifics and features in the territories of a country. Therefore, it is especially important to obtain and analyze information about the natural environment and its components. This significantly contributes to the development of new areas such as „Geographic Information Systems“ (GIS). These new technologies can be used for specific research, resource management, regional and spatial planning, cartography and in more and more areas of human life. Some early developments in Europe are also important for the development of GIS, such as those of the Swedish scientist Hägerstrand, who in 1955 studied the analytical potential of spatial data by taking into account location and population information related to households (Hägerstrand, 1955). The use of database management systems is especially important in modern GIS concepts, as it allows the integration of spatial and non-spatial data. This, in turn, gives impetus to the development of geourbanism and the regional economy. Urbanization is an increase in the urban population, but is also determined by the development of industry and other urban activities. The process of urbanization began with the very beginning of civilization, as well as the creation of cities, but intensified after the industrial revolution and the
use of new technologies in agriculture, which has reduced the need for human labor and expanded the services sector in the economy. Urbanization brings with it a whole range of problems, especially when it is expressed as a sudden large concentration of population in a relatively small area. Therefore, there is a need to apply special measures and procedures to help build and organize settlements. Big cities need specially organized water supply, sewerage, food and other food supplies, electricity and telecommunications network. In addition, special attention should be paid to the quality of life in the city, including the fight against pollution, crime and other activities. This gives grounds for regional development to focus on the problems of the regional economy.

Therefore, it is necessary to apply a special theoretical approach to territorial development which imposes three groups of problems. Firstly, economies of scale, specific to a certain territory, secondly, the search for advantages arising from the neighborhood to other industries, and thirdly, the urbanization effect, which is expressed in the extremely strong development of urban settlements, concentrating large masses of the population in them. This is related to the location of business companies in the territory with joint use of financial and administrative services, infrastructure, and proximity to the market. Addressing these problems, regional development becomes even more functional, it already covers the development of the economy, the sectoral structure and the built infrastructure, determines the territorial differences between the administrative-territorial units and economic regions and gives answers to a number of related questions.

The measurement of development through indicators such as: concentration of people on the territory, economic activities located in the territory, working hour income, availability of the industrial, production and social infrastructure, the living status and ecological situation are an additional focus on regional science (Hägerstrand, 1992). However, the following indicators are the most widespread and officially used for the purposes of European regional policy: GDP per capita and the unemployment rate, per capita income, inflation, the human development index and others. Another popular indicator for measuring differences in different territories is the unemployment rate. Unemployment is one of Europe's most serious problems. The differences are mainly between rural areas, declining areas, peripheral areas and highly urbanized areas (Karakashev et al., 1989). The reasons for the income lag are the peripheral location, insufficient capital invested in production, insufficient infrastructure for enterprises and private households, as well as the low level of general and professional qualification of the population. It should also be mentioned that with rapid economic growth, the differences between the richest and the poorest regions decrease, and with a decline in economic growth, the differences increase again. In this direction, regional development increases its focus and scope of research, beginning to form as a stable fundamental science, solving the problems of spatial development in its socio-economic integrity. Of course, the application for this fundamentality is a path that must be scientifically followed by practical application and definition of various social dimensions and opportunities for attractive socio-economic development. This largely requires a return to the focus of research on another plane, following the normal vision of combining the natural component that affects the economically active population and the actual behavior of the demographic factor on the territorial development of individual territorial communities.

5. Environmental aspects of regional development management

Spatially related to the above judgments, the question is whether it is legitimate to interpret the physical environment as „natural“ regionalism, if we assume that the object of its study is the geosphere, and its focus is the landscape. It should be recognized that a specific definition of natural regionalism needs to be defined. By linking the natural complex with its use and environmental protection, we undoubtedly arrive at common scientific postulates of natural geography and environmental protection. We can go further in this direction by assuming that geoeconomy is a combination of natural geography and environmental protection. Then, „natural regionalism“ is called to implement specific management measures and approaches to the rational use of natural resources and environmental management, related to its restoration and prevention of the decline of the territory from active human activity. In this direction, „natural regionalism“ may acquire a newer dimension, including sustainable development policy, which may give rise to a new scientific direction „geoeological development“ as an upgrade over regional development and geoeconomy. This gives us reason to refer to P. Hagger (1983), who believes that we are dealing with the structure and interaction of two main systems: the ecological, which unites man and the environment, and the spatial, connecting one area with another through a complex volume. We can also mention that S.B. Lavrov (1989) largely defines the essence of geoeconomy as a science from
which new scientific directions can be defined, such as sustainable development. In practice, the natural sciences, as well as other groups of regional and geographical sciences, are interdisciplinary in nature, as they come into very close contact with other basic sciences or their branches. In practice, the natural sciences, as well as other groups of regional and geographical sciences, are interdisciplinary in nature, as they come into very close contact with other basic sciences or their branches. Therefore, it can be assumed that each independent science from the regional scientific branch is both interdisciplinary and intermediate and even fundamental, as long as it has its own coherent theory and methodology. In this case we are talking about specific research methods that can be borrowed from other sciences. The methods used by the regional sciences and geocology are modified, adapted and improved by inspecting the object studied with their help. The definition of the block of regional sciences is more than positive due to the fact that regional development is special and is an important element of the structure of management sciences. Undoubtedly, in methodological and organizational terms, regional development in Bulgaria is not adapting successfully enough to world standards. To a large extent, Bulgarian scientific thought avoids imposing the concept of regional development. Also, regionalism fits in the form of economic regions, as economic geography or as management systems. In these cases, regional development, or more precisely regional aspects, fit into the management and geographical sciences. This requires us to pay attention to the fact that regional development is related to the study of a comprehensive plan of separate territories or regions of the land surface on the basis of ongoing socio-economic changes and management activities related to the state of human society. It is necessary to emphasize once again that the regional paradigm is the core of management sciences. Nevertheless, both in the past and now, the question arises as to the place of regional development in the system of administration and management, about the subject of regional development, and whether it replaces the social and natural sciences? In its essence, regional development is a synthesized and localized addition to the management, natural and social sciences. Regional development does not replace them. As the basic sciences, including physics, biology and geography, are a bridge between nature and society, so regional development is a kind of integrator between the two main blocks of management and geographical sciences. Regional development partially covers the objects of study and the subject of study of the natural and social sciences (Stoychev, 2020). The delineation of regional development and its methodology, specific tasks, methods and practical forms are needed primarily for the practice and application of social sciences. However, this is not about creating mechanical mixtures, but about characteristics that contain a logical combination of the most important features of their complete binding. Regional development synthesizes specific but different materials for countries and regions, reveals their specificity and without exaggeration represents the very essence of geography, without which it is deprived of the meaning of its existence. From what has been said so far, there is no doubt in the formation of a block of theoretical regional disciplines. This is because regional development covers the problems as a whole. However, this does not mean that regional sciences will not be able to have their own theoretical generalizations, formulations and principles. The theory of regional development summarizes disparate materials as a kind of counterbalance to the differentiation of regional development (Stoychev, 2020). In addition, regional development studies the objects of our environment and human society not from different countries, as the individual management sciences, but as a whole. The theoretical basis of regional development creates a new stage of specific regional research. The terms regionalism, regionalization and regional development should not be confused, although they have common features. To a large extent, regionalism precedes regional development, and regionalization is only one process of regional development. The imposition of statistical and cartographic methods, visual analysis and digital modeling can take regional development on a new path of scientific and technological development and strengthen the foundation of regional sciences as a leading scientific field.

6. Conclusion

The presented structure of the regional development expresses an argumentative point of view. It does not and cannot have claims to be exhaustive. It is necessary to gather many more opinions from foreign and Bulgarian authors working on the problems of regional development, meaningful from logical and lexical positions. Such opinions would lead to significantly more precise conceptual essence and affirmation of the most correct notions in terms of their content and transcription. At the same time, I hope that this approach and scientific alternative will open the beginning of a series of articles that will ultimately contribute to the rise of regional
development as a modern and scientifically based science.

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