

## GEOGRAPHICAL REGIONALIZATIONS OF BOSNIA AND HERZEGOVINA IN THE LIGHT OF EURO-ATLANTIC INTEGRATIONS<sup>1</sup>

**Muriz Spahić & Haris Jahić**

Univerzitet u Sarajevu, Prirodno-matematički fakultet, Odsjek za geografiju,

Zmaja od Bosne 33-35, Sarajevo, Bosna i Hercegovina

[murizspahic@gmail.com](mailto:murizspahic@gmail.com)

[haris-jahic@hotmail.com](mailto:haris-jahic@hotmail.com)

*Existing political and territorial organization of Bosnia and Herzegovina, based on the Dayton Peace Agreement from 1995., is in complete disharmony with its regional-geographic structure, which relies on its natural physiognomy, the economic function and nodal differentiation. Entity line was created as a compromise to stop the war in Bosnia and Herzegovina 1992-1995 year. This line clip physiognomic units and tore previously self-sustaining functions of nodal-functional regions, which have primarily relied on its natural physiognomy. Negative processes of political-territorial arrangement compounded by cantonal regulation of the Federation of Bosnia and Herzegovina, which is crisscrossed together previously self-sufficient geographic regional and sub regional entities.*

*In order to explain the essence of unsustainability imposed ethnic and cantonal political-territorial differentiation of Bosnia and Herzegovina the analysis of previous regional-geographic differentiation was performed, with full respect of geographical principles and methods. These conceptions of geographical regionalization started from the idea of the region, as basic unique taxonomic units in regional planning of sustainable development of certain chorological entities. In addition, this work relies on the methodological concept of regional policy of the European Union, whose future is based on the integration of self-sustaining region.*

**Key words:** *Bosnia and Herzegovina, Dayton, political-territorial arrangement, regional-geographical structure, entity division, cantonal division, entities, cantons, regions, regionalization, NUTS regions, European Union.*

### INTRODUCTION

Dayton two-entity and Washington canton division negated integrative physiognomical space of Bosnia and Herzegovina's regional-geographical structure. Entity division of Bosnia and Herzegovina, based on the political-territorial criteria implicatively and negatively reflects on the impossibility of a normal functioning and development. Negative implications are the real facts, and reflect the principles of non-compliance with the geographical regionalization.

Previous geographical regionalization of Bosnia and Herzegovina respected the natural geographical and social geographical determinants of territorial regionalization. Political divisions of Bosnia and Herzegovina failed to acknowledge the geographical regionalization

---

<sup>1</sup> Paper of the first author, title: "The implication of the political and territorial organization of Bosnia and Herzegovina on its regional and geographical development" has been adopted, amended and adapted from the Proceedings of the International Symposium "Bosnia and Herzegovina - 15 years of the Dayton Peace Agreement. University of Sarajevo Sarajevo 18-19 January 2011 (171-192)

and disturbed her previous regional structure based on the principles and methods of regionalization, which, among other things, is the subject of analysis in this paper.

Analytical approach to map content of geographic regions and content analysis, among other things, are the basic method of region analysis and regionalization of Bosnia and Herzegovina. This analytical procedure is combined with the comparative method, which is the core of the existing geographical regionalization incorporated into entity and cantonal political-territorial borders of Bosnia and Herzegovina. Analytical and comparative method have shown all the illogics of territorial differentiation of Bosnia and Herzegovina in achieving the modern tendencies of regional planning for European integration.

Entity and cantonal division created artificial network which limited economic, political and integrative European path of Bosnia and Herzegovina. This division did not respect physionomic units, and nor present regionalization that were the basis of spatial planning in the development of Bosnia and Herzegovina. It is, among other things, the reason for unsustainable and every other economic development, and even the one regarding geographical education.

## REGION AND REGIONALIZATION

### **Term and types of geographical regions**

Spatial area is determined by the **region**, which includes complexity and multiplicity of definitions, and are used in various fields of human knowledge, primarily in geography and other disciplines such as economics, medicine, politics etc. Region (lat. Regio,-onis, f.) place, district, prediona spatial area, environment, country, province, region, district, environment, part, place, primarily relating to spatial area, which belongs to chorological geospace. Accordingly, geographical space or chorion is a geographical term and has its own temporal, and thus the development dimension.

Region is an operating unit of chorological continuum in geography, as for example period of time to temporal continuum in history. Therefore, the region can be seen as part a of a historical continuum, so they can be understood as a historical category. Region is defined area of any size, defined by selected or leading criteria (James, E.J., 1972). Thus selected territorial unit determines its uniqueness, non-repeatability and homogenization of all the leading parameters, whose borders are invisible and in some cases can be understood only as an arbitrary bounded space.

Region is sometimes attributed by dualistic meaning based on mutual intertwining of natural geographical and social geographical phenomena and processes in certain space. Creating a region in the dualistic approach assumes the form of higher complexity of natural and social factors, processes and phenomena between and within them, as the first and the repetition of the same features as the other factors of regional allocations. Regions allocated on the basis of one dominant indicative geographical elements or variables are defined by simple regions, and those that are specific by two or more of the leading indicative factors belong to complex regions.

Territorial units separated on the basis of only one variable are often called homogeneous regions despite the fact that they have different characteristics of uniqueness. They may belong to complex regions, in which a high degree of mutual unity of the leading factors is accomplished.

Complex regions are spatial areas allocated on the basis of several geographical variables. Complexity is manifested by mutual relations and connections of only natural geographical elements and phenomena that can provide favorable conditions for their use in the production cycle. In this way favorable conditions for the interaction with the social geographical elements and phenomena are created. Such interactional activity result with complex relations, which categorises given spatial area in the complex or systemic geographic region. It is defined according to the prevailing social activities, such as primary, secondary, tertiary or quaternary economy (agriculture, industry, tourism, etc.) or the prevailing natural features (mountainous, coastal, forest, etc.) Complex regions alike include natural geographical and social geographical elements, wherein the first elements, most often, define the framework of human activity.

Regions can be defined as an individual unit without chorological continuity, based on the homogeneity of developed points or nodes. Nodus in regional-geographical understanding is an economic, cultural and any other polyfunctional settlement - city, which has an immediate effect on their environment, and indirectly to the neighboring nodes of lower taxonomic rank, such as a small settlements - settlement of smaller urban functions, which in largely depend on the central node.

Nodes connecting is accomplished by means of daily migrations, distribution of goods and services, the realization of various needs of the population, which directly or indirectly belong to bigger node. Extracted in this way spatial area by its content belongs to a nodal region.

Definition of the boundaries of nodal region refers to the spatial circulation of people, goods, services and information. In this way strengthen the functional links of nodal centers, which grow into the open nodal urban systems. Theoretically, it is possible to understand each settlement as a separate hub or nodule from which begins or ends it spatial circulation, or interactions. Development of nodal grouping is determined by the quantity of interaction with other nodes. Interaction effects are realized by different relations which include interconnections, whether travel or communication links. Each nodal regions in the nodal system is viewed as a subsystem in a complete system or as a nodal system for itself (Haggett, P. 1965).

In nodal regionalization, nodal region is determined by the urban core and urban systems. Hence nodal systems correspond to urban systems, which are connected in the urbanized region. The connection between nodes can be solid or weak, depending on the interactional action. On those lines where the interactive relations is weak towards the first and stronger to the second the border of one nodal region is formed. Interconnection of nodal regions is determined by the features and functions of economic development and regionalnogeographical arrangement of a certain state. This spatial arrangement based on the nodes and the interconnectional functions belong to nodal-functional region, and the process of nodal-functional regionalization.

Thus, the region is a complex individual geographical entity which, according to leading identification factors, differs from other neighboring territories. She explains it natural spatial area and economic region in the geographic region and represents the object of study of regional planning.

Region has no specific and clear boundaries, and can not be separated from the geographic environment. It has a certain specific structure as a result of the law of economy and law of societies. Structure and dynamics of the region is variable category and frequently changed with the socio-economic development.

In addition to the concept of region very often is used the term area. This is a special area unit separated, depending on the purpose of regionalization, on a strictly determined principle. The region can be a territorial unit based on legal or statistical model. In addition, the area can be physical geographical or human geographical area. Natural geographical regions allocated to specific or major physical geographical elements (geological structure, morphology, climate, water, soil, etc.). If the area is differentiated by primary, secondary, tertiary or quaternary form of human activity such as agriculture, mining, industry, tourism, transport and the like districts, then they are so called. This concept of the term region is not, in almost all segments, differentiated from the concept of region.

### **Geographical regionalization**

Geographical regionalization is a process that involves differentiation of spatial areas according to strict principles. Geographic principles emphasize the leading natural geographical or economic factors, phenomena and processes. Taking into account the main elements of territorial differentiation, geographical and any other regionalization can be: typological and complex. Typological regionalization respects the analytical methods used in identifying factors leading attributive or more of them on the basis of which establishes the mutual difference between spatial areas.

Typological regionalization belongs to the individual zoning and mapping, and takes place according to the set, usually physical geographical criteria from which stands dominating factor or oleate. From such a multitude of oleates a section of identifying geographical elements, which make natural spatial physiognomy will be created. Thus isolated spatial units provide a framework for social geographical actions in order to use benefits of the resource.

Complex regionalization uses synthetic method, in which prevails a leading indicator factors, which individually and collectively valorize certain spatial unit, by which it differs from the neighboring. This type of regionalization that is conducted according to the principle of geographical factors related to mutual relations and connections makes homogeneous regionalization. Homogeneous regionalization also arises from mutual relations and functional links of the leading node.

Conceptualization of physiognomically homogeneous, uniform region relies on the landscape or natural landscape, as basic operational unit, which man evaluates as much as it provides benefits for exploitation and how it is used in different ways. Thus, a natural transformation of the cultural landscape, at the level of which depends on the lifestyle of certain civilization group (Paasi, A., 2003).

Regional differentiation of spatial units precedes the regional and spatial planning. It is planned development of regional and spatial units for the rational exploitation of natural resources and the harmonization of different types of human activity. Regional and spatial planning aims to harmonize economic development.

Region is the basic concept of regional planning in general and regional geography, and regionalization process directed to differentiation of spatial, operational and functional units directed toward basic primary, secondary, tertiary and quaternary sectors of economic development. Regional Geography is the oldest branch of geography, which applies the results of systemic component of geographical sciences on a certain part of the country. It is complex or synthetic science and represents a link that relates scientific and narrower geographic disciplines.

Geographical regionalization concept stems from the essence of geographical science and its scientific methodology. The basis of geographical regions and regional concept of heritage principle of homogeneity and complexity, and exactly as much as geography understands as a system of natural geographical and social geographical science, and this system makes the biggest unity or uniformity of geographical elements that define a particular spatial area - region.

## REGIONALIZATIONS OF BOSNIA AND HERZEGOVINA

### **Regionalization of Bosnia and Herzegovina before Dayton**

Geographical regionalization of Bosnia and Herzegovina mainly relied on physionomic regionalization, which are integrated into spatial units of neighboring republics of the former Yugoslavia. Regionalization of Bosnia and Herzegovina in certain periods was the result of its planning and economic development, often one-sided character which dominated the natural geographical and economic-component, and then physionomic, nodal and nodal-functional principles.

Basis of the regional division of Bosnia and Herzegovina, among other things, based on the concept of physical geographical regions, and the result of such regionalization was based, primarily, on the evident visual physionomy, and secondarily on the planned economic orientation. Analysis of thus imposed attitudes based on leading geographical factors, which were decisive for the application of geographical methodology regionalization of Bosnia and Herzegovina. Some examples of geographical regionalization of Bosnia and Herzegovina in cartographic contributions were brought in the context of its Dayton and Washington division. With these contributions is visible all the illogicality of territorial territorial division was created and negotiated by the peace treaties.

Basic geographical regionalization of Bosnia and Herzegovina, from the time of the last century, were based on a number of indicative elements, of which the most important physical-geographical orientation with certain premises of social geographical economic geographical character (R.Marek, A.Melik), complex homogeneous approach (S. Valkenburg, S.Held, S.Ilešić, S.Smlatić, etc.) and nodal-functional (T.Kanaet, S.Ilešić, K.Papić, etc.).

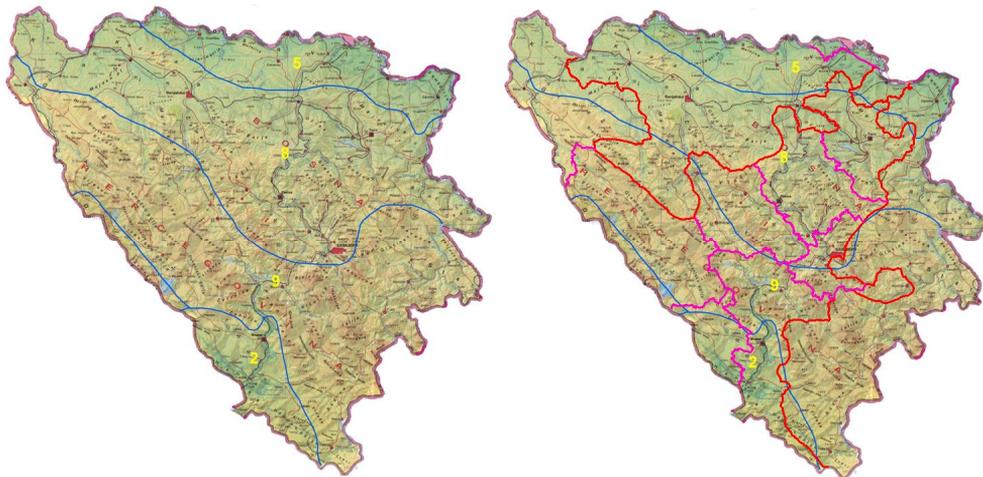
Apart from these there are other approaches to the regional division of Bosnia and Herzegovina which, at the same time, take into account geographical and physionomic regionalization and regionalism that is based on the functionality of the space. By this lack of universal principles and methods for universal regionalization of Bosnia and Herzegovina is understandable. Therefore, the regional division of Bosnia and Herzegovina are multi-layered, have pluralistic character, which is synthesized in certain taxonomic groups.

Guided by the previous paragraphs, quite a number of regionalization of Bosnia and Herzegovina were based on the component and complex natural eographical elements on which have arisen component and complex physionomic region. The methodology of regionalization often had administrative starting point or economic geographical concept development, where often, except primary chorological, chronological or historical geographical, landscape, secondary concept of regionalization was used.

The oldest regionalization of Bosnia and Herzegovina dating from the time between the two world wars was based on typological principle of natural geographical identification factors (A.N.Krebs, J.Cvijić, R.Marek and Y.Chataigneau). According to R.Marek

(Petrovic, 1957), Bosnia and Herzegovina was divided into geographical regions which include: northern and north-eastern Bosnia, west-Triassic levellers, central Bosnia, Sarajevo valley, southeast Bosnia, Dinaric Alps, the Neretva valley and the karst plateau of southern Herzegovina.

Paper "Geographia Univerzalle» Chatiaigneau Y. (1934) Bosnia and Herzegovina, which was part of the Kingdom of Yugoslavia, regionally and geographically divides into: central Bosnia, Bosnian Krajina, Posavina, karst mountains of Bosnia, rudine and humine and surfaces and karst polja of western Bosnia (Petrovic, R., 1957).



**Fig.1. Natural-geographical regions of Bosnia and Herzegovina according to A.Melik (map on the left), netted with entity and cantonal borders (map on the right)**

Regionalization of the Balkan Peninsula, within which is Bosnia and Herzegovina, N. Krebs (1934) divided the antro-po-geographical areas in accordance with developed centers who have had a strong impact on the economic development of defined regional areas. In Bosnia and Herzegovina, the author distinguishes: Posavina, Turkish Croatia, Northern Bosnia, Central Bosnia, Western Bosnia, Herzegovina and Travunija (Petrovic, 1957).

In the regionalization of the former Yugoslavia A. Melik (1949) included Bosnia and Herzegovina, and following regions: low and middle-Herzegovina, Pannonian plains and hills along rivers or peripanonian area of Bosnia, dinaric foothills and highlands, with its valleys, hills and highlands of central Bosnia, dinarc belt with high mountains and high karst polja, large karst plateau of Bosnia and Herzegovina and the high plateau in western Bosnia.

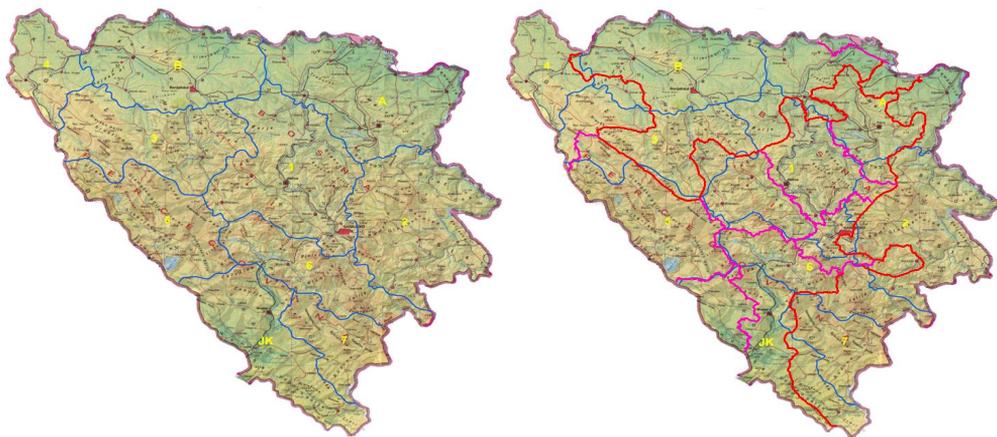
Physical geographical regionalization of Bosnia and Herzegovina can be found in the work of K. Kayser (1951) in which the territory of Bosnia and Herzegovina is divided into: the hilly area of Panonian area, central Bosnia, belt of karst highlands and the Mediterranean region with its coast. (Rogić, 1963).

In regionalgeographical preview of Europe, N. Pounds (1953) divided Bosnia and Herzegovina regionally into: Danubian Plain, central Bosnia and in the south area of the Dinaric Alps. Region Dinaric Alps, according to the mentioned author, includes the southern areas of the headwaters areasof the rivers: Bosnia, Vrbas and Una, which has no scientific grounds (Rogić, 1963).

Within the complex regionalization of the former Yugoslavia, J. Roglić (1955) points to the possibility of allocating region as a functional government units which include: mountain core and peripheral band. Bosnia and Herzegovina, according to this criterion was incorporated into the core of the mountain, and its ultimate peripheral parts are treated as peripheral band, which belongs to the part of Sava river valley on the north and the south coast.

In the processing of Yugoslavias Nature, A.N.Gracianski (1955) defined 11-natural geographical regions, while R. Petrovic, not taking into account the boundaries of the republics and provinces within the former Yugoslavia, conducted regional division in which Bosnia and Herzegovina belongs: northern Bosnia and Slavonia, Bosnia and Sandzak, the Dinaric karst, Dalmatian and Croatian coast.

The first regionalization after World War II, which was confined to the territory of Bosnia and Herzegovina presented T.Kanaet (1954). By applying the principles of homogeneous economic structure, which is closely associated with physionomic natural base, the author on the territory of our country outlines three geographical areas and eight sub-areas. Cereal economic areas in the north belong: Tuzla basin and Banja Luka. Mountain area consists of: central economic area, economic area of eastern Bosnia, mountain area of western Bosnia, area of Bihać Krajina, area of karst polja of western Bosnia, an area of mountain pastures and area of the upper Herzegovina. The same author in southern geographical area of Bosnia and Herzegovina includes area of southern agricultures.



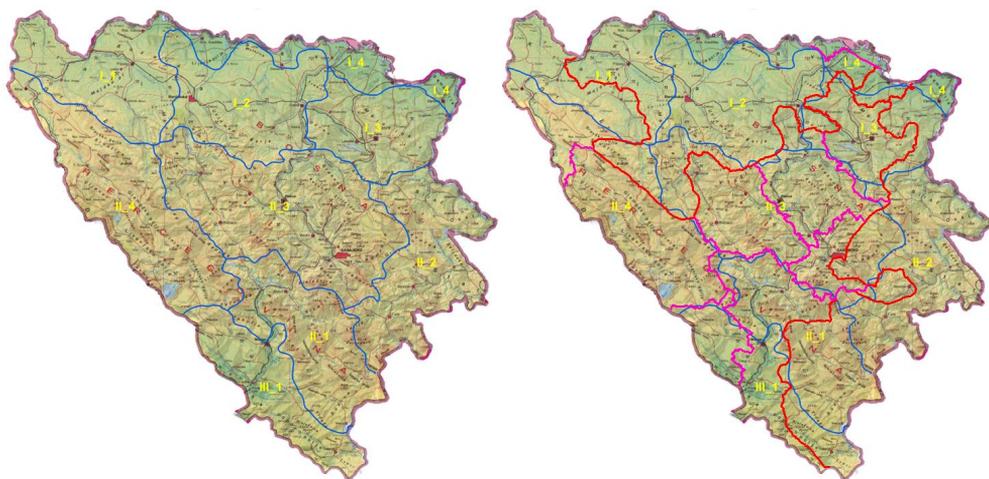
**Fig. 2. Natural-geographical regions of Bosnia and Herzegovina according to T.Kanaet (map on the left), netted with entity and cantonal borders (map on the right)**

Federal Institute for Economic Planning has, as part of the advancement of agriculture, performed the division of the former Yugoslavia in the agricultural zones, which comprise the territory of Bosnia and Herzegovina in predionim units: fertile plain, fruit and vineyard, pasture mountain regions and cultures of the Adriatic - Mediterranean area.

By implementing the principle of uniform physical-regionalization, R. Petrovic (1957) in Bosnia and Herzegovina allocates regions belonging to: the Pannonian area, high dinaric mountains, dinaric medium high mountains and valleys, Herzegovina and Montenegro karst and the Adriatic coast. In addition to uniform physical-regionalization, the author takes into account the cultural aspects of regionalization, or historical principle, which is the territory

of Bosnia and Herzegovina is divided into: the Pannonian region of Bosnia, medium high dinaric region of Bosnia, high dinaric region of Bosnia and Herzegovina and the karst region of low Herzegovina.

A major contribution to the regionalization of the territory of Bosnia and Herzegovina gave S.Ilešić (1961), whose dualistic concept of regionalization was the basis for many later regionalization. Dual-layer principle of regionalization author based on the geographical basics, and then the economic-principles. Economic-criteria are based on an analysis of the economic situation of physionomic units. Within Bosnia and Herzegovina, the author distinguishes regional physionomic units within the region of the Pannonian Plain in the territory of Bosnia and Herzegovina, the author distinguishes: Subpannonian edge which makes subdinaric or subpannonial area. Dinaric Bosnia and Herzegovina is divided in: internal Dinaric highlands and high Dinaric karst area, while the coastal region was seen as: sub-Mediterranean area and subdinaric area.



**Fig. 3. Natural-geographical regions of Bosnia and Herzegovina according to Đ.Marković (map on the left), netted with entity and cantonal borders (map on the right)**

Within the framework of regionalization of the former SFRY, J. Markovic (1980) in the Regional geography of Yugoslavia gives a very detailed regionalization taking into account republic borders of the former common state. On the territory of Bosnia and Herzegovina allocates three regions in which recognizes the sub-region and their districts. It is a regional triad based on physionomy, which determines, among other things, the level of development. Region, which he calls the Pannonian area, closely defined with subregional area of Peripannonian Bosnia in which he classified districts: Pannonian Pounje, donjovrbasko-bosanski, sprečko-majevički and posavska Bosnia. Mountainous Basin area of Bosnia and Herzegovina consisted of: mountain Herzegovina, eastern Bosnia, central Bosnia and western Bosnia. The Adriatic area was determined by sub-central seaboard which, in the narrow framework of the former common state, belonged to the Adriatic Herzegovina as a geographical region.

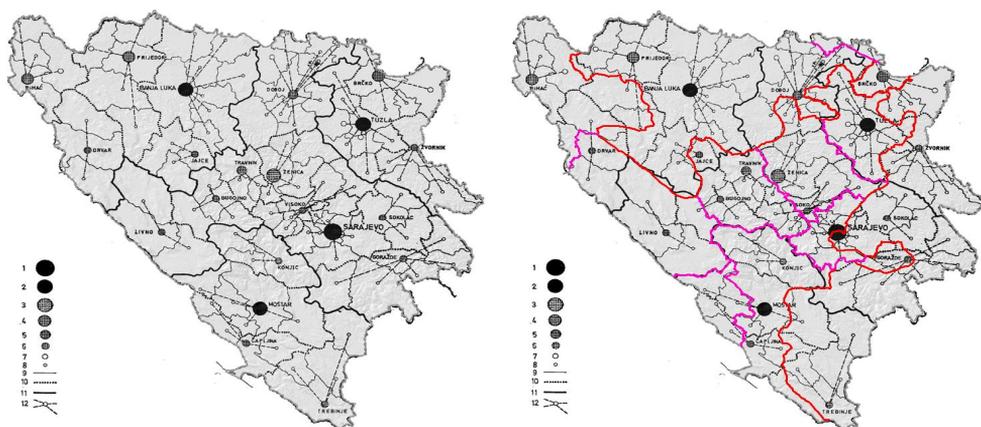


Fig. 4. Natural-geographical regions of Bosnia and Herzegovina according to K.Papić (map on the left), netted with entity and cantonal borders (map on the right)

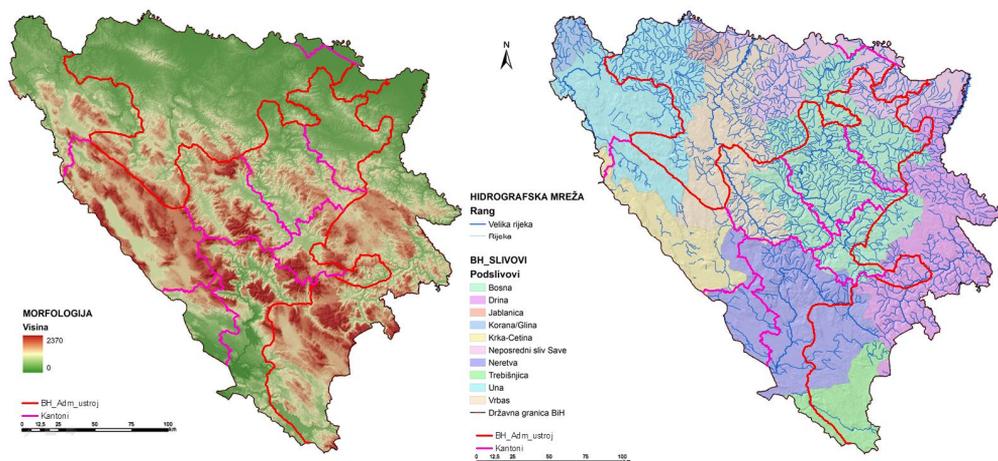
In carrying out extensive studies on the issue of regionalization of Bosnia and Herzegovina, K.Papić (1977) suggests various economic regions, which according to the principles and methods of regionalization, belong to nodal, and in some cases, functional regions. In this way, the author Bosnia and Herzegovina differentiate within two-layer regionalization, while upholding the geographical conditions, traditional ties with the neighboring republics of the Yugoslav community and the existing network of primary and urban centers, which by its size and role presented macro-regional center. Author divided Bosnia and Herzegovina into 4 regions and 21 subregions.

Concept of regional differentiation from R. Roglić (1963) is based on the principle of homogeneity, which implies mutual uniqueness of geographic factors on certain spatial unit. On the territory of Bosnia and Herzegovina, V. Rogić identifies four physionomic region with homogenous character and in them several subregions. The physionomic region of North Bosnia consists of: Unska Krajina, the lower river courses of Vrbas and Bosnia and north-eastern Bosnia. The region of Central Bosnia is defined by subregions: Sarajevo-Zenica basin and the Upper Drina, while the region of the Bosnian-Herzegovinian high karst divided into: Western Bosnia and Herzegovina's. In addition to the previous, V.Rogić (1973, 1987) with respect to node and behavior of their functions, on the territory of Bosnia and Herzegovina identifies four nodal-functional macro-regions, namely: the Bosnian Krajina and Banja Luka, Tuzla or the Bosnian northeast, central Bosnian or Sarajevo and Herzegovina's or Mostar.

In the second edition of the Encyclopedia of SFR Yugoslavia, S.Smlatić (1982) treats Bosnia and Herzegovina within four regional units, which can be called physionomic regions and eight units, which can be introduced in the sub-regional areas named after hydronyms, hyponyms and combination of oykonyms and hyponyms.

For the purposes of economic development of Bosnia and Herzegovina, Economic Institute in Sarajevo has made several regional division of its territory. For example: Posavina area with Una (Eastern, Central and Western Posavina), mountain-forest belt

(Eastern, Central and Western Bosnia) and karst area (Eastern, Central and Western Herzegovina).



**Fig. 5. Relief structure of Bosnia and Herzegovina (map on the left) and river net of Bosnia and Herzegovina, netted with entity and cantonal borders (map on the right)**

There are also recent economic regionalization of Bosnia and Herzegovina that take into consideration the principles of the main chorological nodes, according to which four regions are named: Banja Luka, Sarajevo-Zenica, Tuzla and Mostar.

### **Dayton division of Bosnia and Herzegovina and consequences on its regional development**

Without going into a detailed analysis of the consequences of the Dayton line of demarcation, which divided Bosnia and Herzegovina into the Federation of Bosnia and Herzegovina and the Republic of Srpska, on this occasion we will discuss only some of its illogical, which reflects all the complexity of its geographical reality. From readable analysis of regions, principles and methods of geographical regionalization, previews of regional division of Bosnia and Herzegovina with the entity and cantonal division notes the complete absence of geographic criteria such as physionomy, homogeneity, nodule, function and so on. Analysis of internal borders does not show any correlative level of compliance according to component and complex natural geographical structure. The newly formed spatial area do not have the character of functional geographical self-sustaining integrity of working towards natural resources.

Dayton entity and cantonal borders are disintegrating factor of physionomical predayton regional entities, which, in addition to relief structures, disintegrated river basins, river network, diversified landscape structure, functional connectivity of natural resources toward processing capacities, centers of economic development to spatial units and neighboring complementary centers of economic development. Dissolution of integrative and regional geographical development of Bosnia and Herzegovina has negative tendencies in the overall and individual strategy for its prosperous development, which proved to be the last two decades of its Dayton political-legal organization

How many geographical illogical has the entity line in the functioning of Bosnia and Herzegovina provides analysis of all previously presented regionalization provided towards dinar direction and entity boundaries are administrative cuts at a number of smaller spatial dysfunctional units.

Problems of Dayton inter-entity demarcation which disintegrate complementary geographical regions and regionalization of Bosnia and Herzegovina, have a negative implication in educational geographic understanding of the national geography, which is taught in the final grades of elementary school and high school. Common curriculum core and the new conception of geography textbooks, as well as national subjects, did not solve the issue of regionalization and regional divisions of Bosnia and Herzegovina. Following the logic of the principles and methods of regionalization of Bosnia and Herzegovina, where the region in the regional geography of Bosnia and Herzegovina, among other things, is a general operating instruction content of the teaching process, there is inevitably an abstract of political solutions, from which is derived entity and cantonal division of Bosnia and Herzegovina, while respecting its state status at the United Nations.



**Fig. 6. Complex regionalization of Bosnia and Herzegovina (Spahić, M., 2007)**

Regional division of Bosnia and Herzegovina in the educational aspects of teaching methods, particularly in the textbooks of National Geography, is presented with complex global regions: North Bosnia (Sjeverna Bosna), Central Bosnia (Središnja Bosna), Karst regions (regija visokog krša) and the Mediterranean region (Mediteranska regija). Detailed presentation of spatial units connected to the nodal-functional units is processed through subregional units: Sprecko-majevički subregion with Semberija, Donji Vrbas and Donji Bosnin region and Una-Sana of Northern Bosnia; Sarajevo-Zenica basin, Gornje Povrbasje, and the Gornje Podrinje in the region of Central Bosnia and Herzegovina; Bila and poljaof Herzegovina high karst (Spahić, 1994; 2007) and geo systematic approach in which relief is the main indicative factor.(Spahić, 2002).

Political boundaries are not geographical so they can't be called political-geographical and, therefore, have no geographical sense for carrying out the regionalization of the national territory. This confirms the fact that the region is the basic unit of teaching process in the Regional Geography, and regionalization is basic approach for geographic generalization.

Component geographical sciences, according to the subject and object of study, are unavoidable in defining the region and regionalization. Geographers of various specialists in their scientific research, among other things, deal with the principles and methods of regionalization and are invited to observe questionable entity and cantonal boundary lines. In addition, geographers should take place in the national consultative and negotiating committees at the expert level, and before defining entity network in the political division of Bosnia and Herzegovina.

## RECENT REGIONALIZATION TENDENCIES OF BOSNIA AND HERZEGOVINA

### Regions in european integrations

Regionalization of Bosnia and Herzegovina is to be regarded as modern integration processes, which rested on the nomenclature of territorial units for statistics NUTS regions. They represent a hierarchical system of identification and classification of territorial units for the purposes of official statistics in the Member States of the European Union. This system was developed in 1980 by the European Statistical Office in Luxembourg, with the aim of comparing, developing and self-preservation of the regions within the European Union. Classification of statistical region defined by the NUTS methodology of a common classification of territorial units prescribed Regulation of the European Parliament and of the Council of Europe in 2003.

When it comes to understanding the region, in the legislation of the European Charter on the regionalization of the 1988 region is defined as a bounded geographical entity or a summation of similar areas where the population lives associated by production and social relations in order to promote cultural, social and economic progress.

The fact is that these areas can be recognized under different names and political-legal forms in certain EU Member States (the autonomous communities, Lander etc.). The basic criteria of NUTS regions allocations is based on the number of inhabitants, the average population density, national income and the surface of the territory. These frameworks are defined by natural and labor resources that make up the support of its self-preservation.

In the European context NUTS - 1 region includes territorial space 34.600-4.860,000 km<sup>2</sup> populated with 3-7 million inhabitants, NUTS - 2 region covers an area of 13,400 km<sup>2</sup> to 1,886,000 km<sup>2</sup> where lives of 800,000 to 3 million. residents and NUTS - 3 region with an area of 2,400 km<sup>2</sup> to 13,000 km<sup>2</sup> inhabited by 150,000 to 800,000 inhabitants. All European Union countries have no administrative unit with the specified range of the population. Thus, the region of Île-de-France in France with 11.3 million people is defined as NUTS - 2 region, while the province of Bremen in Germany, with only 662,000 inhabitants is considered NUTS - 1 region. There is a rule that less NUTS region defined more nodal centers, gathered in the functional unit.

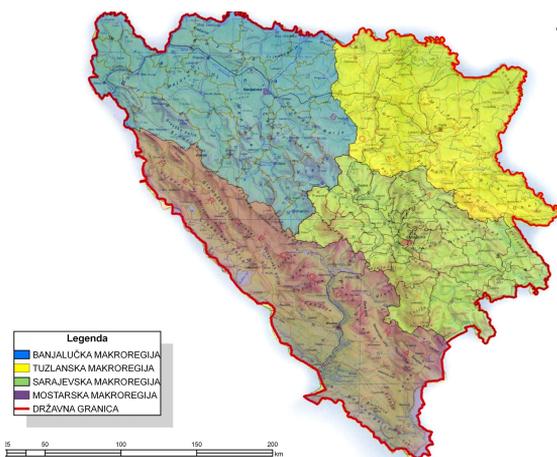
Lower hierarchical ranks of the nomenclature of statistical units are units of local government (LAU). They could be seen as a sub-region within the NUTS regions that have a hierarchical rank of a macro region. Their number refers to the nodal centers and compatibility to overall development of the NUTS regions.

The European Union is a union of compatible regions which constitute the integrative unity of cross-border cooperation. Cross-border regional cooperation is based, in addition to the above principles of regionalization, even on the physionomic evaluation of primary

indicative factors. So Pannonian physionomic unit and its peripheral parts can represent the backbone of the primary development sector.

If we accept one limit of NUTS regionalization - number of population of at least 800,000 then, according to this criterion, the territory of Bosnia and Herzegovina could allocate five regions, which would have complex regionalgeographical character.

Uneven population density and lack of nodal centers networking, and inadequate self-sustainable development of some areas in Bosnia and Herzegovina do not allow taking into account only size of the area and number of population criteria. Sustainability measured by GDP on which in Bosnia and Herzegovina are no official statistics, except superiors, with reliable figures on the surface of the territory and population, it is possible to regionalize



**Fig. 7. Example of NUTS regionalization of Bosnia and Herzegovina in the papers of the geography students, 2<sup>nd</sup> cycle of the second generation, Regional and Spatial Planning**

and Herzegovina, among other things, has to take into account cross-border regionalgeographical division of the neighboring countries to full compatibility capacity.

The criteria and principles of European regionalization require the necessary application process of regional geographical analysis of Bosnia and Herzegovina in at least three levels: programming, diagnostic and prognostic. A program of research include the selection of variables process or identification of factors that define a given region. The process of regionalization in the research program is based on the collection of data and information about geographic facts that define the region, then the analysis of physical-and social geographical parameters in order to define the types of regions and detection of typical geographical determinants, taking into account the European criteria by which regions differ from each other.

Diagnostic research in the process of region separation and the regional division of territorial units are realized by identifying the leading and recognizable identification of factors, primarily natural, labor and production resources, defining the internal unity and self-sustainability of the region.

To diagnostic research of regionalization belong and analysis which give compatibility with neighboring regional development, including cross-border regions. Prognostic

Bosnia and Herze-govina towards the European NUTS on the Banja Luka region macro-surface 15.210 km<sup>2</sup> with a population of 1.078.099, or 28.4%, Tuzla macro-region surface of 10.393 km<sup>2</sup> and 1.260.059 century. or 33.2%, Sarajevo Macro-Region - 10.495 km<sup>2</sup> with her 955.477 century. or 25.2%, Mostar macro-region 15.031 km<sup>2</sup> with 497.987 inhabitants or 13.1% of the total population in Bosnia and Herzegovina. (see Fig. 7).

NUTS regionalization of Bosnia and Herzegovina is the imperative of integration processes in the European Union. European regional geographical concept applied in the territory of Bosnia

and Herzegovina, among other things, has to take into account cross-border regionalgeographical division of the neighboring countries to full compatibility capacity.

regionalnogeographical research include aspects of sustainability assessment of future conditions of given region according to the achieved level of the production development. Prognostic research are permanent and, except for the assessment of the current diagnosis, are undertaken in order to improve regional and spatial development.

Postojeći besperspektivni regionalno-geografski razvoj Bosne i Hercegovine umrežen dejtonskom podjelom moguće je, u prijelaznoj fazi do evropeizacije regionalne podjele Bosne i Hercegovine, rješavati stimulacijom ekonomskog razvoja regionalnih razvojnih zajednica i agencija. Njih bi trebalo forimirati na nodalno-funkcionalnom principu uz uvažavanje teritorijalnog kompleksnog pristupa kojim bi se obuhvatale predione cjeline fizionomskog karaktera, a koje pri tome zanemaruju entitetske i kantonalne diobe.

Existing nonperspective regional and geographical development of Bosnia and Herzegovina networked by Dayton division is possible, in a transitional phase to the Europeanization of the regional division of Bosnia and Herzegovina, addressed by stimulating economic development, regional development boards and agencies. They should be formed on the nodal-functional principle with respect to the territorial complex approach that would include spatial areas of physionomical character, and which at the same time neglecte the entity and cantonal division.

## CONCLUSIONS

Entity and Cantonal unsustainable networked division is not a reflection of geographical understanding of geographic regions. Political and any other action should be focused on regional development planning in Bosnia and Herzegovina. Planned development can not exist without a regional strategy in order to include natural and social resources provided by regional division.

Regionalization in the regional strategy must be based on its functional division taking into account:

- ✓ complex geographical regionalization,
- ✓ concept of regionalization of the European Union,
- ✓ sustainable concept of region
- ✓ integration of future NUTS regions in neighboring compatible European region.

Regional Strategy and regionalization of Bosnia and Herzegovina may engage experts who have glimpsed deeply into the core of principles and methods of scientific regionalization. Their consensual proposal based on the foundations of regional science would be a basis for political dialogue and agreements on regional development of Bosnia and Herzegovina in the light of new integration trends sought.

## Literature

- Bošnjak, J. 1991: Mjesto i uloga regionalne geografije u sistemu geografske nauke sa posebnim osvrtom na regionalnu geografiju Jugoslavije. Doktorska disertacija, (Fond naučne dokumentacije Prirodno-matematičkog fakulteta) Sarajevo
- Bublin, M. 2000: Prostorno planiranje, Univerzitetska knjiga Sarajevo
- Gracianski, A. N. 1955: Priroda Jugoslavije. Gosudarstvenoe izdatel'jstvo geografičeskoji literaturi, Moskva

- Haggett, P. 1965: Locational analysis in Human Geography; Arnold
- Ilešić, S. 1961: Geografska regionalizacija Jugoslavije. Geografski vestnik, GD Slovenije, Ljubljana
- James, E.J., Martin, J.G., 1972: All Possible World. A History of Geographical Ideas; Wiley
- Marković, J. 1980: Regionalna geografija SFR Jugoslavije. Građevinska knjiga, Beograd
- Melik, A. 1948: Jugoslavija. Zemljepisni pregled, DZS, Ljubljana 1948.
- Paasi, A. 2003: Region and Place: Regional identity in question, Progress in Human Geography 27(4) 475-485.
- Nurković, S, & Mirić, R. 2005: Implikacije političko-teritorijalnog ustroja Bosne i Hercegovine na regionalno-geografsku strukturu i razvoj, Zbornik radova Prvog kongresa geografa Bosne i Hercegovine, Geografsko društvo Federacije Bosne i Hercegovine, Sarajevo
- Kanaet, T. 1954: Prirodno-geografske oblasti i područja NR BiH. III kongres geografa Jugoslavije, 14-23 IX 1953, GD NR BiH, Sarajevo
- Papić K. 1977: Ekonomsko-geografske regije BiH. Geografski pregled, sv. XXI, Sarajevo
- Pejanović, P. 2010: Ogleđi o državnosti i političkom razvoju BiH. Šahinpašić, Sarajevo/Zagreb
- Petrović, R. 1957: O problemima geografske regionalizacije Jugoslavije. Geografski pregled sv. 1 GD NR BiH, Sarajevo
- Rogić, V. 1963: Geografski koncept regije. Geografski glasnik 25, 113-119.
- Roglić, J. 1955: Prilog regionalnoj podjeli Jugoslavije. Geografski glasnik br 16.17, G.D. Hrvatske Zagreb
- Sauer, C.O. 1925: The Morphology of Landscape; Uni. Of California
- Sijarčić, E. 1976: Migracije stanovništva Bosne i Hercegovine, Republički zavod za statistiku SR BiH, Sarajevo
- Smlatić, S. 1982: Regionalne cjeline Bosne i Hercegovine. Enciklopedija Jugoslavije, tom 2 (Bje-Crn), drugo izdanje, Jugoslovenski leksikografski zavod, Zagreb
- Spahić, M. & Drešković, N. 2011: Implikacija političko-teritorijalnog ustrojstva Bosne i Hercegovine na njen regionalnogeografski razvoj. Međunarodni simpozijum „Bosna i Hercegovina – 15 godina Dejtonskog mirovnog sporazuma“ Zbornik radova, Univerzitet u Sarajevu, Sarajevo, 165-184
- Spahić, M. 2007: Geografija za 8 razred osnovne škole. Sarajevo Publishing, Sarajevo
- Vresk, M. 1997: Regionalna geografija danas, Acta Geographica Croatica, vol.32, Zagreb Atlas svijeta za osnovnu i srednje škole. IP „Sejtarija“ 1998.
- Enciklopedija Jugoslavije, tom III (I-J), JLZ, Zagreb, 1990.

## Authors

**Muriz Spahić**, doctor of geographical sciences, full professor at the Faculty of Science, University of Sarajevo, Bosnia and Herzegovina. Scientific area of research includes: physical geography and environmental protection, from which he published one monography and six university textbooks. Author of over 75 scientific articles, autor and co-author of several textbooks of geography in primary and secondary schools. Responsible researcher and participant in several scientific prestige projects. President of the Association of Geographers of Bosnia and Herzegovina, editor of the scientific journal Acta Geographica Bosniae et Herzegovinae.

**Haris Jahić**, master of geographical sciences, senior assistant at the Faculty of Science, University of Sarajevo, Bosnia and Herzegovina. Performs exercises, among other things, from Tourism and environmental protection and Methods of teaching geography. Currently performs doctoral studies at the Faculty of Science in Sarajevo, in the field of Turizam.