Abstract. In fact, this situation with using the materials of the First All-Russian Census of the Russian Empire in 1897 determines the purpose of the article – to prove the fruitfulness of the Census results of 1897 for the analysis of a new, industrial society formation in sub-Russian Ukraine at the end of the XIXth century and the crisis of the old class structure. The research methodology is determined by the fact that all demographic phenomena recorded by the Census of 1897 are considered in the context of historical events and reflect their consequences, i.e., in this case it was an industrial modernization. The authors proceeded from the need to use new methods of calculating the Census results to analyze the social consequences of an industrial modernization in the Ukrainian provinces of the Russian Empire, which are based on the adaptation of the demographic statistics methods to the processing of the Census data of 1897. The scientific novelty consists in the fact that for the first time in historiography new methods have been used to recalculate the results of the Census of 1897 to characterize the trends
and consequences of changes in the social structure of the society due to an industrial modernization. This allowed us to correct the existing in historiography ideas about the social consequences of the first post-reform 40th anniversary of 1861 – 1897. The Conclusions. Summing up, first of all, we note that the source analysis of the First All-Russian Census of the Russian Empire in 1897 is quite topical taking into account the preparation for the second, after the restoration of independence, demographic census in Ukraine. The Census materials are published, recognized as a reliable source of a historical demography and are widely used in the domestic and foreign historiography. However, the Census programme does not make it possible to record the social consequences of an industrial modernization and the crisis of the population class structure, and in historiography there are almost no attempts to list the results of the Census. Accordingly, the authors set a goal to analyze possible ways of recalculating the Census data of 1897.

The authors suggested the feasibility of using three methods of recalculating the Census results. The first one consists in grouping of 64 groups of population occupations, registered by the Census, into industrial clusters (groups) – civil service, public activities, finance, industry, construction, transport and communications, agriculture, services and traditional industries. On the example of the largest city in the Ukrainian provinces – Odesa, it was proved that the Census recorded considerable progress in forming the social structure of the industrial era, but the remnants of the past, traditional society remained significant (the correspondent observations were compared with other cities).

The second method aims at analyzing the mobility of the population, clarify the role of individual social sources in the formation of new strata of the society and urbanization. The method was used to analyze the data of Kharkiv province, especially Kharkiv and other major cities of the province. The method allowed to characterise the mobility of both the population as a whole and its individual states, the role of local people and migrants in the formation of industrial centers, the role of individual social groups in modernization processes.

The content of the third method is an attempt to overcome the main flaw of the Census programme of 1897 – the lack of information on the formation of new social groups and the collapse of the states of the Russian Empire. On the example of Katerynoslav and Kanyanets-Podilsy, the formation tendencies of the new social structure elements and disintegration of the old one were characterized.

In other words, the source analysis of the results of the First All-Russian Census of the Russian Empire in 1897 proves that its heuristic potential is far from exhausted, and the multiplicity of methods of its study (including recalculation of results) seems appropriate. The Census results make it possible to characterize the leading social consequences of the industrial modernization of the Russian Empire at the end of the XIXth century.

Key words: the Census of 1897, recalculation, social structure, mobility, consequences of modernization.
The Problem Statement. In Ukraine there is some preparation for a new, second, after the restoration of independence, general census. Scholars and activists take into account the experience of the previous censuses. The reference to the materials of the First All-Russian Census of the Population of the Russian Empire in 1897 is caused by the following reasons.

Firstly, it was the first and the only one in the history of the Russian Empire. Secondly, the Census was conducted at a turning point in the history – the period of industrial modernization.

The Census materials were quite fully published concerning all provinces and Odesa separately, which allows us to make correct calculations, taking into account the modern borders of Ukraine (Pervaya Vseobshchaya perepis’ naseleniya Rossijskoj imperii, Vv. 3, 8, 13, 16, 20, 32, 33, 41, 46, 47, 47, kn. 1, 48).

The researchers do not often take into account the population calculation of the entire modern territory of Ukraine in accordance with the administrative territorial structure of the Russian Empire in 1897, which requires quite hard work. In the researches the materials of the Census of 1897 are mostly analyzed in only nine Ukrainian provinces (Volyn, Podil, Kyiv, Chernihiv, Poltava, Kharkiv, Katernoslav, Kherson and Dnipro, Melitopol and Berdyansk counties of Tavria), which significantly affects the analysis of many social processes. Perhaps, the most illustrative in this regard is the situation with Kherson region due to significant changes in the administrative territorial boundaries of modern Kherson region compared to Kherson province (Savenok, 2014, pp. 6–10). Thus, modern Kherson region, according to the administrative territorial boundaries of 1897, included the parts of Kherson district of Kherson province and Melitopol district of Tavria province and the entire Dnieper district of Tavria province. Accordingly, in order to determine many statistical data on the social face of Kherson region in 1897 (the amount of population, its ethnolinguistic composition, level of urbanization, etc.) it is necessary to calculate the relevant figures carefully, including

інформативних можливостей такого специфічного історичного джерела, як підсумки демографічних переписів населення на противагу панівній в середовищі істориків думки щодо їх обмеженості через визначене спрямування програми перепису. Для перерахунку підсумків перепису було запропоновано три нові методи. Перший зводиться до групування виділених у переписі 64 груп занять до визначальних щодо наслідків модернізації кластерів (груп) отримання прибутків – це державна служба, громадська діяльність, фінанси, промисловість, будівництво, транспорт і зв’язок, сфера послуг і доіндустріальні галузі. На прикладі великих і середніх міст (Одеси, Харкова, Катеринослава і Кам’янець-Подільського) було доведено, що перепис зафіксував значний прогрес в індустріальній модернізації міста, хоча в соціально-економічній сфері зберігався чималий сектор традиційного суспільства. Дію другого методу перерахунків перепису продемонстровано на прикладі Харківської губернії. Для аналізу мобільності різних станів населення та їх ролі у формуванні модерних соціальних структур, у тому числі урбанізації, було перераховано відомості підсумової таблиці перепису “Розподіл населення за станами та місцем народження”. Внаслідок було уточнено стан мобільністі населення загалом та окремих його верств, з’ясовано роль місцевого населення і мігрантів у формуванні нових індустріальних центрів, передусім Харкова. Застосування третього методу перерахунку даних перепису Катеринослава (Дніпра) і Кам’янець-Подільського, зведене у таблиці “Розподіл населення за станами та соціальним становищем”, дало змогу виявити нові риси в динаміці розкладу станів традиційного суспільства і становленні нових соціальних елементів індустріальної доби та суттєво доповнити усталені в історіографії уявлення щодо тенденцій формування модерної соціальної структури.

Ключові слова: перепис 1897 р., перерахунок, соціальна структура, мобільність, наслідки модернізації.
the population in volost (a small administrative peasant division in the Russian Empire). However, this requires the analysis of each region and Ukraine as a whole, because as compared to the administrative division of the Russian Empire, not only the boundaries of modern regions changed, but also the state border of independent Ukraine.

The Census of 1897, according to demographers and historians, was conducted according to the highest standards of science at that time. Though, the Census was not perfect. For instance, the native language literacy was recorded only if the person did not speak Russian, which distorted the ethnic structure; the urban population included only cities residents recognized by the authorities; due to the military registration the peasants, regardless of a residence place, were included into rural communities. As it was organized in winter (at that time the migration of the population was the smallest) the Census recorded an underestimated real number of workers among the peasants. The Census simultaneously took into account three categories of the population, which were partially mutually superimposed on each other. However, the most significant, fundamental shortcoming was its focus on the realities of a traditional society. Accordingly, the formation of an industrial society and the class division crisis were not reflected in the Census. This fact creates significant difficulties in using the materials of the Census of 1897 for the analysis of modernization processes – employment and mobility of the population, the level of a real urbanization, the number of employees and entrepreneurs, intellectuals and etc.

The analysis of recent researches and publications shows that certain drawbacks of the Census of 1897 did not prevent historians from using its results as the source. Initially, researchers (such approaches survived till nowadays) used the final Census materials to illustrate and review the professional composition of the employed population (Litvak, 1990, pp. 116–119).

It is difficult to agree with those scholars, who consider the linguistic and confessional groups, identified by the Census, as ethnic groups. For instance, these scholars call the Orthodox people, whose native language was Ukrainian, – the Ukrainians (Chornyi, 2001, pp. 8–37). Meanwhile, modern science considers self-consciousness to be a decisive feature of ethnicity, and therefore, according to the results of the Census, we can speak only of ethnolinguistic groups.

The materials of the Census of 1897 are often used in modern Ukrainian historiography. In V. Konstantynova’s monograph “Urbanization: the South-Ukrainian Dimension (1861 – 1904)” a relevant professional extensive historiographical review is presented, which allows us to dwell on only the most important aspects (Konstantynova, 2010, pp. 14–54).

Firstly, domestic and foreign researchers refer to the Census materials in the plots of the generalized works on the population dynamics, ethnic and religious composition, health status, number of foreigners, etc. Typical in this regard is the work of the American P. Herliha “Odesa. History of the City, 1794 – 1914” (Herlihi, 1999, pp. 226–253), in which the Census data are used as illustrative, sometimes confirming material is used to characterize some social trends – the population growth, ethnic dynamics, and etc.

Much more informative possibilities of the Census of 1897 materials were used in the monograph by professor H. Turchenko from Zaporizhzhya “Southern Ukraine at the Turn of the Epochs” (Turchenko, 2005, pp. 20, 24). The researcher operates successfully with demographic statistics for a comprehensive study of the modernization scheme of the Ukrainian nation-formation.

The comprehensive and comparative approaches to the results of the First All-Russian Census of the Population of the Russian Empire in 1897 are generally applied professionally
by modern Ukrainian researchers. Thus, D. Chorny, Kharkiv resident, in the monograph “On the Left Side of the Dnieper: Problems of Modernization of Ukrainian Cities (the end of the XIXth – the beginning of the XXth century)” included into the source of his study the results of the Census of 1897 in combination with other demographic statistics, primarily, the results of the survey of cities in the Russian Empire in 1904 and 1910. This allowed to reconstruct the dynamics of urbanization, the class structure of citizens, the composition of the population by gender and age (Chorny, 2007, p. 27).

The above-mentioned work by V. Konstantynova is widely illustrated by the materials of the Census of 1897 on the characteristics of the sectoral employment of citizens and the comparison of the employment structure of the towns and village inhabitants, religious and confessionnal composition of the population (Konstantynova, 2006, pp. 539–589).

A successful attempt to compare the results of the Census of 1897 with the results of the one-day censuses of Berdychiv in 1882, Katerinoslav in 1865 and Kyiv in 1874 was made in T. Vodotyka’s article “Peculiarities of Modernization Processes in the Cities of the Dnieper Region in the Second Half of the XIXth Century: New Source Searches” (Vodotyka, 2013, pp. 161–169).

During our writing the article, V. Lyubchenko published the research material on the verification of the ethnosocial composition of the urban population of the Ukrainian provinces according to the Census of 1897 in the collection “From Walls to Boulevards: the Creation of a Modern City in Ukraine (the end of the XVIIIth – the beginning of the XXth century)” edited by O. Reyent, a member-correspondent of the National Academy of Sciences of Ukraine (Lyubchenko, 2019, pp. 188–228). The author came to the conclusion that the indicators of a high share of the Russians among the citizens on the basis of the language criterion are not confirmed by the Census data on the composition of migrants. The scholar corrected the prevailing notions in the publications about the predominance of the Russians or the Russians and the Jews in the cities and proved that according to the Census of 1897, “the ethnic Ukrainians outnumbered almost everywhere (or were approximately commensurate) with the ethnic Russians” (Lyubchenko, 2019, p. 228).

At the same time, we emphasize that the researchers underestimate the information potential of the Census, in particular, it is a matter of recalculating the results of the Census of 1897 to correct its drawbacks. This concerns the ignorance by the authorities and, accordingly, the Census leaders of the state of a traditional society and the reflection of the consequences of modernization, the birth of a new social structure.

In fact, this situation with using the materials of the First All-Russian Census of the Russian Empire in 1897 determines the purpose of the article – to prove the fruitfulness of the Census results of 1897 for the analysis of a new, industrial society formation in sub-Russian Ukraine at the end of the XIXth century and the crisis of the old class structure.

The Statement of the Basic Material. The purpose of the article was formed gradually. Initially, the authors used the results of the Census in a traditional way. Thus, S. Vodotyka analyzed the composition of the population of Kherson, its language and religion, class structure and employment (Vodotyka, 2004, pp. 8–12). In the doctoral dissertation “Historical Conditions of Organization and Specifics of Health Care Development in Kharkiv (the end of the XVIIIth – the beginning of the XXth century)” I. Robak used the Census of 1897 on mortality (the number of deaths, reasons, etc.) of population in large cities to analyze the state of health care and to identify its specifics in Kharkiv (Robak, 2009, pp. 107–108).

Reflections on the possibility of the Census results recalculating revolved around two mutually exclusive postulates, realized by the authors from the time of the student bench
of the Faculty of History of Kharkiv V. N. Karazin National University. The first postulate consists in the inexhaustibility of information resources of the source, the second one – the materials of demographic censuses cannot be recalculated. In the end, the discussion resulted in the decision to rely on the first postulate. Taking into account the format of this study, the authors decided to limit themselves to a few examples of the Census results recalculating.

The Census materials contain Table XXI “Distribution of the Population According to Groups of Occupations”, 64 groups are dealt: “administration, court, police”, “public and class service”, “armed forces”, “church liturgy”, “educational activities”, “science, literature and art”, “agriculture”, “clothing manufacturing”, several types of trade, etc. (Pervaya Vseobshchaya perepis’ naseleniya Rossijskoj imperii, 1904, v. 8, pp. 156–158; vol. 47, book 1, pp. 173–175, etc.). Groups are formed with the following indicators: administrative territorial division (province, county, urban and rural population, cities) and "groups of nationalities" according to the indicator – a native language.

The essence of the first method of the Census data recalculating will be illustrated by the example of the largest city in sub-Russian Ukraine, Odesa, where 403,8 thousand inhabitants were recorded. It is obvious that the legend about the nature of work of 151,5 thousand Odesa residents with “independent income” (according to the allocated 64 “groups of occupations”) does not give anything to understand the social consequences of an industrial modernization. Therefore, 64 groups of occupations were “folded” and listed in several spheres that really defined the social face of Odesa – a civil service, community service, finance, industry, construction, transport and communications, agriculture, fisheries and crafts (in Odesa, in the Census there were recorded farmers, livestock breeders, beekeepers, fishermen), services. In this case, a clearer picture of the social consequences of modernization emerges when clarifying the share of Odesa residents employed in the above-mentioned industries (spheres) of labour. The calculations are made on the basis of the Census (Pervaya Vseobshchaya perepis’ naseleniya Rossijskoj imperii, 1904, v. 47, kn. 1, pp. 173–175).

Thus, 590 people were employed in the financial sector, which is 0,38% of self-employed people. Thus, the traditional notions of Odesa as a financial center were "somewhat exaggerated" and the network of financial institutions available in 1897 was insufficient for modernization. For comparison, in Odesa, (the neighbourhoods were not taken into account), in agriculture, fishing and woodworking there were employed 3,8 thousand people (2,5% of the population), which was seven times more in number as compared to banks employees.

Trade played a significant role in the city’s economy, as it was the main port of the Northern Black Sea coast and the trade centre of a large region. 21,8 thousand people were employed in trade, (14,4% of population). The number is significant, but not decisive for the city’s economy.

The leading role in socio-economic life was played by industry, which employed 31,7 thousand people or 21% of all self-employed people. However, we should not make a conclusion about significant steps in the industrialization of Odesa. After all, in the actual industrial sectors (metallurgy, metalworking, chemical industry, mechanical engineering, printing) there were employed 9,8 thousand people, which was only 6,5% of the total employed population or 29,3% of people employed in industrial production.

The bulk of those employed in Odesa’s industry worked in traditional industries (famous stonemasonry, processing of livestock and wood products, ceramics, clothing, footwear, distilling, etc.) in small, semi-artisanal and handicraft establishments. A similar picture with the level of industrial progress was observed in other major cities of sub-Russian Ukraine –
Kyiv, Kharkiv and Katerynoslav (Dnipro) (Vodotyka, 2013, pp. 165–171). Thus, even in large cities of the Ukrainian provinces of the Russian Empire, the success of industrialization at the end of the XIXth century should be assessed critically, and the growth of industries did not displace traditional handicrafts.

The situation in industry was similar to other sectors of Odesa economy. Thus, 11,9 thousand workers were employed in transport and communications, which was 7,8% of Odesa residents with an independent source of income. This seemed to be enough for the beginnings of an industrial modernization. In addition, the Census was conducted in the winter, when the port of Odesa almost “died out” and the number of employees decreased sharply. At the same time, qualitative changes in this sphere were slow. For example, in the industrial sectors of transport and communications (railway, telegraph, telephone) 3,2 thousand men received a livelihood, which was 2,1% of self-employed persons and only slightly more ¼ (more precisely 26,5%) employed in transport and communication.

Many residents of Odesa were employed in the civil service and it was their main source of income – the state budget “fed” 27,2 thousand residents of the city, which was 18% of self-employed people. But there were 23,2 thousand military men of them, i.e., the actual civil service was not very common at that time. For instance, among 403,8 thousand Odesa residents there were only 3,0 thousand officials, court employees and police officers, which comprised 2% of the employed population. Obviously, among many other reasons, the small number of civil servants was one of the reasons for the weakness of the Empire.

Another sphere of the economy should be mentioned – the service sector, which became fundamental for the society progress during the era of an industrial modernization and nowadays, during the post-industrial period. The service sector is the basis of socio-economic progress of developed countries. In 1897 a lot of Odesa residents were employed in the service sector – 9,8 thousand people, which was 6,5% of non-professional workers. But even in this case, there was some discrepancy of quality indicators to the requirements of an industrial modernization. About 1 thousand people were the clergy or 10,2% of those employed in this religious sphere out of the 9,8 thousand employed in the service sector. At the same time, the sectors of services, which were fundamentally important for the industrial era, are the following ones: education (1,816 people worked in the sphere of education and upbringing) (which only 1,8 times exceeded the number of the clergy), science, literature and art (totally in the last three segments there were only 733 people employed) – were underdeveloped in Odesa. All this was sharply dissonant with the social needs of the accelerated development of education and science. There were 163 people employed in a social security. In medicine and sanitary institutions 1,2 thousand people worked, which was extremely insufficient for 400 thousand inhabitants of the city. This clearly confirms the critical state of health care in Odesa – this is discussed in detail in the above-mentioned work of P. Herlihi (Herlihi, 1999, pp. 226–231). I. Robak draws similar conclusions about Kharkiv and other large cities of the Dnieper Ukraine in his works (Robak, 2007, pp. 250–252).

Summarizing the application of the results recalculating method of the First All-Russian Census of the Russian Empire population of 1897 by making the groups of occupations selected by the Census according to the criteria of an industrial society, we note that it allows to make more accurate assessment of quantitative and qualitative indicators of industrialization, to assess the extent to which the Ukrainian provinces of the Russian Empire advanced on the path of a “catch-up” modernization and to identify quantitative and qualitative indicators of this process.
The following method of the results recalculating of the Census of 1897 concerns the analysis of the mobility of different social classes and layers. Mobility allows us to characterize several aspects of the modernization processes depth – the destruction of the traditional social layers structure and sources of new social groups formation, to clarify the role of individual social groups in these processes, to some extent, to determine the openness of the society.

For instance, let’s analyze the Census results of Kharkiv province. The final volume of the Census in the province contains Table VI “Distribution of Population by Estates and Place of Residence” (Pervaya Vseobshchaya perepis’ naseleniya Rossiijskoj imperii, 1904, vol. 46, pp. 44–46. Similar Tables are for all provinces). Table VI (information on province, county, city and village) illustrates the division of the population by place of birth – those born in the county where they live; natives of Kharkiv province; migrants from other provinces of the Empire and those born abroad. Indicators of residence place and birth place are combined by estates (peasants, hereditary nobles, nobles and officials) and sex (men and women). This combined Table VI helps find out how many locals, migrants from other counties of this province, other provinces of the Empire or from abroad were among the registered.

For example, in general, among the population of Kharkiv province (Table contains information on 2492,3 thousand inhabitants) in the native county lived 2238,2 thousand people (89,8%), in another county of Kharkiv province 91,3 thousand inhabitants were born (3, 7%), in other provinces of the Empire – 160,8 thousand (6,5%) and abroad – 2047 people (0,08%).

However, behind the so called “average temperature in the hospital” there is a significant difference in the mobility and composition of the rural and urban population, the share of migrants in the population of Kharkiv or other cities. Different social strata illustrated different involvement into modernization processes and significant differences in mobility. We provide the information on our calculations to confirm these provisions (different involvement into modernization processes by different social strata).

Thus, 230,6 thousand out of 367,3 thousand (62,8%) of inhabitants of Kharkiv province lived there. For these 230,6 thousand people Kharkiv province was the place of birth. In other words, there were 37,2% migrants among city dwellers and 10,2% – of the total population, it was 3,6 times less. This fact clearly reflects the dominance of the urbanization trend due to a significant migration from rural to urban areas. In Kharkiv, 66,5 thousand out of 174 thousand Kharkiv residents (38,2%) were local natives, i.e., almost two thirds of Kharkiv residents were migrants. Other cities of the province according to this indicator occupied an intermediate place between the urban population of the province and the provincial center – in Okhtyrka locals made up 84,3% of the population, in Izyum – 89,1%, Slovyansk – 84,4%, Sumy – 67, 8% and etc.

The rural population was much less mobile – among 2124,8 thousand rural residents of Kharkiv province for 2007,6 thousand people (94,5%) it was the place of birth; 47,6 thousand (2,2%) were born in other counties of the province; 69,3 thousand people (3,2%) came from other provinces of the Empire (obviously, nobles, officials and rural intelligentsia mostly) and only 519 people were born abroad (0,02%).

Naturally, according to relative date, the peasantry was not very mobile. Thus, among the peasantry of the province in the native county there continued to live 2098,5 thousand of 2265,6 thousand peasants of Kharkiv province (92,6%), in the native province 63,5 thousand of 2265,6 thousand (2,8%), migrants from other provinces – 4,6% (103,5 thousand in absolute numbers). However, the peasantry showed a greater mobility compared to the rural
population as a whole (which seems to be unexpected), although it was inferior in mobility to hereditary nobles (51.8% lived by place of birth) and personal nobles and officials, among whom 59 lived in their native county. Unfortunately, there are no data on other conditions. In addition, there is an error in the calculations of the information on the category of “personal nobles and officials” in the Census (Pervaya Vseobshchaya perepis’ naseleniya Rossijskoj imperii, 1904, vol. 46, pp. 46–47). This may happen in statistical publications, so researchers should check their calculations in different ways.

Due to its large number (the peasantry comprised 90.9% of the total population of the province) and a relatively high mobility, the peasantry itself was the main source of urbanization and, accordingly, the formation of new social components of an industrial society (naturally, especially the working class). Thus, in the cities of Kharkiv province the peasantry comprised 58.6% of the population, including among Kharkiv residents – 49.5%, among the residents of Okhtyrka – 69.7%, Izyum – 57.3%, Sumy – 61.3%. The peasantry comprised 69.6% among 91,3 thousand immigrants to Kharkiv province from other provinces of the Empire, recorded by the Census of 1897. It is obvious that the situation with the peasantry reflects the picture of the old class structure destruction. This process was clearly recorded in the Census of 1897.

However, the Census also records a high mobility (modernization required it) among other social strata, who were ahead of the peasantry due to greater opportunities for migration (material and organizational opportunities, a higher level of education, etc.). Thus, among almost 9 thousand hereditary nobles of Kharkiv 2439 (27.2%) were born in the provincial center; those who were born in Kharkiv province and moved to Kharkiv – 1343 (15%); 5144 people (57.3%) were natives of other provinces of the Empire. This significantly exceeded the corresponding indicators of the peasantry.

It is logical to prognose that the greatest mobility was observed among the categories “personal nobility and officials” registered by the Census – they lived mainly at the expense of the civil service and moved to Kharkiv at the first opportunity. Therefore, it is not surprising that in Kharkiv out of 7715 people of this category, only 2624 (34.0%) were natives of Kharkiv; there were 1277 people born in the province (16.6%); 3763 people (48.8%) were migrants from other provinces people or 48.8 %.

But a real picture of the mobility of “personal nobles and officials” was more complex compared to the hereditary nobility. Among this group of Kharkiv there were more locals than among hereditary nobles born in Kharkiv province almost equally. But there were 1,2 times more new-comers from other provinces among hereditary nobles than among personal nobles and officials (57.3% and 48.8%, respectively). It is obvious that hereditary nobles had a greater migratory potential to move to a large city. However, such difference in the social mobility of the categories “hereditary nobles” and “personal nobles and officials” during the period of an industrial modernization may be the subject of a special analysis.

Thus, the use of the second method of recalculation of the Census of 1897 on the distribution of population according to a social status and birth place provides a reliable and representative factual material on the state of mobility of the population as a whole, rural and urban populations and social groups, the potential of mobility of certain social strata and layers, their involvement into modernization processes. Our calculations also clarified the sources of urbanization.

The third approach to the results recalculating of the Census of 1897 consists in the attempt to try get rid of the gaps in the Census programme concerning the information on a social structure. For this purpose, Table VIII was used in the results of the Census.
“Distribution of the Population by Estates and Social Stratum” – in the original Table’s name is “Distribution of the Population by Class and Wealth”. Usually, as we say in the results of Podilsk province, this is Table VIII (Pervaya Vseobshchaya perepis’ naseleniya Rossijskoj imperii, 1904, vol. 32, pp. 56–57).

The authors proceeded from two positions. Firstly, the estates (status groups) of the Russian Empire still had certain features of social groups, which allows the use of the class structure of the society to reconstruct the leading features of the social structure evolution. This does not deny the fact that the social strata at the end of the XIXth century should be understood as remnants of a traditional society, which overshadowed the statistical picture of new elements formation of the social structure of an industrial society.

Secondly, the authors in no way equate estate and social groups. It is a question of revealing progress tendencies of a social structure as a component of an industrial modernization on the basis of those materials, which were included into the Census programme.

For instance, the presence of a large number of peasants in the cities (even in the winter when the Census was conducted) is a manifestation of the proletariat formation. The predominance of men over women among the peasants and the urban population as a whole is also the evidence of the intensive formation of the social elements of an industrial society. After all, at first mostly young men moved to the city, family members, brides and other females joined men. The predominance of men over women in the gender structure of the society – a sign of its intensive growth during the traditional and industrial epochs.

The share of entrepreneurs can be indirectly judged by the number of merchants and hereditary and personal honorary citizens – it is from these categories that entrepreneurs were most often recruited. Of course, peasants, nobles and officials, burghers, university professors, etc., were also engaged in business in the cities.

As for the estate of the “bourgeoisie” in the process of the social strata formation of an industrial society, it is almost impossible to assess them unambiguously as an indicator of modernization or patriarchy. It is obvious that the burghers in the industrial cities, to a large extent, merged into the modern elements of the social structure gradually. At the same time, in most Ukrainian cities, the economy retained a significant niche for the traditional occupations of the burghers – gardening, animal husbandry, fishing, tailoring and repair of clothing and footwear, semi-handicrafts in the food industry, small trade and etc. Yet a significant proportion of the bourgeoisie in the urban population showed patriarchal and traditional features rather than an industrial modernization, as they, unlike rural migrants, tried to preserve the old rather than to create the new.

Let us analyze to the use of the third method of the results recalculating of the Census of 1897 on the example of Katerynoslav (Dnipro). The above-mentioned Table VIII “Distribution of the Population by Estates and Social Stratum” shows the distribution of registered residents according to the following estates: hereditary nobles, personal nobles and officials without nobility status, the clergy, hereditary and personal honorary citizens, merchants, burghers, peasants, Cossacks, foreigners born in Finland, stateless persons and foreign nationals (Pervaya Vseobshchaya perepis’ naseleniya Rossijskoj imperii, 1904, vol. 13, pp. 44–45). Information on Katerynoslav was compared with the data on Kamyanets-Podilsky, the center of Podilsk province at that time (Pervaya Vseobshchaya perepis’ naseleniya Rossijskoj imperii, 1904, vol. 32, pp. 56–57).

Thus, typically the urban estates of a pre-industrial society (nobles, officials, clergy and burghers) comprised 67,5% of the total population in Katerynoslav, and 75,3% – in Kamianets-Podilskyi. That is, the excess of the share of traditional “typically urban”
states in Kamyanets-Podilsky by 11.6% as compared to Katerynoslav testifies to its lag in modernization processes. It is no less significant that in Katerynoslav burghers comprised 55.4% of the city’s residents, in Kamyanets-Podilsky – 60.7%. Thus, there were 9.6% more burghers in the center of Podil province than in the industrial center of the Lower Dnieper.

The situation was similar with the peasants, who migrated to the city and were the main source of the social strata formation of an industrial society. Thus, in Katerynoslav, accountants recorded 37.5 thousand peasants, who practically became city dwellers. These peasants comprised 33.5% of the total population, while in Kamyanets-Podilsky there were 7,000 peasants, which was only 19% of the total population. In other words, there were 1.7 times more peasants in Katerynoslav.

All these figures statistically reflect much more intensive industrial modernization in Katerynoslav than in Kamyanets-Podilsky. However, the social structure of the latter had the features of a modern society formation. For instance, in contrast to the traditional division of the population by gender with a predominance of women (longer life expectancy, fewer industrial injuries, etc.) in Kamianets-Podilsky men comprised 51.9% – although they were less in number than in Katerynoslav, where their number reached 53.8% (our calculations are based on Pervaya Vseobshchaya perepis’ naseleniya Rossii skoj imperii, 1904, vol. 13, pp. 44–45; vol. 32, pp. 56–57).

Thus, the third method of the results recalculating of the Census of 1897 makes it possible, on the basis of Table VIII “Distribution of the Population by Estates and Social Stratum”, to determine the dynamics of the distribution of the class structure of an agrarian society and the formation of the social strata of an industrial society. Naturally, these tendencies were observed in the cities mostly, which were the locomotives of modernization.

The recalculation results of the Census of 1897 allows us to compare the degree of an industrial modernization of individual cities and regions, to identify “leaders” and “those, lagging behind”. Equally important is the fact that information on the distribution of the population by estates and social strata statistically confirms the irreversibility of an industrial modernization and the system crisis of the class structure.

It should be emphasized that we analyze the nature, direction and tempo of changes in the social structure during the period of an industrial modernization, the specifics of the relevant trends in the Ukrainian provinces of the Russian Empire.

**The Conclusions.** Summing up, first of all, we note that the source analysis of the First All-Russian Census of the Russian Empire in 1897 is quite topical taking into account the preparation for the second, after the restoration of independence, demographic census in Ukraine. The Census materials are published, recognized as a reliable source of a historical demography and are widely used in the domestic and foreign historiography. However, the Census programme does not make it possible to record the social consequences of an industrial modernization and the crisis of the population class structure, and in historiography there are almost no attempts to list the results of the Census. Accordingly, the authors set a goal to analyze possible ways of recalculating the Census data of 1897.

The authors suggested the feasibility of using three methods of recalculating the Census results. The first one consists in grouping of 64 groups of population occupations, registered by the Census, into industrial clusters (groups) – civil service, public activities, finance, industry, construction, transport and communications, agriculture, services and traditional industries. On the example of the largest city in the Ukrainian provinces – Odesa, it was proved that the Census recorded considerable progress in forming the social structure of
the industrial era, but the remnants of the past, traditional society remained significant (the correspondent observations were compared with other cities).

The second method aims at analyzing the mobility of the population, clarify the role of individual social sources in the formation of new strata of the society and urbanization. The method was used to analyze the data of Kharkiv province, especially Kharkiv and other major cities of the province. The method allowed to characterize the mobility of both the population as a whole and its individual states, the role of local people and migrants in the formation of industrial centers, the role of individual social groups in modernization processes.

The content of the third method is an attempt to overcome the main flaw of the Census programme of 1897 – the lack of information on the formation of new social groups and the collapse of the states of the Russian Empire. On the example of Katerynoslav and Kamyanets-Podilsky, the formation tendencies of the new social structure elements and disintegration of the old one were characterized.

In other words, the source analysis of the results of the First All-Russian Census of the Russian Empire in 1897 proves that its heuristic potential is far from exhausted, and the multiplicity of methods of its study (including recalculation of results) seems appropriate. The Census results make it possible to characterize the leading social consequences of the industrial modernization of the Russian Empire at the end of the XIXth century.

The prospects of further source studies of the materials of the Census of 1897. Information on the distribution of the population by groups of occupations should be classified into the leading sectors of the economy in several versions. Firstly, within the administrative territorial units – according to provinces, cities, villages, different groups of cities (large, medium, small), different regions. Moreover, all these researches should be made comparative – the analysis of the cities of the South and the Right Bank of the Dnieper, the villages of the Left Bank and the Right Bank, and etc. Secondly, the presence of the combined tables in the Census materials (the distribution of the population by groups of occupations and native language) makes it possible in the same way to analyze the inclusion in the modernization of different ethnolinguistic groups.

Of great interest is the analysis of the mobility of the population of the Ukrainian provinces of the Russian Empire as a whole, in individual provinces, counties, cities, in particular large, medium and small, and rural areas. It is necessary to study the migratory mobility of individual estates, their role in urbanization and the social structures formation of an industrial society. The analysis of the migration consequences should be carried out in comparison with regions, provinces, cities and certain categories of the urban population. The observations on mobility among estates, in regions and provinces will provide significant statistics on the extent of a state destruction.

The analysis has a considerable potential, which is based of the nature, trends and rates of change in the social structure during the process of an industrial modernization on the basis of information on the distribution of the population by estates and social status. Moreover, researchers should pay attention to both sides of this process – the destruction of the old class structure and the formation of a modern social structure. In the course of such research, a comparative approach to analyzing cities data, including their various groups of population, counties, provinces and historical and geographical regions should become dominant.

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