GEOSPATIAL CONCEPTS OF “BORDER”, “BORDERLANDS”, “TRANSBORDERLANDS”: MODERNIZATION OF THE MEANING

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Citation

Abstract
In this article, a terminological analysis of the ambivalent geospatial concepts of “border”, “border zone”, which are characterized by a long synonymic row and simultaneously have the semantic load of lines, strips of separation as well as interaction; with account of historical and genetic, natural and geographical, morphological and functional approaches, conceptual and terminological systems of “state border”, “borderlands”, “transborderlands” are analyzed; semantic shifts of the notions of “border”, “border zone”, “frontier” according to the world order tendencies are defined.

Key words
concept, border, frontier, borderlands, region, transborderlands.

1. Introduction
Geospatial concepts “border”, “borderlands”, “transborderlands” belong to fundamental notions, scientific usage of which has increased under the conditions of regional, global development in the twentieth century. The division of whole into parts, the allocation of interconnected structures in view of relativism of the whole and separate, center-peripheral approaches are general theoretical basis for specifically concrete research. The complexity of research of the concepts “border” and “borderzone” caused by their ambivalent nature (the content is disclosed simultaneously by polar features, such as separation and interaction).

Philosophical multiplicity of meanings of concept “border” in the specific areas of natural, formal and social sciences has been transformed. The problem of “border” and “borderzone” is relevant in the geographical science, the general subject of research of which is continual-discrete geographical space (gespace) in whole plurality of natural, social, socionatural dimensions. Reality and virtuality, absoluteness and relativity, clarity and diffuseness of borders, typology of natural, social, socionatural borders, delimitation criteria and territorial gravitation zones (borderzone) are not enough analyzed in the geographical research. Within the context of postmodern scientific discourses, the problem of perception of borders, borderlands and formation
their mental geographical images respectively, is also topical. The aforementioned actualizes the necessity of the development of geographical border studies as an research area of theoretical geography.

**Research methodology:** methodical possibilities of terminological analysis, essence of which is in creation of the conceptual and terminological systems, determination of content, semantic connections, establishment of semantic transformations of concepts are used for realization of research. The terminological analysis carried out in compliance with scientific methods of comparative, systemic and structural, synergistic, relativism approaches, geographical conceptions of regionalism and regional development.

2. Geospatial conception of border: modern interpretation

The problem of the origin and function of geospatial borders and border zones is the most highlighted in publications of historical, historical and geographical, ethnogeographical, political-geographical, military geographical and geopolitical areas. In this context should be mentioned the scientific achievements of H. Bliy and R. Muller (Блій, Муллер, 2014), M. Dnistriansky (Дністрянський, 2014), Yu. Kyseliov (Киселюв, 2012), N. Mikula (Мікула, Засадко, 2014), M. Malsky and M. Matsiakh (Мальський, Мацях, 2011), T. Michalski (2008, 2010), I. Chornovol (Чорновол, 2015), O. Shabliy (Шаблій, 1997), B. Yatsenko (Яценько et al., 2007). The impact of historical factors on the establishment and functioning of strips of cultural, social, economic, mental delimitation in the research of Ya. Dashkevych (Дашкевич, 1991), N. Zamiatina (Замятіна, 1998), F. Turner (Тернер, 2009) and others is relevant. The most general, comprehensive approach of research refers to the border studies, well known from the end of XX century (Kannenep et al., 2011).

Ukrainian and English, as modern scientific languages, have many correspondences for the definition of geospatial concepts “border” – the line of separation of a territory, and “borderzone” – a zone which functionally gravitates to the border. For example, in Ukrainian, correspondences are rubizh (boundary), hranytsia (bound), kordon (border), kray (verge), kinets (end), mezhnyk (side land), hran (facet), and porubizhzhia (boundary zone), pohranychchia (zone of bound), pokordonnia (zone of border), prykordonnia (borderlands), prykordonnya smuha (border strip), prykordonniy region (border region), prykordonyi prostr (border space), okrayina (outskirts), okolytsia (surroundings), perypheria (periphery), transkordonnia (transborderlands) respectively.

The dominant of the synonymic row is the common word border. It is a carrier of the main meaning common to the entire row, stylistically neutral, often used, and it unites around itself the closely semantics words. Synonymic rows to the words border and borderlands are not closed. They are replenished with new words, lose outdated, and the most importantly – there are semantic shifts of some correspondences for the definition of the new geospatial context.

In English terminology, to denote geospatial boundaries the notions of limit, barrier, frontier (dynamic border), boundary (stable, often the state border), border (a common term that unites frontier and boundary), borderlands, border region, cross-border region, cross-borderlands, transborderlands, are used. There are the term “granitsa” (rus., bulg.), “granica” (pl., croat., serb.) in Slavic languages. The term “grenze” in German language is a result of the Germanic-Slavic interaction, according to some researchers (Kannenep et al., 2011).

In the recent geopolitical publications the Latin concepts of limes (border), limitrophe (from limitrophus – borderand, adj); outlying appendage of the Great powers; states, formed after the collapse of the Russian Empire; an intermediate space between the empires or civilizations); Great limitrophe (the strip that separates Russia from the main centers of power) are revived (Цымбурский, 1999). According to M. Dnistrianskyi (Дністрянський, 2014), these terms do not have cognitive values that reflect the bias of the authors in different Great power projects and can be used mainly in the historical and geopolitical discourses.

As the political and geographical component of geographical border studies is the most developed, the conceptual and terminological system of “State border” is chosen as the object of analysis. The notions of “state border” and “national territory” are key in international law, classical political geography, as the main criteria that must be met by a state as a subject of international law. The correlative universal categories of “border” and “border zone” reflect the polar sides of the spatial political and geographical organization of society (without borders can be the countries deprived of sovereignty; without territory – nations located primarily in the border space of other states).

If the historical and geographical discourse allows synonymic interpretation of lines and strips of ethnic, cultural, civilizational delimitation, there is a requirement of holding clear international legal norms in relation to the creation of terms and their
definitions in political and geographical studies. For example, the state border is a line and a vertical surface passing along this line, which define the territory of state, its land, water, natural resources and air space.

The review of scientific literature of research topic allowed organizing a large array of terminology on state borders. In order to systematize are used the traditional historical and genetic, natural and geographical, morphological, functional approaches. In particular, according to:

- *the type of formation* there are „natural” (orographic, hydrographic, etc.) and “artificial” borders;
- *genesis* – antecedational (pioneer, primary), subsequent (next);
- *morphology* – geometrical, astronomical, wavy, straight, combined;
- *the nature of the earth’s surface* – upland and marine;
- *the historical features* – prewar, postwar; colonial, post-colonial; contentious;
- *dynamics* – stable, volatile, „creeping”;
- *the nature of the processes* – strict, non strict; “soft”, “hard”; controlled, uncontrolled; permeable (diffuse), impervious; militarized, “critical”;
- *the dominance of certain functions* – barrier, filtering, contact (with preservation of the main one – achievement of national security) (Влах, Котик, 2017; Яценко et al., 2007).

The state borders, formed as the results of the Second World War, the inviolability of which fixed in the Final Act of the Conference on Security and Cooperation in Europe in 1975 (Conference..., 1975), are mostly artificial, subsequent that often leads to problems in interstate communication.

W. Szymańska (2016) used notions of *disintegrative borders* (closed for contacts), *fragmentize borders* (have different levels of openness), *integrative* (have higher level of openness and intensively contacts) for defining borders according to its functions in international relationships.

While the lexemes denoting the state border according to the type of formation, morphology, genesis, natural features, the nature of the surface, not change semantic meaning. Also polarization of the semantic load of state border from collision to cooperation, from stability to volatility, from barrier to the line of contact, etc. is observed.

### 3. The concept “frontier”: dynamics of the senses

At the early historical stages of the political structure of the world, distinction of territory was variable, unstable. The notion of boundaries of the state was interpreted as a pulsating boundary space, not demarcated and delimited clearly. The unstable nature of ethno-cultural, civilizational geospatial distinction reflects the relatively new concept of “frontier”. The author of the term American historian F. Turner regarded the frontier as a moving area of the settlements of expansive clash of “civilization” with barbarism, according to the theory of geographical determinism, has been formed distinctive traits of the American character. The Great Frontier was a border of European colonization of North America that was moving from East to West (Тернер, 2009). The frontier as a zone of development, the zone of unstable equilibrium is also considered by a modern Russian researcher N. Zamiatina (Замятина, 1998).

The frontier issues are raised in the Ukrainian scientific thought for concerning the formation of the national territory, detection of the Ukrainian national identity. Actually, polytonim Ukraine means land on the edges. Ukrainian historian Ya. Dashkevych territory (Дашкевич, 1991), to characterize the location of Ukraine between East and West, used the concept of *the Great Border* as a steppe frontier, a strip of delimitation of the political, military influence, and later economic uses of the. The Great Border of medieval Ukraine ceased to exist in the XVIII century because of the Russian conquest, but for a long time was stored in the material and spiritual culture of ethnic groups of the over Northern Black Sea region.

In the modern scientific reflection of the concept “frontier”, there has been a semantic shift from the space of separation, instability (“bloody land” according to T. Snyder (Снайдер, 2011)) to the space of intensive interaction of different cultures. In particular, Lviv historian I. Chornovol under a frontier understands “the space of variable values in the contact zone of different identities and adaptation to the natural environment when, through intensive communication, economic, social, cultural and political interaction, the borrowing, adaptation or domestication of one culture by another occurs” (Чорновол, 2015, p. 266).

The researcher raises questions of comparative aspect of frontier studies for analysis the different eras and societies; the feasibility of introducing the thesis on frontiers in the history of Ukraine; the influence of frontiers on creation of Ukrainian identity; the dangers of frontier phenomenon at times when Ukraine became border zone in the
conditions of Russian aggression (hybrid or frontier war).

In the context of changing geopolitical situation in the modern world – a world of increasing barriers – there is semantic shift of the terms “state border”, “frontier” in the direction of their primary values as lines of demarcation, strips of clashes, confrontation.

The new military frontier in the east of Ukraine is Donbas – local in terms of spatial coverage, but global in terms of the influence on geopolitical situation. For the definition of Donbass frontier, the concept of “critical border” can be used as a special kind of borders when Great power is seeking to protect their interests outside its legally delineated territory. This concept connected with the concepts of “sphere of influence”, “sphere of vital interests”.

The problems of the Ukrainian-Russian borderzone have deep historical roots. American historian H. Kuromiya (Куromія, 2002), analyzing issues of freedom and terror in Donbas for the period of 1870–1990, argues that modernity has revived here the features of the steppe borderlands (pugnacity, cruelty, inclination to terror, independence, love of freedom). The main features of modern militaristic frontier is permanent instability, destruction of social institutions, customary morality, ideology, intensive migration, ambivalent identity of the population.

The terminology for definition of the present geospatial differences of frontier acquired militaristic traits: buffer zone, “grey” zone, “red” zone, “green” zone, controlled area, uncontrolled area, safety zone, danger zone. To characterize such frontiers, transterminized military concepts are used (“red” zone – the zone of fire).

Describing the geosophical differences of the East and Southeast of Ukraine, Yu. Kyseliov uses the concept of Ukrainian frontier, which coincides with the basin of the Don River (Herodotus drew the line between Europe and Asia along Tanais). The researcher emphasizes partially Eurasian nature of the Ukrainian geospace in connection with its significant spread in steppes (Кисельов, 2012).

With account of the features of geospatial differences of strip of delimitation, and also the main directions of movement of ethnic groups, the author provides a typology of frontiers, highlighting limiting and unlimiting, linear and planar frontiers respectively (in our opinion, term elements for the definition of the singled out types should be modernized, because by its nature frontiers are always limiting). Under unlimiting frontier Yu. Kyseliov understands “boundary that outlines populated by a certain ethnic group territory with almost undeveloped geographical space”. The limiting frontier “separates the territory developed by two resident ethnic groups with a negative to each other complementarity” (Кисельов, 2012, р. 37). Linear frontiers arise on condition that an ethnic group moves only in one direction; planar frontiers (sometimes called planar spaces) formed if an ethnic community spreads in several ways.

In the modern scientific, scientific and publicistic texts, avoidance of the concept of frontier is observed as a result of its determination, i.e. use of it to describe the different phenomena of the borderlands – location, interaction and etc. Ukrainian historian V. Kravchenko (Кравченко, 2010) in the monograph devoted to Kharkiv, calls it the capital of Borderlands (not the first capital of Ukraine). The researcher emphasizes the importance of mythologemes for the formation of mental images of border areas. In perceptional and dimensional interdisciplinary discourses the concept of mental border is actively used (as opposed to physical border in the traditional approaches).

4. Content and semantic connections of concept “borderlands”

As to the concepts of “border zone” (“borderlands”), the scientific semantic load it acquired in the context of state border with term elements of “borderland” and “transborderland”. The borderlands is a geographical space directly close to a border, characterized by special social factors, conditions (natural- and human-geographical location), a particular demographic, settlement, cultural, social and economical processes etc., functions (safety, socio- and ethno-cultural, economic, etc.), dynamics of development, distinct from neighboring spaces.

During the last century, the concept of “borderlands” has significantly evolved and enriched with new components, which is associated with various aspects of the functioning of borders. This is due to historical conditions, dynamics of various processes of the borderland, especially the military, political, cultural and ethno-cultural, social, economic (in particular the formation of border infrastructure, the existence of properties such as transitivity of border), the nature and intensity of cross-border cooperation (Michalski, 2010). Along with the notion of “borderland” (“border zone”) other terms are often used – „borderland territory”, “marchlands” that are smaller in volume. The category of “territory” actually indicates a portion of land (as a two-dimensional space object) with typical natural geographical and human-geographical features, and the term “borderland” is used to describe not only the territory, but
also space (as an object in three-dimensional system of coordinates) that covers the territory, airspace, water space. However, the notions of borderlands and borderland territory are frequently used as synonymous.

One of the most important aspects in the definition of borderlands is its delimitation. Approaches to delimitation of borderlands are determined by such indicators:

- **natural geographical; socio-economic** (limits are variable, depending on the intensity of cross-border relations);
- **psychological** (depend on the mental perception of the borderland limits by residents, on their self-identity as citizens of the state, representatives of the ethnic group, or of another religion, etc.);
- **administrative and institutional** (at various levels of administrative and territorial structure – raions (districts in Ukraine), oblasts, regions; depending on the role of borderlands for certain formal institutions; depending on the system of legal regulation of border status);
- **security** (availability of borderland and military infrastructure).

These indicators identify two aspects of borderland delimitation:
- **informal** (no clear limits; or limits, which are not reflected in the documents – laws, international agreements, etc.) and **formal** (formalized by an agreement; with the establishment of limits).

The informal aspect of borderland delimitation also applies to the territorial identity of the inhabitants of borderlands. Scientific analysis of regional sentiments, the feeling of kinship with neighbors, willingness to cooperate with them, provides an opportunity to identify features of regional consciousness, the mental limits of borderland. In particular, the feature of borderland socio-dynamics is that on its territory, formation of a specific cultural archetype takes place and, overall, borderlands is a marker of national culture. This approach is typical of social and cultural studies.

The formal approach is most common in scientific research of economics, human geography, international relations, military science, law, etc. According to the administrative and institutional and security principles, “border strip” and “controlled border regions”, which have special border regime and protected the State Border Guard Service, are delimitated. Also the limits of borderlands in the form of zone of Local (small) border traffic (this is a strip with a width of about 30–50 km from the border) are clearly documented, which regulates the peculiarities of crossing the state border by the residents of this zone. However, there is no detailed definition of “borderland zone” in the legislative acts of Ukraine. For formal delimitation of borderlands, the system of administrative and territorial structure of a country is often used. For Ukraine, unfortunately, there are barriers in the development of borderland areas, precisely because of the lack of implementation of administrative reform, especially a reform of local government (Kuczabski, 2010).

The most general concept which characterizes the space of borderland is the notion of “border region” – an area (space) adjacent to the state border, which is characterized by stable borderland connections with a neighbouring country and related development features. The limits of this region are formal. They are determined by the units of the territorial structure (local settlements, raions, oblasts, regions).

According to the developed in the second half of the twentieth century Center-Periphery theory, borderland space belongs to the periphery of state, which is characterized by special security functions and minor economic value. All over the time, borderland “periphery” has changed its role in regional development of a country: from agricultural, non urban regions with level of economic development below the average to regions with sustainable interstate connections, developed borderland, economical, ecological infrastructure.

Due to the change of senses “borderlands’ chain of meanings” next components borderslands – borderland connections – cross-borderland cooperation – border region – cross-border connections – cross-border cooperation – cross-border region – Euroregion, cross-border cluster, cross-border partnership, etc is formed. Such chain (a system of concepts in which each subsequent term is formed based on the previous) successfully reflects the changing of functions of borderlands from the time, when the dominant function was barrier, to modern times, when contact and filtering functions are important.

5. The place of the concept “transborderlands” in terminological system of border

In contrast to “borderlands”, the primary concept of which is “border”, the term “transborderlands” derived from the concept of “cross-border cooperation”. The concept of “transborderlands” or more formally “cross-border region” is used to indicate the space of distribution of cross-border (transborder) cooperation, which is, in turn, a higher level of development of borderland cooperation. In the process of growth of the role of cross-border cooperation, the formation of a cross-border region on the basis of two or more borderland regions takes place.
In cross-border cooperation, the main condition is relatively stable relations across the state border. Therefore, a common to the two states cross-border region, adjacent to the common section of state border, is formed in contrast to borderlands – on one side of border mainly.

The most common definition of cross-border cooperation is no action aimed at strengthening and deepening of the neighboring relations between territorial communities or authorities under the jurisdiction of two or more Contractual Parties, and signing for this purpose no necessary agreements or arrangements. Cross-border cooperation carried out within the competence of territorial communities or authorities, determined by domestic legislation (Мікула, Засадко, 2014). After the disintegration of the system of socialist countries and USSR, this part of Europe experienced a vacuum in terms of international relations. However, initiatives quickly appeared aimed at establishing new economic, political and social relations (Michalski, 2008). In accordance with the theory of international relations, borderland and cross-border cooperation belongs to bilateral or multilateral forms of international relations (Мальський, Мацях, 2011).

The geospatial meaning the concept “transborderlands” includes components:
- border geographical location;
- spatial relationships in border regions of neighboring states, including infrastructure, ethnocultural, economic, etc.;
- natural geographical factors of functioning of cross-border cooperation’s stable forms, namely the presence of common natural and territorial complex based on a river basin, mountain systems, coastal complex, etc. For example, the vast majority of Euroregions is established on the basis of certain natural geographical complexes, which is reflected in their names, for example, the Carpathian Euroregion, the Bug Euroregion, the Upper Prut and Lower Danube Euroregion, Euroregion Dniester, the Dnipro Euroregion in Ukraine (Мамчур, 2013).

Sociologist U. Beck explains modern changes in the economic meanings of borderlands by the processes of weakening of the role of national economies: “Global economy operates translegal, that is, neither illegal nor legal. Translegal domination means a long, more or less institutionalized possibility of influence over all national systems and functional boundaries on the results of government decisions and reforms so that their priorities match the priorities of distribution of world economic power. (…) The forms of sovereignty divided between states and global economic actors appear” (Бек, 2011, p. 120).

The modern meaning of “transborderlands” should also be considered in the context of theories of regional development, in particular regional policy. In the applied aspect, borderland and cross-border cooperation is the manifestation of a coherent regional policy of states on both sides of the common border. Scientific analysis of the concept “transborderlands’ makes clear that its use is associated with the spread of the idea of Europe of regions, a concept that is opposed to the centralist concept of creation of common European institutions and includes active participation of the regions of European countries in the power functions of the European Union. It was reinforced by the well-known Center-Periphery theory (Мамчур, 2015). In parallel, by the early 1990s, the fundamental principles of European regional policy had been formulated: subsidiarity; decentralization; partnerships; programming, resource concentration (Козак, 2008). These principles reinforce the process of regions’ devolution. It should be noted that the concept of Europe of regions has specific political and geographical aspects, because it can trigger the growth of regional consciousness that promotes autonomization of individual regions. Also people’s perception of space varies depending on its presentation in mass media. Now borderlands, an area of interactions of different geopolitical and geo-economical interests of neighboring states and another, should be considered as a special cyberspace, requiring information security.

Transborderland space in Europe is characterized by the presence of such spatial forms of cross-border cooperation: Euroregion, cross-border cluster, cross-border partnership, the European grouping of cross-border cooperation, the Organization for European cooperation, cross-border regions of knowledge, cross-border innovations zones and industrial zones, etc. They developed due to unique historical, nature- and human-geographical features of appropriate cross-border regions.

An example of modernization of the concept of borderlands mostly with security functions on the territory of borderland cooperation is the Ukrainian-Polish borderlands (Шаплюй, 1997). This geographical space is characterized by a number of barrier functions: border between states, border of international organizations – EU, NATO; ethnic border, religious border (including the limit of use of the various systems of chronology, calendar); time zones border. Despite the increase of the barrier function, contact function was also developed that is conditioned by development of border and customs infrastructure (checkpoints, crossing points, customs posts, etc.), transport infrastructure (international transport corridors), increasing of social and economical
connects. Due to strengthening of these functions, a number of new forms of borderland cooperation appear, and cooperation developed into Ukraine-Poland cross-border region.

6. Conclusions

As the result of the research, the synonymic row was characterized ambivalent determined semantically close archaic and modern as the result of the research, the synonymic row was characterized ambivalent determined semantically close archaic and modern as the result of the research, the synonymic row was characterized ambivalent determined semantically close archaic and modern as the result of the research, the synonymic row was characterized ambivalent determined semantically close archaic and modern as the result of the research, the synonymic row was characterized ambivalent determined semantically close archaic and modern. As the result of the research, the synonymic row was characterized ambivalent determined semantically close archaic and modern as the result of the research, the synonymic row was characterized ambivalent determined semantically close archaic and modern

In the research, terminological analysis of the concept of “borderlands” was carried out; formal and informal principles of its delimitation were established; modernization of the meanings of the concepts of “border” and “borderlands” was elucidated; the increasing role of the concept of “transborderlands” was identified. In the research, terminological analysis of the concept of “borderlands” was carried out; formal and informal principles of its delimitation were established; modernization of the meanings of the concepts of “border” and “borderlands” was elucidated; the increasing role of the concept of “transborderlands” was identified. In the research, terminological analysis of the concept of “borderlands” was carried out; formal and informal principles of its delimitation were established; modernization of the meanings of the concepts of “border” and “borderlands” was elucidated; the increasing role of the concept of “transborderlands” was identified. In the research, terminological analysis of the concept of “borderlands” was carried out; formal and informal principles of its delimitation were established; modernization of the meanings of the concepts of “border” and “borderlands” was elucidated; the increasing role of the concept of “transborderlands” was identified.

The semantic chain of concepts of border – borderlands – border region connections – borderland cooperation – border region – cross-border connections – cross-border cooperation – transborderlands – cross-border region was constructed. Dynamic radial branching of the semantic chain of the concepts “border”, “borderlands”, “transborderlands” that conditioned by the transformation of their meanings, were identified.

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