USE OF TERRITORIAL IDENTITY MARKERS IN GEOGRAPHICAL RESEARCHES

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Abstract: Territorial identity is a complex of social and cultural relations of local or regional community with the territory of residence, and is considered as an important criterion of regionalization. Nowadays, territorial identity studies are conducted using different scientific approaches. This study represents an attempt to use territorial identity markers, such as names of enterprises, institutions and some kinds of urban place-names. The findings revealed the transformation of historical-geographical regions of Ukraine at the present historical stage, resulted in regionalization scheme and can be used to solve different theoretical and practical problems, including optimizing of the administrative division of the state. The method of territorial identity markers appears to be reliable and effective; therefore it can be widely used both as an independent approach and in the combination with other methods, especially socio-geographical and historical-geographical ones.

Keywords: *territorial identity, territorial identity marker, perceptual portrait of the region*

I. INTRODUCTION

Preservation of regional diversity and cultural identity in particular is an important task for united Europe. The strong tendency characterized by local government functions expansion and providing the regions with more powers in political, economic, and cultural management is typical for the EU. Criteria of region and its' delimitation in geographic space, as well as understanding of specificity and uniqueness of each individual region, are the essential tasks for

effective regional development and practical implementation of the famous concept named "Europe of regions" (Ivanov, 1998).

Regionalization can be done according to various criteria. The territory of the region may be spatially distinguished based on: 1. Regional internal components and systemic connections between them (strong criterion), 2. Radical difference from the other territories based on some feature (strong criterion), or 3. Uniform level of this feature manifestation throughout the territory (weak criterion). It should be noted that spatial behavior is determined not only by factual geographical environment, but also with the perception and desires of regional population (Brookfield, 1961). In particular, subjective sensory characteristics of regions, which sometimes play a crucial role in decision making about residence, place of employment or recreation, are often left ignored (Mezentseva and Mezentsev, 2005). Without the understanding of territorial identification processes at different hierarchical levels it is impossible to shape an effective strategy of regional policy and regional development of certain areas, as well as to achieve social cohesion at the national level by maintaining the cultural, economic, and natural diversity of individual regions. Understanding the mental structure of geographical space makes possible to improve the efficiency of regional management, to optimize administrative divisions, to anticipate and neutralize national and regional separatism processes, to encourage the development of entrepreneurship, environmental protection, to stipulate preserving of the local cultural heritage etc. P. Schmitt-Egner notes that at the present stage of historical development Europe is characterized by so-called "postmodern" regionalism, which is not associated with regional political demands, but with a goal of creating a positive image of the region as a key condition to improve its competitiveness in different sectors of social life (Schmitt-Egner, 2002). Territorial identity of the region is one of the key factors of the regional image. Accordingly, a study of regional and local identities should be an important complement to traditional regionalization procedures.

It should be also noted that in future traditional ethnographic traits will play a smaller role due to globalization. Therefore, precisely territorial identification of the population should be considered as a key criterion for regionalization. Moreover, the possibility to identify the mental structure of geographical space can dramatically change the regionalization procedure itself, its research apparatus, methodology and methods (Smirniagin, 2007). The reflection of region in the public consciousness should serve as the main criterion for the existence of given region.

II. STUDY AREA, GOAL, AND OBJECTIVES

The goal of the study was regionalization of Ukraine on the basis of territorial identity using territorial identity markers. To achieve this goal following objectives have been set up: first, to identify the regions of sub-ethnic identities and their spatial limits, and secondly, to identify the content of these identities, a system of geographical patterns and local mythology associated in the minds of people with a particular region. In particular, conservative and dynamic features of the regional identity, as well as the degree of historical memory preservation were the subject of attention.

Sub-ethnic level of territorial identity has been selected for analysis as being the most determined by historical and cultural specificity of the territory and less limited by modern administrative units.

III. METHODOLOGICAL FRAMEWORK

The authors distinguish three main methodological approaches to the study of territorial identity of population. The first methodological approach is based on the study of territorial identity as a mental phenomenon, as an element of consciences and intellectual culture. In this case the researcher has to directly or indirectly contact with the population as a carrier of territorial identity. The second methodological approach is based on the study of territorial identity markers. The third methodological approach involves analysis of historical-geographical conditions of territorial identity development.

This study uses the second methodological approach. Herein territorial identity marker refers to artifacts or sociofacts that indicate the spatial structure and/or the content of territorial identity on a particular territory. Two following groups of markers are distinguished according to their nature and degree of matching with actual territorial identity.

A. Different cultural traits, i.e. features of architecture, language, customs, traditional trades and crafts, traits of the religion, folklore, settlement planning, place-names of large geographical objects etc. that are indicative for given area. These are relatively stable features that distinguish social and cultural space of a particular territory from the other territories and form the local geographical specificity, therefore indicating a potential extension area of particular territorial identity. However, these cultural traits are not necessarily actualized as the elements of modern territorial identity. The questioning of population can provide an answer to the question of whether the use of a particular cultural trait is reasonable as a marker of territorial identity. Such markers have been used in a range of previous researches (e.g. Zelinsky, 1958; Dnistrianskyi, 2006).

B. Modern and dynamic territorial identity manifestations, which provide the possibility to trace its present state and dynamics of change.

1. Place-names of small areas (districts, stows), parts of settlements (neighborhoods or residential areas), urban place-names (including names of resettlement network elements, i.e. streets, squares, lanes, etc.).

2. Names of private enterprises and institutions, local media, and regional brands.

3. Memorable signs dedicated to famous local personalities, historical events etc.

4. Spatial behavior of population, including movement of goods and information across the territory, including non-governmental services.

5. Residential patterns of local sports teams fans.

6. Electoral behavior of the population.

Such markers have been effectively used in a large number of publications and research projects (e.g. Zelinsky, 1973, 1982, 1987; Weiss, 1988; 1994; 2000; Weakliem and Biggert, 1999; Commoncensus Map Project etc.).

We have selected two markers to analyze the territorial identity of Ukrainian population. As a first marker of territorial identity we considered the names of enterprises and institutions that have a direct semantic connection with the names of main historical-geographical Ukrainian regions. Thus, in such a mode we study the spatial limits of sub-ethnic identities developing at the background of historical-geographical (or ethnographic) lands. The names of geographical objects reflect the perception of residential area by population. Therefore, place-names, being an important component of geographical diversity, can be called a "mirror" of cultural landscape. The names of enterprises and institutions that are discussed in this article can be characterized by dynamism and strong link to the present, and therefore reflect the current state of territorial identity.

Online directories of Ukrainian enterprises were reviewed to find such names and determine their geographical localization. Finally, we have analyzed names semantically related to the following 20 historical-geographical and ethnographic regions of Ukraine: Galicia, Volhynia, Podolia, Northern Bukovina, Opillia, Pokuttia, Polesia, Middle Naddniprianshyna, Chernihovo-Sivershchyna, Poltavshyna, Sloboda Ukraine, Zaporizhia, Taurida, Donbass, Bessarabia, Budjak, Transcarpathia, Hutsulshchyna, Boykivshyna, and Lemkivschyna.

Reasonable selection of such names was an important element of the research methodology. Only those names have been selected that had been given to enterprise or institution by the free choice of the owner or the managing authority. This requirement was used for the identification and elimination of names directly determined by the name of appropriate administrative unit (village, district, region and so on). In particular, official names of executive authorities and local self-

governments (e.g., "Poltava Regional State Administration" in Poltava) have not been considered because their origin does not describe the perception of territory and is explained by administrative factor only. In view of this, there were certain difficulties in the application of this marker to determine the boundaries of perceptual regions with names corresponding to the names of modern administrative units (e.g., historical Poltavshchyna and modern Poltava oblast, historical Volhynia and modern Volhynia oblast; historical Transcarpathia and modern Transcarpathia region etc.).

Asserting the role of enterprises' and institutions' names as markers of territorial identity, we have assumed that their owners give such names based, among other things, on the historical-geographical background of the region where the enterprise/institution is located. Thus, the names of enterprises and institutions in particular region should reflect spatial identification of its population. Absolute quantity of such names and their density per area unit and per population express the strength of sub-ethnic identity.

Names within each semantic group (i.e. related to a particular historical-geographical/ethnographic region) were divided into 2 types by its geographical location: congruent and incongruent. Congruent names are those located within the relevant historical-geographical /ethnographic region. These names correspond to the historical-geographical background. The boundaries of historical-geographical regions were determined by two sources: 1. ethnographic zoning of Ukraine (by Zastavnyi, 1993), which has synthetic character and takes into account the impact of natural, economic, historical, political and administrative factors; 2. scheme of historical-geographical zoning of Ukraine (Krul, 2004), taking into account, besides the above-mentioned factors, also demo-geographical factor based on retrospective dynamics of all characteristic features in the absence of the prevalence of any of them. Names, located outside the boundaries of the relevant historical-geographical regions, have been enlisted to the pool of incongruent names.

As a second marker we used the names of urban resettlement network elements (URNE), i.e. names of streets, squares, lanes, alleys, etc. Hereinafter such names are referred simply as urban place-names, bearing in mind the existence of other urban place-names (e.g., names of districts, neighborhoods, etc.).

The initial hypothesis implies the existence of urban place-names reflecting the territorial identity of population at its different hierarchical levels. Detection of such urban place-names allows characterizing a particular identity and determining its strength and spatial limits of extension.

Unlike the names of settlements, which generally are stable, urban place-names are more dynamic place-name type. Cultural, historical, and especially political and ideological changes in society always led to the renaming of URNE in

favor of the dominant ideas of particular epoch, therefore many urban place-names has memorial character (are given in honor of someone or something) and ideological marking. The decision on URNE naming and renaming is usually adopted by local governments that in democratic conditions, albeit indirectly, should express the will of population. However, it should be noted that in the USSR, since which Ukraine inherited the bulk of urban place-names, URNE were often named without any consideration of public opinion. Considering the conservation of most ideologically marked names we should admit a gap that potentially arises between the actual perception of the region and the structure of urban place-names. Therefore, the adequacy of using urban place-names as a marker of territorial identity can be questioned. However, firstly, long acquiescence of population in a certain region with the alien ideology of urban place-names' denotations indicates changes in local mentality, and therefore in local identity; secondly, even in such circumstances, one can try to identify those urban place-names connected with local cultural and historical background; thirdly, not only static structure of urban place-names is useful, but its dynamics over time, even being slight, also may be indicative. Finally, the most of urban place-names, being or not being an identity product, every day surround the residents and affect the very identity of them. Therefore, the study of regional differences in urban place-names may be useful in explaining the differences in mentality.

A database of urban place-names for 43 Ukrainian was created at the first phase of the study. Cities were selected according to the following principles: 1. complete coverage of the entire Ukrainian territory, and 2. cities with more URNE (and so with more place-names) were preferred, and this criterion roughly correlates with city population. The second principle is essential in terms of representativeness of the urban place-name set, because the latter is formed according to a probabilistic basis (described below). Therefore almost all major cities in Ukraine were selected, including all oblast centers.

As semantic meaning of place-name is more important for the needs of the study than place-name itself, urban place-names had been added to the database on the principle of denotation unity, i.e. a person, event, phenomenon etc. indicated by urban place-name. So, when both Pushkina Street and Pushkinska Street are present in a particular city, only one denotation was added to the database, namely Russian poet and writer Alexander Pushkin. In this case, we have different grammatical forms with the same denotation. Similar actions were carried out in case of multiple repetitions of urban place-names with a different ordinal number, but the same denotation (e.g. 1st, 2nd, 3rd Washington lanes should be recorded in the database only once, because their denotation, historical figure of George Washington, is the same). Different types of URNE (streets, squares, avenues, alleys, blind alleys, descents etc.) were not distinguished in this study, so the

presence in the city, for example, Independence Square and Independence Street, they were added to the database as only one denotation, namely "Independence of Ukraine". When externally similar urban place-names have different denotations, they have been recorded as two different denotations and occupied two separate rows in the database (e.g., Povstanska Street, meaning in fact "Rebel Street" and named after the rebel movement of Haidamaks, and Povstanska Street, with the same meaning "Rebel Street", but named after events on the battleship "Potemkin" in 1905).

Tables of intercity pair correlation coefficients (IPCC) were calculated to estimate regional differences in the structure of Ukrainian urban place-names. Actual IPCC is defined as the overlap between the urban place-name sets for each pair of cities involved in the analysis, and is calculated as the ratio of urban place-names common for the two cities to the total number of urban place-names in these two cities:

$$K = \frac{\theta_{ab}}{N_a + N_b} \quad (1),$$

where N_a and N_b indicate a number of urban place-names in cities A and B respectively, θ_{ab} – number of urban place-names common for the two cities A and B.

The following problem appears when calculating according to formula (1). In determining IPCC between cities with quite different number of URNE, the factual overlap of urban place-name sets is underestimated due to imbalance in URNE. It was therefore proposed to conditionally increase the number of urban place-names in the smaller city up to the number of urban place-names in the bigger city while maintaining ratio θab/Nb, and determine therefore the corrected intercity pair correlation coefficient (hereinafter CIPCC). Thus formula (1) takes the following appearance:

$$K_{corr1} = \frac{\Theta}{2N_a - \Theta} \, (2)$$

where $\Theta = \theta_{ab} \cdot \frac{N_a}{N_b}, N_a > N_b.$

It should be noted that even CIPCC does not show the potential overlap between two cities due to the mechanism of urban place-name set formation. We have shown that the formation of urban place-name set has a stochastic (probabilistic) character. The total city urban place-name set contains certain amounts of place-names semantically relating to national, regional, and local levels. Depending on the total number of urban place-names the relationship between these groups may vary according to certain regularities. For each specific

city there are a number of URNE, and there are corresponding numbers of "vacancies" for urban place-names from each group. Therefore, there are a number of national level urban place-names that could potentially be used in cities across the country, including this given city. Due to the specificity of this particular city there are some of relevant urban place-names that can be filled in this city "vacancies" at regional and local levels. Filling of "vacancies" within each group occurs through a random selection of urban place-name from appropriate group.

As a result, the factual overlap of urban place-names sets and CIPCC for two cities located in the same geographical conditions and so having the same relevant groups of urban place-names may vary depending on the size of cities. For example, in the case of a small number of URNE there will be a small number of "vacancies", so the probability of high overlap between urban place-name set is small, and CIPCC is likely to be low. If the number of "vacancies" is equal to or greater than the number of relevant urban place-names, this ratio is close to 1,0 (in reality the number of relevant urban place-names is very large and potentially endless, since there are practically infinite number of names associated with certain country, region or settlement).

Described disparity partly can be corrected by dividing CIPCC by the ratio urban place-names quantity in compared cities. Then the formula (2) takes the next final appearance:

$$K_{corr2} = \frac{\theta_{ab}}{2N_a - \Theta} \text{ (3)}$$

where $\Theta = \theta_{ab} \cdot \frac{N_a}{N_b}, N_a > N_b$

Hereinafter abbreviation CIPCC refers exactly to the coefficient K_{corr2}. The above described phenomenon of small town "discrimination" due to stochastic mechanism of urban place-name set formation explains the need to involve large cities into analysis as possible, and also the need to supplement pure mathematical calculations with consequent qualitative investigations.

By analyzing the obtained correlation table, clusters and cluster groups of Ukrainian cities were defined based on the largest correlation values and general character of correlation between different cities. Then mathematically defined clusters received quantitative and qualitative characteristics; for obtaining the latter we studied urban place-names that were common for the cities of particular cluster. Such urban place-names have been called characteristic for a given cluster. If possible, cluster core was determined as a city where a) the greatest number of characteristic urban place-names is represented; b) CIPCCs with the other cities of given cluster are highest in comparison with those of the all other cities of given cluster.

Quantitative parameters of clusters were calculated as follows. Let us assume that certain cluster includes n cities with U characteristic urban place-names, and Ux – number of characteristic urban place-names, observed in x cities of given cluster. Then characteristic urban place-names ranking for this cluster will look like this:

$$U_n : U_{n-1} : ... : U_3 : U_2 \quad (4)$$

Coupling coefficient is calculated as follows:

$$K_{coupled} = U_n \cdot \frac{n}{n} + U_{n-1} \cdot \frac{n-1}{n} + \cdots + U_3 \cdot \frac{3}{n} \quad (5)$$

Share of uncoupled characteristic urban place-names is defined as:

$$Sh_{uncoupled} = \frac{U_2}{U} \quad (6)$$

The higher number of characteristic urban place-names and the larger coupling coefficient, the more expressive, shaped and justified is certain cluster. The number of characteristic urban place-names reflects abundance and diversity of historical and cultural background, while coupling coefficient indicates the degree of representation of each characteristic urban place-name in the cities of the cluster and reaches highest values when many characteristic urban place-names are present in many cities, not just in certain pairs of cities. Therefore, coupling coefficient allows comparing shaping degree of different clusters. Characteristic urban place-names ranking shows the detailed presence of characteristic urban place-names in the cities of the cluster. Share of uncoupled characteristic urban place-names shows the percentage of characteristic urban place-names that are present only in 2 cities of the cluster. Therefore, they may not, in fact, be characteristic for the cluster, and only semantic analysis can definitively confirm or refute it.

The number and ratio of shared characteristic urban place-names for all pairs of clusters have been also calculated. The purpose of this procedure was further rationale for cluster groups.

IV. RESULTS AND DISCUSSIONS

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IV.1. Names of enterprises and institutions as a marker of territorial identity

The vast majority of the identified names of enterprises and institutions turned out to be congruent. This suggests that spatial limits of the modern sub-ethnic identities generally coincide with the boundaries of the relevant historical-geographical regions. Thus, ethnographic and political situation is significant factor shaping sub-ethnic identity. The number, density and spatial location of such congruent names suggest the following:

1. A number of sub-ethnic identities with the following historical-geographic regions have been found: Polesia, Podolia, Galicia, Northern Bukovina, Volhynia, Poltavshyna, Taurida, Sloboda Ukraine, Chernihovo-Sivershchyna, Donbass, Opillia, Pokuttia, Hutsulshchyna, Boykivshyna, Lemkivschyna, Bessarabia, Budjak, and Transcarpathia. Names semantically related to the Middle Naddniprianshyna and Zaporizhia have not been found.

2. The largest number of detected names is associated with Podolia (456), Taurida (341) Polesia (294) Donbass (357), and Galicia (186). Meanwhile, relatively small number of detected names is associated with Chernihovo-Sivershchyna, Sloboda Ukraine, and Poltavshchyna (27, 35 and 27 respectively). The highest spatial density is typical for the names associated with Bukovina, Pokuttia, Taurida, Podolia, Volhynia, and Budjak. Therefore, it can be assumed that the strongest sub-ethnic identity is expressed in residents of western and south-western Ukraine, and also in the extreme east (Donbass) and south (Taurida and Budjak). Relatively less developed sub-ethnic identity is observed in northeastern Ukraine (Sloboda, Chernihovo-Sivershchyna). In the central part of Ukraine sub-ethnic identity is relatively weak.

3. Distribution of the analyzed names has a positive correlation with the size of settlement, which is logical, since the number of factual and, to a lesser degree, registered enterprises and institutions is usually directly proportional to population. However, some discrepancies with this rule may be observed not only between different historical-geographical regions (due to the differences between the strength of various sub-ethnic identities), but also within the same region (indicating internal spatial structure of sub-ethnic identity). In particular, in this way it is possible to detect the spatial cores of territorial identities, which potentially (but not necessarily) may also serve as perceptual cores for relevant

regions. For example, the core of Podolian identity is the city of Khmelnitsky with 3,9 characteristic names per 10 thousand of people, while for the most populous Vinnytsia this figure is only 1,5 characteristic names per 10 thousand of people. Spatial cores of the other sub-ethnic identities are the following: Lviv in Galicia, Chernivtsi in Bukovina, Lutsk in Volhynia, Zhytomyr in Polesia, Kharkiv in Sloboda Ukraine, Kherson in Taurida, Donetsk in Donbass, Poltava in Poltavshchyna. For a number of identities extended through the small regions the core is indistinct or don't exist.

4. The distribution of congruent names within the relevant historical-geographical regions often is uneven with separate clusters and adjacent sparse areas. There are grounds to assert the objective connection between this distribution and the historical development of resettlement. For example, distribution of such names within Podolia showed spatial correlation with historical ways of resettlement (Author et al., 2009). The latter fact points to a stable sub-ethnic identity in the ancient rural settlements.

5. Hierarchical structure of sub-ethnic identity is observed. For example, in the Ternopil oblast identities with great historical-geographical regions like Galicia and Podolia coexist with the identity with the ethnographic territory of smaller rank (Opillia). The identity with Galicia in some regions is combined with the identities with Pokuttia, Hutsulshchyna, Boykivshyna, and Lemkivschyna.

6. Sloboda Ukraine appeared to be the historical-geographical region that has essentially lost in the territorial expanse. Currently, over 90% of names associated with Sloboda Ukraine are concentrated in Kharkiv and its surroundings, while in Sumy oblast and in the north of Luhansk oblast they are sporadic.

7. The study demonstrated preservation of historical memory about belonging of the northern Odessa oblast to Podolia, north of Ternopil oblast to Volhynia, conservation of identities with Chernihovo-Sivershchyna, Budjak, and Bessarabia.

The foregoing facts and regularities suggest that the names of enterprises and institutions can serve as an objective marker of territorial identity. The boundaries of historical-geographical regions in Ukraine are firmly rooted in the minds of people and transmitted from one generation to the other by public (historical and geographical education, media) and non-public (family ties between generations) means, despite the overall discrepancy between the historical-geographical regions and the modern administrative divisions.

However, a significant number of registered names are incongruent, indicating therefore the changes that occurred in the sub-ethnic identity since the shaping and scientific review of traditional historical-geographical regions. The current population of Ukraine differently perceives certain territories due to the influence of several factors, including administrative and educational, during recent

history. Here are some examples of such sub-ethnic identity changes, which are manifested through incongruent names:

1. Interaction of identities with Volhynia and Podolia. Due to positioning of Khmelnitsky oblast as a typical Podolian region by the media, the north of Khmelnitsky oblast is now associated with Podolia, although historically it belonged to Volhynia. At the same time in the north of adjacent Ternopil oblast the identity with Volhynia has been strictly preserved. The latter fact may be explained by vagueness of sub-ethnic identity in the rest of the Ternopil oblast, which excludes the possibility of its clear assignment to a specific historical-geographical region (see following paragraph).

2. Ternopil region (except Volhynian north) is an area of interaction between the two strong sub-ethnic identities: with Galicia and with Podolia. Natural conditions and the economy of Ternopil oblast are typically Podolian, and its southern-eastern part belonged to Podolian voivodeship in XIV-XVIII centuries. However, its south west has long been related to Galicia, and later its long stay as a part of Austria-Hungary and Poland, together with Lviv and Ivano-Frankivsk oblasts, resulted in positioning Ternopil oblast as Galician. Now both "Podolian" and "Galician" names of enterprises and institutions are evenly distributed in the south and in the center of this oblast, often being present in the same settlement.

3. Reduction of Volhynian identity spatial extension is observed, as well as concurrent transformation of Polesia in people's perception. Thus, the current identity with Volhynia appears limited by Volyn oblast, south of Rivne oblast and north of Ternopil oblast, and sporadic names are present in Zhytomyr oblast near the city of Novohrad-Volynskyy and in Zhytomyr. The very Zhytomyr oblast is perceived by its residents as a part of Polesia, although historically it predominantly formed a part of Volhynia, and Zhytomyr was a center of Volhynia governorate. So, perceptual image of Polesia has transformed from a natural zone to historical and cultural Ukrainian region with a core in Zhytomyr oblast. Thus, within Zhytomyr oblast the density of names related to Polesia is twice as much as in other areas of natural Polesia, and these names are evenly distributed throughout the Zhytomyr oblast up to the edge with the Vinnytsia oblast in the south, while in Chernihiv, Kyiv, Sumy, Rivne and Volyn oblasts they are confined specifically to Polesian parts of these regions in physical-geographical aspect (i.e., mixed-forest landscapes). In addition, the identity with Polesia replaced weakened identity with Volhynia in the far north of Khmelnytsky oblast.

4. Historical identity with Sloboda Ukraine and new identity with Donbas are simultaneously presented in the agriculture north of the Luhansk oblast, as Lugansk oblast is typically regarded as the one of the two Donbass oblasts.

5. The areal of identity with Taurida spread to the north, west and east. So, except the Crimea, and the south parts of Zaporizhia and Kherson oblasts,

representing the historic Taurida, relevant names now are present on the right bank of the Dnieper and spread to the north of Kherson oblast, south of Mykolayiv and Odessa oblasts, and covered the entire Dnipropetrovsk and Zaporizhia oblasts.

6. The area of identity with Chernihovo-Sivershchyna is fully represented in Chernihiv oblast, meanwhile regressing in the north of Sumy oblast. But the density of the names associated with Polesia there is lower than the density of the names associated with Chernihovo-Sivershchyna.

7. The eastern part of Chernivtsi oblast is perceived by the population as a part of both Bessarabia and Northern Bukovina, although according to some researchers, this is Podolian land (Makarchuk, 1994). Opinion about this territory belonging to historical-geographical region Northern Bessarabia, within the historical-geographic area of southwestern Ukraine (Krul, 2004), seems more reliable in view of our data.

It should be noted that in some cases the presence of incongruent names cannot be explained by the changes in territorial identity. As it turned out, a wide range of enterprises' and institutions' names, semantically related to spatially remote historical-geographical regions, is observed in the major cities of Ukraine. We assume that the authors of these incongruent names were mostly citizens coming from the regions of such sub-ethnic identities. These names, therefore, are manifestation of their sub-ethnic identity, the desire to emphasize on the region of origin at a new residence or business activity place etc. Accordingly, our study allows to indirectly identify the centers of attraction for internal migrants and to identify the donor regions of such migrants for each city. The list of such attractive centers is represented below (in parentheses are the donor regions defined by incongruent names observed in cities):

1. Kyiv (Polesia, Podolia, and, to a lesser extent, Bukovina, Galicia, Taurida, Donbass, Poltavshchyna, Sloboda Ukraine etc.).
2. Dnipropetrovsk (Donbass, Taurida, Volhynia, Polesia, Galicia, Budjak).
3. Odessa (Budjak, Bukovina, Donbass, Polesia, Volhynia).
4. Donetsk (Taurida, Chernihovo-Sivershchyna, Bukovina, Podolia).
5. Mykolayiv (Polesia, Budjak, Volhynia, Podolia).
6. Zaporizhia (Bukovina, Podolia, Polesia).
7. Kramatorsk (Taurida, Budjak, Polesia, Galicia).
8. Lviv (Podolia, Bukovina, Polesia, Taurida, Pokuttya).
9. Kharkiv (Taurida, Chernihovo-Sivershchyna, Polesia, Galicia).

To a lesser extent such incongruent names are observed in most oblast centers of Ukraine and resort towns on the Black Sea shore.

According to received data it can be argued that most migration flows are directed to the cities of Kyiv, Kharkiv, Donetsk, Odessa, Lviv, Dnipropetrovsk, Mykolayiv. Kyiv attracts migrants from neighboring Polesia and Podolia, but in

general from all Ukraine. Cities of Donbass attract migrants from eastern and southern Ukraine, Lviv - from the western and central Ukraine. The cities of Prydniprovya, Crimea and the Black Sea shore pull migrants from all Ukraine.

It is worth noticing the fact that incongruent names associated with Bukovina, Podolia, Volhynia, and Polesia are observed almost everywhere in Ukraine, while names associated with Galicia have a limited presence in the extreme eastern oblasts, and the names associated with the Donbas are practically rare in the central and western oblasts. On the one hand, it can be regarded as limited migration flows from Galicia to the Donbass and from the Donbass to the western Ukraine. On the other hand, it may be considered as unacceptability of such names by majority of the population living on these territories, because due to today's political confrontation in Ukraine they may be perceived as hostile, inappropriate or unacceptable.

By spatial distribution of incongruent names of this type it can be assumed that migrants from Galicia, Bukovina, Podolia, Taurida, Donbass, and Polesia most likely publicly express their sub-ethnic identity. This information coincides with the preliminary conclusion about the strength of identity of different regions, which has been made considering density and number of associated names.
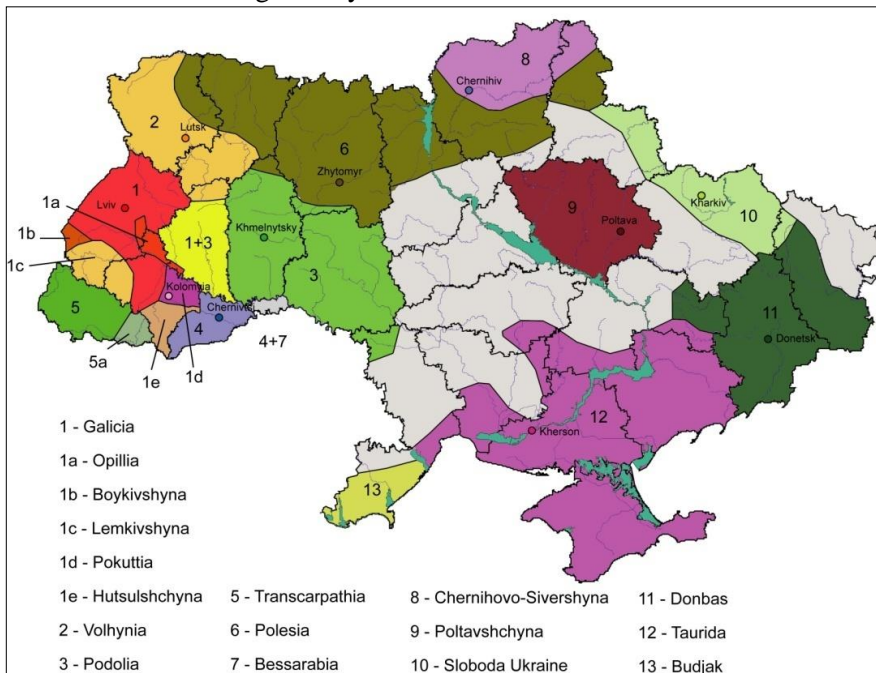

Fig.1 Sub-ethnic identity regions in Ukraine by the names of institutions and enterprises (according to the authors' data)

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It should be noted that some incongruent names are located outside the cities. Such names are markers of migration routes and resulted from the fact that some migrants settled in smaller settlements on the way to the bigger cities due to intervening opportunity: migrants could find a new place of employment or residence on their way to the intended destination) (Stouffer, 1940).

According to aforementioned findings, we create a map of sub-ethnic identities in Ukraine, displaying the actual spatial extent of sub-ethnic identities, as well as their cores and areas where several sub-ethnic identities overlap each other (Fig. 1).Distinguished regions should largely correspond with similarly-named vernacular regions, since the latter are generally detected by using territorial identity and self-appellation (Norton, 2005).

IV.2. Urban place-names as a marker of territorial identity

11 clusters of Ukrainian cities have been distinguished based on the pattern of CIPCCs. These clusters can be divided into three groups: Western, Central and South-Eastern. The Western group includes Galician-Volhynian, Podolian, Bukovinian and Transcarpathian clusters, the Central group includes Zhytomyr, Overdnieper, Chernihovo-Siversk, and Poltava clusters, the South-Eastern Group unites Donets-Dnieper, Black Sea, and Crimean clusters (Fig. 2).
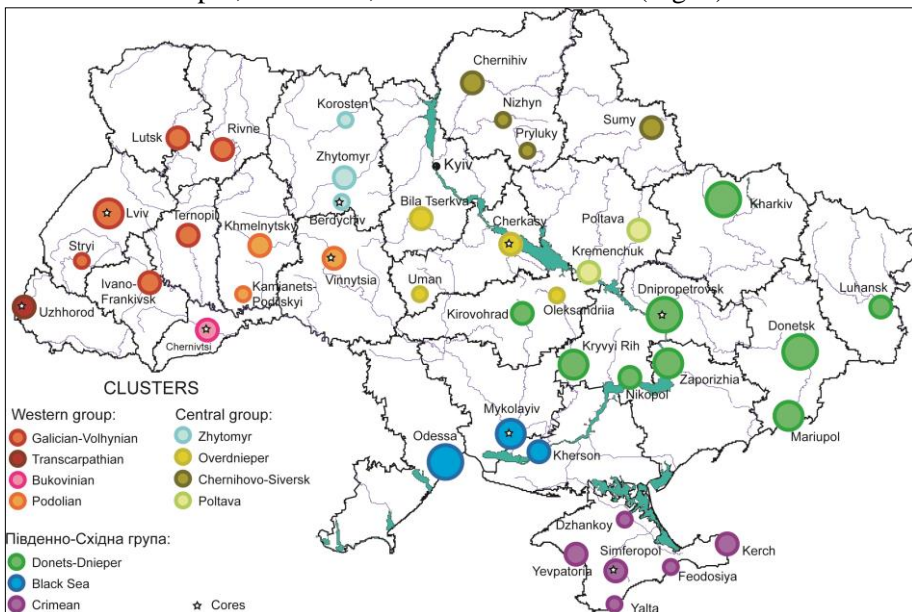
Fig.2 Clusters of Ukrainian cities isolated based on the urban place-names (according to the authors' data)

Brief description of aforementioned clusters and cluster groups is provided below.

I. Western group.

1. Galician-Volhynian cluster.

Cities: Lviv, Ivano-Frankivsk, Stryi, Ternopil, Lutsk, Rivne.

Core: Lviv

Specific features of CIPCC pattern: very high internal CIPCCs (more than 1.6), moderate CIPCCs with the cities of Podolian cluster (0.6-1.6), very low CIPCCs with the cities of Crimean (usually less than 0.4), Donets-Dnieper (usually less than 0.7) and Black Sea (less than 0.8) clusters. CIPCCs with Kyiv always prevail over CIPCCs with the cities of Donets-Dnieper cluster.

Number of characteristic urban place-names: 238.

Ranking of characteristic urban place-names: 3:7:15:55:158.

Coupling coefficient: 0.19.

Share of uncoupled characteristic urban place-names: 66.39%.

Typical denotations of characteristic urban place-names: leaders, ideologists, and victims of Ukrainian struggle for independence in the XX century; prominent figures in the fields of culture, science, religion, etc., who were born or worked in Galicia and Volhynia; prominent Ukrainians in the field of culture, science, religion, etc., who lived and worked in the rest of Ukraine; historical figures of Kievan Rus and Principality of Galicia-Volhynia, as well as of the Grand Duchy of Lithuania; historical figures of Cossack times; settlements within Galicia, Volhynia and adjacent areas; ethnographic regions (or relevant population groups) in Ukrainian Carpathians; national minorities that have lived in the cities of Galicia and Volhynia; Ukrainian rebel movements; elements of agricultural and natural landscapes; crafts, trade, and service facilities; dissidents, human rights activists; famous representatives of neighboring nations; fighters for the independence of nations within the Russian Federation.

2. Bukovinian cluster.

Cities: Chernivtsi.

Core: Chernivtsi.

Specific features of CIPCC pattern: high CIPCCs with the cities of Galician-Volhynian cluster (1.9-3.7), moderate correlation with the cities of Podolian (0.9-1.3) and Donets-Dnieper clusters, except Oleksandriia (0.9-1.1). CIPCC with Kyiv prevails over CIPCCs with the cities of Donets-Dnieper cluster.

3. Transcarpathian cluster.

Cities: Uzhhorod.

Specific features of CIPCC pattern: high CIPCCs with the cities of Galician-Volhynian (0,5-2,4) and Bukovinian (1.7) clusters, moderate CIPCCs with the cities of Podolian cluster (0.4-0.7). CIPCC with Kyiv prevails over CIPCC with the cities of Donets-Dnieper cluster.

Characteristic names are not presented for Bukovinian and Transcarpathian clusters because both these clusters contain only one city.

4. Podolian cluster.

Cities: Vinnytsia, Khmelnytsky, Kamianets-Podilskyi.

Core: Vinnytsia.

Specific features of CIPCC pattern: high internal CIPCCs (0.8-1.3) and CIPCCs with Chernivtsi (0.9-1.3), moderate CIPCCs with the cities of Galician-Volhynian (especially Ternopil and Rivne) cluster (0.6-1.6), Black Sea cluster (0.5-1.3) cluster and Uzhhorod (0,4-0,7). CIPCC with Kyiv are higher or approximately equal to the CIPCCs with the cities of Donets-Dnieper cluster.

Number of characteristic urban place-names: 19.

Ranking of characteristic urban place-names: 3:16.

Coupling coefficient: 0.16.

Share of uncoupled characteristic urban place-names: 84.21%.

Typical denotations of characteristic urban place-names: outstanding Podolian personalities, settlements, and rivers.

II. Central group.

5. Zhytomyr cluster.

Cities: Zhytomyr, Berdychiv, Korosten.

Core: Berdychiv.

Specific features of CIPCC pattern: moderate internal CIPCCs (0.3-0.7). Also moderate CIPCCs with the cities of Podolian, Donets-Dnieper, Galician-Volhinian, Poltava, Black Sea, Chernihovo-Siversk clusters. CIPCCs with Kyiv prevail over CIPCCs with the cities of Donets-Dnieper cluster.

Number of characteristic urban place-names: 9.

Ranking of characteristic urban place-names: 0:9.

Coupling coefficient: 0.0.

Share of uncoupled characteristic urban place-names: 100.0%.

Typical denotations of characteristic urban place-names: outstanding personalities and settlements of Zhytomyr oblast.

6. Overdnieper cluster.

Cities: Cherkasy, Bila Tserkva, Uman, Oleksandriia.

Core: Cherkasy.

Specific features of CIPCC pattern: relatively high internal CIPCCs (0.6-1.4) except for CIPCC between Bila Tserkva and Oleksandriia (0.2). Moderate CIPCCs with the cities of the Black Sea (0.2-0.6) and Podolian (0.1-0.6) clusters.

CIPCCs with Kyiv prevail over CIPCCs with the cities of Donets-Dnieper cluster (except for Oleksandriia, for which the situation is reverse).

Number of characteristic urban place-names: 16.

Ranking of characteristic urban place-names: 0:1:15.

Coupling coefficient: 0.05.

Share of uncoupled characteristic urban place-names: 93.75%.

Typical denotations of characteristic urban place-names: outstanding personalities, settlements, and military units related to the Overdnieper Ukraine (Naddnipryanshchyna).

7. Chernihovo-Siversk cluster.

Cities: Chernihiv, Sumy, Nizhyn, Pryluky.

Core: Chernihiv.

Specific features of CIPCC pattern: relatively high internal CIPCCs (0.2-2.4). Moderate CIPCCs with Zhytomyr (0.4-0.7). CIPCCs with Kyiv slightly prevail CIPCCs with the cities of Donets-Dnieper cluster.

Number of characteristic urban place-names: 26.

Ranking of characteristic urban place-names: 0:2:24.

Coupling coefficient: 0.06.

Share of uncoupled characteristic urban place-names: 92.31%.

Typical denotations of characteristic urban place-names: prominent personalities related to Chernihovo-Sivershchyna; certain settlements outside Chernihovo-Sivershchyna; names of churches; oil industry; important regional historical dates.

8. Poltava cluster.

Cities: Poltava, Kremenchuk.

Specific features of CIPCC pattern: high internal CIPCC (2.1%), moderate CIPCCs with the cities of Donets-Dnieper cluster (0.6-2.1), low correlation with the cities of Galician-Volhynian and Podolian clusters. But CIPCCs with Kyiv slightly prevail CIPCCs with the cities of Donets-Dnieper cluster.

Number of characteristic urban place-names: 23.

Typical denotations of characteristic urban place-names: famous personalities, settlements, rivers, economic activities and historical events, related to Poltavshchyna.

III. South-Eastern group.

9. Black Sea cluster.

Cities: Odessa, Mykolayiv, Kherson.

Core: Mykolayiv

Specific features of CIPCC pattern: high internal CIPCCs (1.1-2.3); moderate CIPCCs with the cities of Crimean (0.2-1.9), Donets-Dnieper (0.4-3.5), and Podolian (0.5-1.3) clusters; low CIPCCs with the cities of Galician-Volhynian

cluster (less than 0.8%). CIPCCs with Kyiv are slightly smaller than with the cities of Donets-Dnieper cluster.

Number of characteristic urban place-names: 66.

Ranking of characteristic urban place-names: 3:63.

Coupling coefficient: 0.05.

Share of uncoupled characteristic urban place-names: 95.45%.

Typical denotations of characteristic urban place-names: activities and objects related to the sea (recreation, navigation, port facilities, allocation with regard to the shoreline); prominent personalities, geographical locations and military units, related to the region of Black Sea region (Prychornomorya).

10. Crimean cluster.

Cities: Simferopol, Kerch, Yalta, Feodosiya, Yevpatoria, Dzhankoy.

Core: Simferopol.

Specific features of CIPCC pattern: high internal CIPCCs (0.6-1.6%, except for Dzhankoy due to low number of URNE, but for the very Dzhankoy corresponding values in the range of 0.3-0.5 are the highest), moderate CIPCCs with the cities of Black Sea cluster (0.2-1.9), very low CIPCCs with the cities of Galician-Volhynian cluster (generally less than 0.4). CIPCCs with Kyiv are distinctly smaller than with the cities of Donets-Dnieper cluster.

Number of characteristic urban place-names: 78.

Ranking of characteristic urban place-names: 0:0:0:8:70.

Coupling coefficient: 0.05.

Share of uncoupled characteristic urban place-names: 89.87%.

Typical denotations of characteristic urban place-names: outstanding personalities of the Crimea; Crimean settlements; activities and objects related to the sea (recreation, navigation, port facilities); prominent Crimean Tatar and Turkish people; nations and historic state entities in the Crimea; military units operating in the Crimea during the German-Soviet war; local agricultural cultures; mutual location of the settlements; items of railway infrastructure.

11. Donets-Dnieper cluster.

Cities: Donetsk, Dnipropetrovsk, Krivyi Rih, Zaporizhia, Mariupol, Luhansk, Kharkiv, Nikopol, Kirovohrad.

Core: Dnipropetrovsk.

Specific features of CIPCC pattern: very high internal CIPCCs (5.2-9.1 for larger cities and 1.1-2.8% for smaller cities), moderate CIPCC with the cities of Black Sea (0.4-3.5%) and Poltava (0.6-2.1) clusters. Very low CIPCCs with the cities of Galician-Volhynian cluster (generally less than 0.7).

Number of characteristic urban place-names: 998.

Ranking of characteristic urban place-names: 0:0:0:12:39:110:238:599

Coupling coefficient: 0.16.

Share of uncoupled characteristic urban place-names: 60.02%.

Typical denotations of characteristic urban place-names: manufacturing, including ferrous and nonferrous metallurgy, coal mining, chemical industry, building materials industry; communistic ideology, political and economic reality of the Soviet Union, leaders of the international communist movement; geographical locations (territories, republics, cities, areas within cities, rivers, lakes, etc.) within the former USSR; transport infrastructure; military training and sports (sports training in the USSR often was considered as united with the military training, so we combine these categories); geographic areas of the world (former socialistic states of Eastern Europe, their capitals, other states with communist regimes, places of the Soviet military glory and of the Soviet scientific expeditions); outstanding figures of world philosophy, music, science, literature; phenomena and features associated with socialist competition; Dnieper River as a major regional river and a geographical position against it; public education; personalities and events related to space exploration; the dominant soils of the region.

Below lays an attempt to describe the identity of residents living in cities belonging to described clusters.

Identity in the cities of South-Eastern clusters largely depends on the heritage of the former USSR. Residents of these cities perceive the former USSR as "their", "close", consider its heroes and leaders as worthy of respect and honor, so appropriate historical epoch has not been erased from the modern way of life and, invisibly, remains present in everyday reality. Relics of the Soviet life stile (both material and mental) are taken for granted, without feeling disgust or rejection. This peculiarity is most clearly manifested in the Donets-Dnieper cluster.

The differences between clusters of South-Eastern group are as follows. High levels of urbanization and industrialization are crucial elements for regional identity in the cities of Donets-Dnieper cluster. First of all this applies to crucial local industries, i.e. metallurgy and coal industry, and, to a lesser extent, chemical industry, machine building, food industry. For residents of this region the city should be large and have many industrial facilities neighboring with energy and transport networks. The Dnieper River, main regional waterway, serves as a symbol of the region, directs residents in the geographical space, and provides life-giving water to industrial facilities.

In the Black Sea and Crimean clusters industrial objects are overshadowed by the image of the sea occupations related to the shipping (especially sailor, seaman, but also fisher, whale man, oiler, an employee of the Navy). Port facilities, quarantine zones, lighthouses, nautical schools that train personnel for shipping, various types of ships moored in ports compose an essential element of the cultural landscape. Certain attributes of the ship, such as anchor and steering wheel,

became symbolic. The value of coastline appears to be emphasized as well as the importance of shipbuilding among the other industries. Another rooted element of identity is the perception of relevant regions as resort and tourism centers.

Differentiation between Black Sea and Crimean coastal clusters has developed due to variations in the history and geographic location of these areas. A connection with the nations who lived before on the peninsula, as well as with their states, can be traced in the mentality of Crimean inhabitants, but in the cities of Black Sea cluster such a connection has not been detected. Residents of the cities belonging to Black Sea and Crimean clusters have different honored personalities, and in the Crimea prominent figures of the Crimean Tatars and the Turkish people are especially honored. The Crimea with its combined mountain and lowland landforms was settled in a process of intensive colonization, so orientation in the geographical space became very important there and is reflected in a number of urban place-names. Crimean residents are aware of the unique role of the Crimea in the supply of subtropical fruits on the market. The Crimean land is perceived by its residents as a single entity, and other lands form an "external" alien world; but Russia is perceived as intimate geographically, historically and culturally. Residents of the cities belonging to Black Sea cluster perceive as important water bodies such as Southern Bug and Inhul rivers, Berezan Island etc.

Clusters of Western group are ideological antipodes to the clusters of South-Eastern group. In particular this applies to the Galician-Volhynian cluster. In its cities ideological colored Soviet place-names are almost completely absent. The vast majority of population does not identify themselves with the former USSR and do not consider themselves and Ukraine with it. Hopes for the future of Ukraine are associated here with the development of national-patriotic, including radical nationalist movements. Modern Ukraine is regarded as the successor of Kievan Rus and Principality of Galicia-Volhynia, Cossack State, Ukrainian People's Republic, the Hetmanate, the Directorate of Ukrainian People's Republic, and also as a result of struggle for independence carried out by Organization of Ukrainian Nationalists and Ukrainian Insurgent Army. Residents of cities within Galician-Volhynian cluster prefer to commemorate especially those outstanding people who are of Ukrainian ethnic or territorial origin and have contributed to the development of Ukrainian literature, art, music, science, education, and therefore to Ukrainian national consciousness. Those persons who performed ideological, political or armed struggle for Ukrainian state are considered like symbolic heroes. For all that the greatest respect is paid to natives of Galicia and Volhynia, i.e. people of local origin. Dissidents and human rights activists have positive images here regardless of origin and country of residence, as well as people who have committed themselves to the struggle for the independence of their nations, especially in the

former Soviet Union and the modern Russian Federation. Thinking of residents has anti-colonial and sometimes frankly anti-Russian character.

Residents of Galicia and Volhynia feel their fellowship and close relations with the residents of neighboring countries with which they are united by a common history, i.e. Poland, Hungary, the Czech Republic, Romania, Belarus, and consider normal to honor those outstanding personalities of those countries whose activities were not contrary to establishment of Ukrainian national idea.

As a region as a whole is perceived Galicia, Volhynia, Western Podolia, Chelm Land, and Podlachia are considered by residents as consolidated region of Western Ukraine (although the latter two territories now are located within Poland). Within this region specific areas of Hutsulshchchyna, Boykivshchyna, and Lemkivshchyna are identified as well as related ethnic groups.

The city for resident of Galicia or Volhynia is not a major industrial center, but the center of sustainable and balanced development, cradle of industry (with a semantic tint of old "craft"), trade, medicine, and religious ceremonies.

Transcarpathian cluster in our study is represented by only one city, Uzhhorod. Therefore, the analysis had to be conducted on the basis of all urban place-names remaining after three eliminations. Fighters for Ukraine's independence are also honored here, but the national idea has not narrow ethnic sense (like "Ukraine for the Ukrainian" in Galicia). Typical should be recognition of Ukrainian Transcarpathian land as a separate region where Ukrainian, Hungarian, Romanian, Slovak cultural traditions are melted together. In contrast to the cities of Galician-Volhynian cluster, features of pro-Russian and Russophile identity also may be found in Transcarpathian Ukraine. The importance of forests for regional economy is widely recognized; the Carpathian forest became sacred image and a regional symbol.

Bukovina cluster, represented by only one city, Chernivtsi, have been characterized by similar procedure. Podolia and Galicia are perceived here as close allied regions. Some features typical for South-Eastern group of clusters are observed: urban place-names derived from villages and regions of Ukraine co-exist with urban place-names names related to Russia and the former USSR. At the same time, prominent Ukrainian politics and artists are also honored. An image of Bukovina as a land of beech forests is typical. The historical memory about Romanian rule is preserved, which has consequences in merging of Ukrainian and Romanian cultures. The identity of the population in Bukovina is determined by a conglomerate of often contradictory ideas and concepts, resulting in their mutual truncation, halfness: willingness to accept the Ukrainian national idea, but do not conduct an active struggle for it; positioning of Bukovina as a European region, but with a tolerant attitude to the Soviet past.

Identity of the residents from Podolian cities is associated primarily with local prominent personalities, represented by people of different professions and vocations: scientists, government and church leaders, writers, pilots. A key feature is neither a sphere of activity nor ideological orientation, but involvement of the person to Podolian region. Podolia is perceived as historical and ethnographic region, with major cities of Kamianets-Podilskyi and Khmelnytsky. Southern Bug River serves as a specific axis, binder component, and Podolian symbol. Podolian mentality combines features of unwillingness to decisively break with the post-Soviet existence (perception of the Soviet period as an inalienable, essential, tolerance to Soviet heritage) and deep rooting of Ukrainian national identity (respect for figures of Ukrainian culture, fighters for independence of Ukraine, people's avengers and leaders of popular uprisings), what we consider as a similarity with the other Western group clusters.

More or less dominated Ukrainian national identity and deep positive attitude to Ukrainian nation and Ukrainian state are unifying features of all Western group clusters. Convergence of Podolian, Galician-Volhynian, Bukovina and Transcarpathian clusters also follows from a high number of common urban place-names. Differences are caused by characteristics of cultural and historical development, interaction with neighboring ethnic groups, and the degree of tolerance to the Soviet past.

In comparison with clusters of Western and South-Eastern groups, clusters of Central group show the lowest degree of mutual similarity. For Central group is simpler to indicate common absent urban place-names than the common present urban place-names. Characteristic urban place-names, associated with the Ukrainian movement for independence, are missing here. And their opposites, i.e. urban place-names associated with the communist ideology, are present only if the corresponding denotations are in close connection with the regional history.

In general, for its own population Central Ukraine is somewhat amorphous territorial entity. Its image has no clear, extreme qualities which are peculiar to Western or South-Eastern Ukraine, is not postulated as the integrity. For this, Central Ukraine should have become a generator of a certain ideology, philosophy, but this role is now intercepted by other macro-regions of the country. Ukrainian national idea possibly could be this ideology, but radicalism in promotion of national and patriotic ideas is not so typical for the residents of Central Ukraine as for the population of Western Ukraine, and therefore Central Ukraine has to in the wake of Galicians, Volhynians etc. Traditional culture and historical memory of these lands were subdued during the Soviet period; at the same time a new identity, based on industrialization and/or sovietization, as in the case of South-Eastern Ukraine, did not appear.

Separate clusters are distinguished here based on memorial urban place-names, indicating the names of prominent local personalities and settlements. This is particularly true for Zhytomyr, Overdnieper, and Chernihovo-Siversk clusters. For residents of the cities belonging to Central cluster not only political and ideological coloring of a historical figure is important, but rather the factor of this person belonging to given region. Population remember regional heroes, regardless of the epoch in which they lived and the ideology that they promoted.

We can assume the following: residents of cities belonging to one cluster clearly recognize the territorial, cultural and historical community with residents of other cities across the cluster and separateness from residents of other areas. It is significant that boundaries of clusters approximately coincide with the boundaries of the more ancient historical-geographical regions (Naddniprianshchyna, Chernihovo-Sivershchyna, Poltavshchyna), although the characteristic urban place-names are almost exclusively related to the Soviet period.

For the population of the city of Chernihovo-Siversk cluster homeland is inseparably connected with the events of the Civil War years (1917-1922), as well as guerrilla movement during the Soviet-German war (1941-1944). Other perceptual dominant include oil industry and Orthodox churches.

Population of the cities belonging to Overdnieper cluster perceives its territory as the successor of Kievan Rus, and therefore as the historic core of the whole Ukraine. Perceptual association with the events of the Soviet-German war, especially the activities of the 2nd Ukrainian Front, is observed.

Residents of Zhytomyr cluster perceive their territory as the land of cliffs and quarries, pottery, hop and brewing. Local leaders of the guerilla movement are respected.

For residents of Poltava cluster the most significant historical event is the Poltava battle between Swedes and Russians with the participation of Ukrainian Cossacks. This land has an image of Cossack glory and is considered as the historical successor of Cossack Hetmanate. In the same series lays the image of semi-mythical poet and singer Marusia Churai. The natural symbol of Poltava is the Horol River. The population perceives their cities as centers of industry and transport infrastructure, which is a trait similar to the cities of Donets-Dnieper cluster.

So, the population of the Central Ukraine has not single macro-regional identity. Instead, there are a number of regional identities that spatially does not coincide with the boundaries of administrative units. At present, these identities, displayed through urban place-names, are based on the events of the Soviet period; however, it can be assumed that these identities have developed on a deeper cultural background, which is not reflected in the structure of urban place-names that are conservative and virtually unchanged since the Soviet period.

Central Group of clusters has some characteristics typical for both Western and South-Eeastern groups. The first are weakening, and the second are increasing in the following sequence of Central group clusters: Zhytomyr, Chernihovo-Siversk, Donets-Dnieper, and Poltava.

In general, the greatest degree of development and shaping is typical for Galician-Volhynia and Donets-Dnieper clusters that function like nuclei for Western and South-Eastern groups of clusters respectively. They are characterized by a high representation (high number of characteristic urban place-names) and internal consolidation (high coupling coefficients). They are followed by the Black Sea, Crimea and Podolian clusters. The first two of them have high representation and the latter is characterized by high internal consolidation. Other clusters are relatively weakly expressed by the all calculated criteria.

The city of Kyiv was not included in any of the clusters. By virtue of its capital function its place-names combine the cultural elements of different parts of Ukraine. Urban place-names of the central part of Kyiv have Ukrainian national-patriotic ideological marking (similar to Western cluster group), urban place-names of peripheral districts are often associated with communist ideology (similar to South-Eastern group), and due to high level of industrialization there is also a similarity with Donets-Dnieper cluster. However, the closest similarity Kyiv has with two neighboring clusters of Central Group, namely Poltava and Chernihovo-Siversk.

As it can be seen from the above description, the ratio of CIPCCs with Kyiv and with the cities of Donets-Dnieper cluster served as one among the criteria during the clustering procedure.

IV.3. Integral regionalization of Ukraine according to sub-ethnic identity

Analysis of the two markers showed that the traditional historical-geographical regions coexist with new regions, geographical images of which are determined by historical and cultural specificity of the twentieth century: firstly, by the economic development and land use, and secondly, by the vector of supranational identity. In general, new regions have been shaped on the basis of one or more traditional geographically close regions, but there are cases when the traditional region is divided into a number of new regions. Spatial boundaries of traditional and new homologous regions can both fully coincide (Northern Bukovina) and significantly differ (Taurida). Thus, using two markers leads to clarification and complementarity of the results and proves the complexity and dynamism of territorial identification process.

By combining the results of the two sub-studies we received integrated regionalization of Ukraine on the basis of territorial identity (Fig. 3).

However, we do not claim absolute accuracy and objectivity of isolated regions. To clarify further the question is necessary to use other markers, as well as other methodological approaches to the study of territorial identity.

Fig.3 Sub-ethnic identity regions in Ukraine (according to the authors' data)

V. CONCLUSION

The study reveals that the names of enterprises and institutions, as well as urban place-names, may be used as objective markers of sub-ethnic identity. They can be applied to assess the strength of identities, their spatial extension, spatial structure, changes in time and space.

A range of sub-ethnic identities has been developed in Ukraine. Identified areas of their extension are characterized by internal economic and socio-cultural homogeneity. Significant coincidence of isolated regions with major historical-geographic regions is observed, particularly in areas of relatively old resettlement (western, northern, central parts of Ukraine). The resulting regionalization can be used to solve some theoretical and practical problems, including, but not limiting to, clarifying human-geographical regionalization, improving administrative division, implementation of regional policy and local government.

If a marker is selected successfully, i.e. if it has both clear link with the territorial identity and sufficient spatial representation (density), this method can display accurate and objective results, but its scope is narrower than of socio-geographical one. However, comprehensive and long-term analysis of multiple markers can bring reliable results. Therefore, the method of territorial identity markers can be used:

- As an independent method of studying a certain component of territorial identity (objectivity of the selected marker should first be verified);

- As a preliminary procedure before applying socio-geographical method for obtaining interim data;

- Along with socio-geographical method to refine its results.

In the future, it is reasonable to explore other markers of territorial identity comparing the obtained results. This would allow further study of territorial identity in different regions and complementing the methodological arsenal of human geography.

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