## MONOGRAPH

## **AUTHOR'S PREFACE**

Ukraine's history has many centuries, but the nineteenth century should be considered the most fateful. The transition from ethnic gathering to the national level of existence, from regional to national professional culture, from various civil associations and movements to political parties came to a close during this time. "Ukrainian 19th century", as O. P. Reient aptly labeled this period, began in the last quarter of the 18th century. The Second Ukrainian National State, which ended in 1920 – 1921 (Reient, 2000, p. 5; 2011), was its culmination. Our contemporaries and their scientific predecessors have contributed many talented works to study various aspects of this process.

The features of Ukrainian nation-building were similar to those of other nations. It took place among regional groups of Ukrainians with their specific characteristics. Interstate borders no longer separated most of them in the 19th century, but these barriers were visible at all levels of social life for a long time – demographic, social, economic, religious, and cultural. It is not for nothing that the mental phenomenon of Taras Shevchenko was born of the fatalistic serf-peasant archetype of Right-Bank Ukraine, and the humorous and sarcastic gifts of Ivan Kotliarevskyi and Nikolay Gogol matured under the influence of the social mythologists of the Cossacks of Left-Bank Hetmanship (Malorossia). However, it was here, in the Dnipro region, in 1862, that the poetry of the 23-year-old graduate of the Faculty of Law of St.-Peterburg University, Pavlo Chubynskyi, appeared and soon turned into the national anthem of Ukrainians.

Within the boundaries of the 19th century in Ukraine, a kind of bifurcation point can be traced when the system froze in an unstable equilibrium before taking a decisive step towards a different quality of existence. This is the period from 1845 - 1847 to 1861 - 1863, short but notable for the fact that in addition to the descriptive sources – traditional for the historian – a new and numerous group of statistical sources grew rapidly, the centralized collection and publication of which acquired state significance. This is not by chance because the corporate noble state, realizing the uncertainty of the situation, tried to find its way quickly, relying on the most objective sources of information to make the inevitable reforms moderate and controlled. Ukrainian historians, despite the high evaluation by specialists of that time, assign statistical sources a predominantly illustrative role in their scientific constructions about the 19th century.

The above considerations help the author to find his place in the complex mosaic of modern historical knowledge and define the discourse of his scientific project. The object of the study is Ukrainian society in its multiethnic composition, especially in Kyiv, Podillia, Volyn, Poltava, Chernihiv, and Kharkiv provinces from the mid-1840s to the end of the 19th century. Paradoxically, these lands, the center of Ukrainianism, in some respects different, but closely related to each other also due to mass migrations from the west to the east in the middle - second half of the 17th and starting of the 18th centuries, taken together, did not acquire the common name. Nevertheless, it was widely used already in the 17th century in writing "Ukraine" (Beauplan, 1990, Appendix, map), with further historical variations by region (Hetmanshchyna, Malorossia, Slobidska South-Western Region, Zadniprianshchvna, Right-Bank, Ukraine, Left-Bank, Central Ukraine, Naddniprianshyna, etc.). With the transfer of the political name Ukraine to a significantly larger area of settlement of the Ukrainian nation, the question of the terminological identification of the primary core of its formation acquired new relevance. In this case, the author proposes to use the experience of fellow archaeologists – researchers of the early Iron Age, including his own. They successfully use the term "Ukrainian Forest-Steppe" to designate the named territories with stable traditions of settled agriculture and cattle breeding, including the adjacent spaces of the Ukrainian Polissia, and contrast this historical-geographical landscape with the nomadic Steppe.

Thus, after the clarifications, the author defines the social organism of the Forest-Steppe Ukraine from the mid-1840s to the end of the 19th century as an object of research in the unity of its opposites. The study focuses on the diverse manifestations of the life activity of this historical phenomenon, with an emphasis on statistical sources on demographic and social aspects that have not yet received due coverage. The monograph comprises seven chapters devoted to several interrelated aspects of the Forest-Steppe Ukraine society in the middle and second half of the 19th century.

The chapter "I. HUMAN RESOURCES OF FOREST-STEPPE UKRAINE (MID-1840S – EARLY 1860S)" examines the system's

demographic manifestation. Its main parametric characteristics (number, density, movement, and dynamics of population growth) have been reconstructed using cluster and factor analysis techniques. For the first time, a generalized statistical model of the demographic situation in the Ukrainian Forest-Steppe of the mid-19th century was proposed at the level of not only 6 provinces but also each of the 77 administrative districts.

The next section. "II. DEMOGRAPHY AND AGRICULTURE (1846 – 1883)," is a continuation and development of the previous one within the framework of the problem of providing a growing population with vital resources in the conditions of an underdeveloped agricultural economy. Its methodology was based on the creation and comparative analysis of time rows, which characterize changes in the state of the main components of such kinds of systems, namely the population, agricultural land, and herds of domestic animals. The ratio of human and agricultural resources in Forest-Steppe Ukraine before and after the peasant reform in 1861 was investigated for the first time in Ukrainian historiography. The author concluded that during the pre-reform period (1846 - 1863), there was a mismatch between population growth and the necessary resources for life. The peasant reform made the situation worse. Between 1863 and 1883, the acceleration of population growth increased disparities in the supply of vital resources. The system has moved from a pre-crisis to a crisis state

In the third chapter, "III. COMPOSITION, STRUCTURE, TOPOLOGY, AND LANDSCAPE OF THE FOREST-STEPPE UKRAINE SOCIETY (1840S – EARLY 1860S)," the author aims to reconstruct the social composition and structure of the population in dynamic development, based on statistical data. The logic of choosing methodological techniques and scientific instruments, as well as the sequence of research stages, is determined by the state of the sources. Quantitative changes in the main social groups were the first thing considered. The data was classified by individual provinces and chronological sections (1846, 1858, and early 1860s) using cluster analysis. Proximity matrix data was used to generate a social topology for Forest-Steppe Ukraine in the mid-1840s and early 1860s. The social composition of the population of 77 districts was used to classify districts for the final stage of the study. The lack of relevant data on Poltava province of the mid-1840s and Right-Bank of the early 1860s led to the cluster classification of 36 districts of Right-Bank and 41 districts of Left-Bank being performed on the materials of different chronological sections. Despite this, the preliminary conclusion on the high degree of homogeneity of the social topology of Right-Bank and Left-Bank separately throughout the entire period made it possible to apply the retrospective method of comparing the obtained information. The main outcome of the research was the development of a model of the social landscape of the Forest-Steppe Ukraine area in the mid-19th century.

Demography, sociology, and economics play an integral role in forming and developing urban settlements. In the section "IV. TOWNS IN FOREST-STEPPE UKRAINE OF THE EARLY 1860S (CLASSIFICATION AND TYPOLOGY)," the objects were grouped using factor analysis, and hierarchical classification was achieved through cluster analysis. As a consequence of the methodology proposed, an amorphous set of 94 towns took the form of a three-part system with five elements, differently connected between themselves and the system as a whole. They were described as three kinds of urban settlements (archetype, proto-industrial, fair-towns) and five ways of implementing them in the six provinces of Forest-Steppe Ukraine.

Issues of ethnic history are no less complex. In the Ukrainian Forest-Steppe, Right-Bank subregion is distinguished by a diverse ethnic palette and statistical database. In the section "V. ETHNICAL COMPOSITION OF THE RIGHT-BANK SUBREGION IN THE SECOND HALF OF THE 19TH CENTURY," quantitative analysis of statistical information made it possible to show the continuous process of population growth, taking into account the peculiarities of its course for different ethnic groups. With the help of qualitative data analysis, hidden trends in the statistical interaction of ethnic groups, the direction of these relations, and the dynamics of changes over time were revealed. A comprehensive calculation of growth rates was made for each district of the Right-Bank subregion for 1867 – 1897 and for each ethnic group. The obtained results were used to develop a dynamic spatial model of ethnodemographic changes using multivariate cluster analysis.

A few years ago, the author was surprised to learn that the history of medical statistics is not a direction in Ukrainian historiography. The answer to this was the study "VI. HEALTH PROTECTION AND MEDICAL AID

IN FOREST-STEP UKRAINE (MIDDLE AND SECOND HALF OF THE 19TH CENTURY)." This work summarizes medical statistics published or partly archived between the 1840s and 1890s and demonstrates their potential for modern statistical analysis. The general result was the determination of the repertoire of the main diseases, the degree of success of the selfless work of doctors and the mortality of patients, including during epidemics, the structure of the medical network, its capabilities in the largest region of Ukraine and each of its historical land-provinces – Kyiv, Podillia, Volyn on the Right-Bank of Dnipro, Poltava, Chernihiv, Kharkiv on its Left-Bank. Particular attention was paid to a representative sample of data on the health status of several tens of thousands of young people aged 21–30 who were conscripted from 1850 to 1883. Approximately 40% to 60% of those who passed the medical examination in the provinces were found to be ineligible for military service due to health reasons.

It's easy to see that the overall narrative feels somewhat unfinished and lacks smooth transitions from one chapter to another. This is not least a consequence of the sources' failure to uniformly cover the entire research space. It should also not be forgotten that statistical sources for Ukraine either did not exist or were fragmentary until the 40s and 60s of the 19th century. The First General Population Census of 1897 materials can provide insight into the problem.

In the last chapter, "VII. SOCIETY OF FOREST-STEPE UKRAINE IN 1897," the author briefly reviews the data of the First General Census of the Russian Empire, conducted in January 1897. For the first time, socio-demographic factors could be taken into account when considering the ethnic makeup of the populace in every province and subregion of the Ukrainian Forest-Steppe. Although these data do not fill all the forced gaps in the previous parts, they make it possible to assess the conclusions' reliability, at least retrospectively. The most important thing is that it becomes possible to study not only the ethnic composition of social groups, groups by literacy level but also of the professional groups, which is of fundamental importance for determining the type of organization of the social division of labor. The author concludes his work by constructing a multidimensional statistical model of the ethnic composition of the most important professions in the region at the end of the 19th century. The study's results can be summarized in the "CONCLUSION" as follows:

1. A new formulation of the problem itself is proposed since regional studies, focused primarily on using mass statistical data and corresponding methods to analyze Ukraine's history, have not been conducted until now.

2. A multidimensional statistical model of the demographic potential of Forest-Steppe Ukraine in the mid-19th century has been created.

3. A multidimensional statistical model of the social situation in the region has been proposed.

4. A regional spatial-dynamic model has been constructed to analyze negative changes in providing the population with agricultural resources from the mid-1840s to the early 1880s.

5. A multidimensional statistical classification and typology of urban settlements in the region at the beginning of the great reforms of the mid-19th century has been proposed.

6. A dynamic statistical model of the ethnic composition of the Right-Bank subregion of the second half of the 19th century has been made.

7. Using statistical data, the issue of the state of health and the healthcare system in the provinces of Forest-Steppe Ukraine has been comprehensively considered.

8. A multidimensional statistical model of the ethnic composition of the region's residents' main specialties at the end of the 19th century has been proposed.

All models are built on the same source base using the same methods, making the results comparable between regional and interregional studies.

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