

Assessment of reliability of results of the 2019 Belarus population census based on an analysis of changes in the ethnolinguistic composition of the population

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Abstract: *The article examines the dynamics of the ethnolinguistic composition of the population of Belarus in the period between the 2009 and 2019 censuses. It is shown that for a number of indicators (the population of certain nationalities by region, the share of Belarusian, Russian and ethnic languages as mother and home languages) there is an anomalous dynamics, which is expressed, first of all, in multidirectional and non-uniformly scaled changes in these indicators in different regions, which was not observed in previous censuses, an abnormally sharp increase in the share of the Belarusian language and some other characteristics in certain regions, the manifestation of a number of features almost exclusively within the administrative boundaries of certain regions. As a result, analysis of the complex of anomalous results of the 2019 population census suggests that these results are due to a distortion carried out in order to obtain politically desired results: despite the very sharp and opposite dynamics of various indicators across the regions, changes on a national scale turned out to be very insignificant compared to 2009 and correspond to ideological attitudes - the shares of both the Russian and Belarusian languages, both native and home languages, increased by a small amount among the general population and major nationalities. Thus, the official results of the census made it possible to preserve the symbolic status of the Belarusian language as an element of ethno-consolidation and national identification, although in fact the indicators of the use of the Belarusian language continue the downward trend expressed since 1999, and the majority of the population considers Russian as their native and home language.*

Keywords: *Belarus, Russian language, Belarusian language, mother tongue, home language, Russians, Belarusians, Poles, Ukrainians, Tatars, Jews, Lithuanians, 2019 population census.*

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Introduction

The significance of population censuses and their results has always, especially in the Soviet and post-Soviet space, gone far beyond a simple display of demographic reality and a tool for a purely scientific analysis of demographic processes and their forecasting. According to V.N. Rakachev and A.A. Khalafyan (2012: 150), *“the problem of the completeness and reliability of statistical data has always existed, regardless of the historical period and political regime ... The uniqueness of our country is manifested in the fact that for several decades demographic statistics have been considered an important ideological tool that can influence the consciousness of the masses... Various kinds of fake statistics have been used at various levels: from the ordinary accountant and bookkeeper to such large-scale actions as the All-Union Population Census.”*

Data on the ethnic and linguistic structure of the population in the new post-Soviet independent states are attracting increased socio-political interest, as they are designed, among other things, to reflect success in strengthening “national identity” and minimizing any “Russian influence”, the main marker of which is a reduction in the spread of the Russian language.

The publication of the final data of the population census of Belarus in 2019 gave reason to suspect a deliberate distortion of a number of its results (Sokolov 2021; Manakov, Sokolov, Suvorkov 2022), in particular, an overstatement of the share of the Belarusian language as both native and home language and, accordingly, an understatement of the share of the Russian language.

Table 1. The share of individual nationalities in the total population of Belarus and regions (according to the 2019 census), %

Nationality	Belarus	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast
Belarusians	84.89	86.92	82.32	87.23	68.29	86.86	88.55	89.35
Russians	7.51	7.26	12.16	7.83	6.38	7.34	5.87	6.07
Poles	3.06	1.10	0.86	0.19	21.73	0.96	1.07	0.21
Ukrainians	1.70	2.79	1.58	1.81	1.05	1.72	1.45	1.19
Jews	0.15	0.07	0.14	0.14	0.09	0.28	0.10	0.12
Tatars	0.09	0.06	0.09	0.07	0.13	0.11	0.08	0.08
Lithuanians	0.06	0.03	0.08	0.03	0.21	0.03	0.03	0.02

Source: (Belstat 2020).

This article is intended to continue research in this direction, to identify and systematize indicators that could be the result of deliberate distortions. The article deals with data on the ethnolinguistic structure of the population. The object of the study are the 5 largest nationalities (Belarusians, Russians, Poles, Ukrainians, Jews), as well as 2 nationalities with a long history in the territory of Belarus (Tatars, Lithuanians). The shares of these nationalities in the total population of Belarus and its regions are shown in Table 1.

In accordance with the Constitution and the Law "On Languages in the Republic of Belarus", the official state languages in the country are Belarusian and Russian, thus ensuring their full development and functioning in all spheres of public life. In addition, citizens are guaranteed the right to use their national languages.

Formulation of the problem

In total, 3 censuses have been conducted in independent Belarus - in 1999, 2009 and 2019. The results of the last census in 2019 turned out to be quite paradoxical:

- for the first time in the history of the census, for a large number of indicators characterizing the country's ethnic and linguistic structure, opposite dynamics were observed in different regions;
- a number of phenomena appeared almost exclusively within the administrative boundaries of individual regions;
- very sharp changes in one direction of individual indicators in one or two regions ensured a change in the same direction of these indicators in the country as a whole, despite the fact that in all other regions these changes were in the opposite direction;
- significant differences in the direction and magnitude of changes in language indicators for individual regions and nationalities are accompanied by a slight change in these indicators for the republic as a whole;
- some indicators showed huge growth (by hundreds and thousands of percent) in the absence of any prerequisites and factors capable of explaining such significant changes, etc.

As a result, all the above-listed peculiarities of the 2019 census, which were absent in previous censuses, provided Belarus as a whole with results on issues of heightened public interest that can be called ideal from a political point of view:

- for both state languages (Russian and Belarusian) there was an increase in the share of the population who indicated them as their native and home languages;
- an increase in the share of the Russian and Belarusian languages, both native and home, was noted for all major nationalities - Belarusians, Russians, Ukrainians;
- while the total population decreased, the absolute number of Belarusians increased;
- the proportion of Belarusian as a native language was not allowed to decrease to less than 50 per cent, nor the proportion of Russian as a native language to exceed that of Belarusian, despite a marked trend in 1999-2009 of a declining share of Belarusian as native and home language (table 2) in all regions of Belarus.

Table 2. Change in the share of Russian and Belarusian as native and home language according to 1999-2019 census data, %

Language	1999	2009	Share change in 1999-2009	2019	Share change in 2009-2019
Whole population					
Russian as native	24.1	41.5	+17.4	42.3	+0.8
Belarussian as native	73.7	53.2	-20.5	54.1	+0.9
Russian as home	36.7	70.2	+33.5	71.4	+1.2
Belarussian as home	62.8	23.4	-39.4	26.0	+2.6
Belarusians					
Russian as native	14.3	37.0	+22.7	38.1	+1.1
Belarussian as native	85.6	60.8	-24.8	61.2	+0.4
Russian as home	58.6	69.8	+11.2	71.0	+1.2
Belarussian as home	41.3	26.1	-15.2	28.5	+2.4

Sources: (Belstat 2020; Minstat 2001: 150).

Such politically ideal results make it possible, on their basis, to issue statements about the absence of both Russification and de-Russification, the preservation of the status of the Belarusian language as an important value for the Belarusian people, and the equality of state languages with a small symbolic priority of Belarusian as “titular” and “national”, and exclude the possibility of using the results of the census for propaganda by both nationalist and conventionally “anti-nationalist” political forces.

However, in our opinion, based on the analysis of the census results for individual nationalities and for different levels of administrative division, such a result became possible only thanks to targeted administrative influence on the census data in order to obtain a politically “convenient” result.

Many researchers emphasize that the Russian language in Belarus dominates as a means of communication, while Belarusian performs mainly symbolic and ethno-consolidating functions (Mechkovskaya 2003: 10; Goritskaya 2021: 61, 233). A decrease in the share of Belarusian as a native language below that of Russian in the entire population would call into question even its symbolic function in society, and among ethnic Belarusians, its role as an element of national identification.

The 2019 census took place during the period of the so-called “soft Belarusianization” (Goritskaya 2021: 15; Bakhlova, Bakhlov 2020: 745; Linchenko, Belyaeva 2020: 105; Shimov 2020: 69; Anarbek 2019: 109), a set of measures to increase the symbolic status of the Belarusian language and expand its presence in public life, but without imposing any open restrictions in relation to Russian. The main goal of this policy was to emphasize the identity of Belarusian society and its fundamental differences from Russian society, including by promoting appropriate narratives and symbols. And a census, as a number of authors point out (Shimov 2020: 69; Goritskaya 2021: 17), is not only a means of reflecting the existing situation, but also a tool for constructing social, in particular sociolinguistic, reality, and can reflect the ideological attitudes and demands of the state, of its individual institutions and even census takers. In this regard, the official results of the census showed full compliance with the ideological demands of this period.

Change in the population size and linguistic structure of Belarusians and Russians

The indigenous nationalities of Belarus - Belarusians and Russians - differ from the rest in that their native and home languages are almost exclusively Belarusian and Russian. For other nationalities, a third component appears in the linguistic structure - the ethnic language.

Changes in the shares of Belarusian and Russian as native and home languages from 2009 to 2019 are clearly related to administrative divisions. Tables 3-8 present data showing changes in the shares of the Russian, Belarusian and ethnic languages for the population of Belarus and individual nationalities by region. Among Belarusians, an increase in the share of Belarusian as a native language, and a very significant one, was recorded only in the Brest oblast and the city of Minsk, i.e., in the regions where this share was the lowest in 2009 (Table 3). For Belarusian as a home language (Table 6), the situation is similar - an increase in the share of the population was recorded only in two regions, the Mogilev oblast and the city of Minsk, where also in 2009 this indicator was the lowest among all regions. Thus, the Brest oblast experienced a sharp increase, the highest among all regions, in the share of Belarusian as a native language, with a simultaneous decrease in its share as a home language, also the highest among all regions. In the Mogilev oblast, on the contrary, the share of Belarusians calling Belarusian their native

language decreased and in 2019 became the lowest among all regions, while the share of those calling it their home language increased. In Minsk, both indicators increased, and the share of Belarusians calling Belarusian their home language increased by 5.5 times, becoming comparable to the share of this indicator in the Grodno and Minsk oblasts, which traditionally have a higher share of Belarusian as both their native and home language.

Table 3. Change in the share of Belarusian as a native language for the population of Belarus and individual nationalities, 2009-2019, %

Nationality and census year		Belarus	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast	σ*	Me**
Whole population	2009	53.2	53.7	52.5	54.6	59.2	35.2	69.4	55.1	9.4	54.6
	2019	54.1	77.0	45.3	47.0	54.5	48.7	59.5	46.1	10.5	48.7
	+/-	+0.9	+23.3	-7.2	-7.6	-4.7	+13.5	-9.9	-9.0		
Belarusians	2009	60.8	59.6	60.6	61.3	68.8	43.5	76.7	61.6	9.4	61.3
	2019	61.2	86.2	53.9	53.5	61.4	55.2	66.2	51.3	11.3	55.2
	+/-	+0.4	+26.6	-6.7	-7.8	-7.4	+11.7	-10.5	-10.3		
Russians	2009	2.8	2.6	2.8	2.5	4.9	2.0	3.1	2.6	0.9	2.6
	2019	2.9	11.3	1.0	1.0	3.0	1.3	2.2	1.5	3.4	1.5
	+/-	+0.1	+8.7	-1.8	-1.5	-1.9	-0.7	-0.9	-1.1		
Poles	2009	58.2	55.2	55.6	43.9	58.0	40.9	81.3	33.6	14.4	55.2
	2019	54.5	43.8	43.7	45.7	56.1	43.2	65.1	43.0	8.0	43.8
	+/-	-3.7	-11.4	-11.9	+1.8	-1.9	+2.3	-16.2	+9.4		
Ukrainians	2009	7.9	7.9	5.8	9.1	11.2	5.4	8.8	7.5	1.8	7.9
	2019	8.2	23.3	13.6	2.3	3.9	0.8	2.0	1.7	7.9	2.3
	+/-	+0.3	+15.4	+7.8	-6.8	-7.3	-4.6	-6.8	-5.8		
Jews	2009	9.1	11.6	8.7	11.2	8.6	6.8	16.9	9.7	3.0	9.7
	2019	11.5	27.6	36.0	18.4	3.3	4.6	3.7	4.0	12.5	4.6
	+/-	+2.4	+16.0	+27.3	+7.2	-5.3	-2.2	-13.2	-5.7		
Tatars	2009	19.3	7.7	13.6	2.4	43.0	12.9	22.0	3.0	13.1	12.9
	2019	21.2	36.7	46.6	30.7	33.8	6.2	8.4	0.8	16.5	30.7
	+/-	+1.9	+29.0	+33.0	+28.3	-9.2	-6.7	-13.6	-2.2		
Lithuanians	2009	25.8	15.8	11.9	13.3	33.1	32.8	17.6	3.0	10.3	15.8
	2019	46.1	51.3	62.0	61.3	42.1	36.3	34.8	0.8	19.4	42.1
	+/-	+20.3	+35.5	+50.1	+48.0	+9.0	+3.5	+17.2	-2.2		

Note: * – standard deviation; ** – median.

Source: Author's calculations based on Belstat data.

As can be seen in Table 3, for the share of Belarusian as a native language for the entire population and for all major nationalities in 2019, there is a significant decrease in the median values of this indicator by oblasts, while for Belarus as a whole, this share increases for almost all nationalities. As a result, while in 2009 the median was roughly in line with the whole country (as well as the arithmetic average across regions), in 2019 it was much lower. Also, for almost all nationalities, the standard deviation indicator increases, which characterizes the degree of dispersion of values relative to the mean.

Table 4. Change in the share of Russian as a native language for the population of Belarus and individual nationalities, 2009-2019, %

Nationality and census year		Belarus	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast	б	Me
Whole population	2009	41.5	42.6	44.2	41.8	36.1	52.6	27.4	41.9	7.1	41.9
	2019	42.3	20.1	51.6	50.0	41.7	48.6	37.3	46.6	10.2	46.6
	+/-	+0.8	-22.5	+7.4	+8.2	+5.6	-4.0	+9.9	+4.7		
Belarussians	2009	37.0	38.8	38.4	36.8	29.5	51.4	21.7	37.2	8.4	37.2
	2019	38.1	13.5	46.0	46.3	38.5	44.6	33.7	44.4	10.9	44.4
	+/-	+1.1	-25.3	+7.6	+9.5	+9.0	-6.8	+12.0	+7.2		
Russians	2009	96.3	96.7	96.7	96.7	94.3	96.4	96.2	96.8	0.8	96.7
	2019	96.8	88.1	98.4	98.5	96.6	98.5	97.7	98.3	3.5	98.3
	+/-	+0.5	-8.6	+1.7	+1.8	+2.3	+2.1	+1.5	+1.5		
Poles	2009	33.9	37.7	32.5	46.8	34.1	47.4	15.0	56.1	12.3	37.7
	2019	38.5	49.5	45.4	43.2	37.0	50.2	29.0	44.9	6.9	44.9
	+/-	+4.6	+11.8	+12.9	-3.6	+2.9	+2.8	+14.0	-11.2		
Ukrainians	2009	61.2	51.5	66.7	62.5	64.0	67.9	60.8	65.0	5.1	64
	2019	62.4	41.4	63.9	71.2	69.0	83.1	68.7	31.2	16.9	68.7
	+/-	+1.2	-10.1	-2.8	+8.7	+5.0	+15.2	+7.9	-33.8		
Jews	2009	86.1	81.4	87.9	83.9	86.6	88.0	77.7	85.5	3.5	85.5
	2019	83.6	38.3	62.2	79.9	95.2	93.6	91.7	87.2	19.4	87.2
	+/-	-2.5	-43.1	-25.7	-4.0	+8.6	+5.6	+14.0	+1.7		
Tatars	2009	63.8	73.5	67.5	75.8	48.5	67.8	61.7	69.9	8.4	67.8
	2019	62.0	46.8	34.2	54.9	56.0	80.9	72.9	63.1	14.5	56.0
	+/-	-1.8	-26.7	-33.3	-20.9	+7.5	+13.1	+11.2	-6.8		
Lithuanians	2009	39.3	51.5	48.6	55.0	28.6	22.4	48.9	69.9	14.9	48.9
	2019	34.7	31.8	26.5	26.0	36.0	21.1	41.8	63.1	13.1	31.8
	+/-	-4.6	-19.7	-22.1	-29.0	+7.4	-1.3	-7.1	-6.8		

Source: Author's calculations based on Belstat data.

Table 5. Change in the share of ethnic languages as native for the population of Belarus and individual nationalities, 2009-2019, %

Nationality and census year		Belarus	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast	б	Me
Poles	2009	5.4	5.6	10.7	5.7	5.2	6.3	2.8	6.9	2.2	5.7
	2019	6.7	6.4	10.5	9.0	6.6	6.0	5.0	6.9	1.8	6.6
	+/-	+1.3	+0.8	-0.2	+3.3	+1.4	-0.3	+2.2	0.0		
Ukrainians	2009	29.2	39.3	26.5	26.7	23.4	23.8	28.7	26.2	5.0	26.5
	2019	29.1	35.2	21.8	26.3	26.9	15.9	28.8	66.3	15.2	26.9
	+/-	-0.1	-4.1	-4.7	-0.4	+3.5	-7.9	+0.1	+40.1		
Jews	2009	1.9	2.5	1.6	1.7	2.8	1.8	2.3	2.5	0.4	2.3
	2019	3.2	32.6	0.6	0.7	0.2	1.2	0.8	2.3	11.1	0.8
	+/-	+1.3	+30.1	-1.0	-1.0	-2.6	-0.6	-1.5	-0.2		
Tatars	2009	14.5	16.8	16.9	18.8	6.5	15.3	14.7	25.5	5.2	16.8
	2019	13.8	14.9	17.2	13.6	9.0	11.9	13.0	23.5	4.3	13.6
	+/-	-0.7	-1.9	+0.3	-5.2	+2.5	-3.4	-1.7	-2.0		
Lithuanians	2009	31.4	28.2	36.1	28.8	35.6	39.9	30.0	25.5	4.8	30.0
	2019	17.2	14.9	10.1	11.3	19.9	41.6	19.5	23.5	9.8	19.5
	+/-	-14.2	-13.3	-26.0	-17.5	-15.7	+1.7	-10.5	-2.0		

Source: Author's calculations based on Belstat data.

Figure 1 shows the dynamics of the share of Belarusians calling Belarusian their native language in 1979-2019 and their home language in 1999-2019. (The question about home

language first appeared only in the 1999 census program). It can be seen that, up to 2009, the changes in these indicators across regions were generally synchronous. At the same time, in Minsk, indicators for the Belarusian language have always been significantly lower than in other regions, even in 1999, when, on the wave of accelerated Belarusianization in the first years of independence, the share of the Belarusian language in all regions slightly increased. In 2019, for the first time, changes in different regions became multidirectional, and the share of the Belarusian language increased very sharply precisely in those regions that were never distinguished by its high values.

Table 6. Change in the share of Belarusian as home language for the population of Belarus and individual nationalities, 2009-2019, %

Nationality and census year		Belarus	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast	б	Me
Whole population	2009	23.4	26.7	22.4	22.7	35.1	5.8	38.9	19.6	10.0	22.7
	2019	26.0	16.2	12.6	14.5	37.9	34.1	37.4	25.1	10.3	25.1
	+/-	+2.6	-10.5	-9.8	-8.2	+2.8	+28.3	-1.5	+5.5		
Belarusians	2009	26.1	29.4	25.4	25.3	38.4	7.0	42.5	21.8	10.7	25.4
	2019	28.5	16.6	14.7	16.4	39.4	38.5	41.3	27.9	11.1	27.9
	+/-	+2.4	-12.8	-10.7	-8.9	+1.0	+31.5	-1.2	+6.1		
Russians	2009	2.1	1.8	2.5	1.8	4.4	0.6	3.3	1.9	1.1	1.9
	2019	2.5	11.1	0.9	0.7	2.4	0.7	2.1	1.1	3.5	1.1
	+/-	+0.4	+9.3	-1.6	-1.1	-2.0	+0.1	-1.2	-0.8		
Poles	2009	40.9	36.9	48.2	23.7	40.7	12.5	67.9	12.5	18.6	36.9
	2019	46.0	28.7	37.4	40.2	48.9	26.2	53.4	31.8	9.5	37.4
	+/-	+5.1	-8.2	-10.8	+16.5	+8.2	+13.7	-14.5	+19.3		
Ukrainians	2009	6.1	7.8	4.8	6.5	9.2	1.5	8.3	4.5	2.5	6.5
	2019	6.4	20.2	1.8	2.8	5.6	0.8	3.1	1.6	6.3	2.8
	+/-	+0.3	+12.4	-3.0	-3.7	-3.6	-0.7	-5.2	-2.9		
Jews	2009	2.0	2.3	1.7	2.5	3.7	1.3	4.6	2.1	1.1	2.3
	2019	2.1	6.6	1.2	1.0	1.3	2.2	2.1	1.9	1.8	1.9
	+/-	+0.1	+4.3	-0.5	-1.5	-2.4	+0.9	-2.5	-0.2		
Tatars	2009	13.9	17.8	3.6	2.6	8.1	2.8	7.2	1.5	5.2	3.6
	2019	13.0	29.8	0.6	0.6	3.5	0.4	6.8	0.4	10.0	0.6
	+/-	-0.9	+12.0	-3.0	-2.0	-4.6	-2.4	-0.4	-1.1		
Lithuanians	2009	24.4	11.0	13.5	6.3	38.1	18.8	16.2	10.3	9.7	13.5
	2019	26.5	28.2	23.2	21.6	27.3	29.4	26.8	29.0	2.8	27.3
	+/-	+2.1	+17.2	+9.7	+15.3	-10.8	+10.6	+10.6	+18.7		

Source: Author's calculations based on Belstat data.

Table 7. Change in the share of Russian as home language for the population of Belarus and individual nationalities, 2009-2019, %

Nationality and census year		Belarus	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk	Minsk oblast	Mogilev oblast	σ	Me
Whole population	2009	70.2	70.1	73.2	72.0	56.5	82.1	56.0	76.5	9.1	72.0
	2019	71.4	81.9	85.0	83.3	60.1	64.0	60.1	68.2	10.4	68.2
	+/-	+1.2	+11.8	+11.8	+11.3	+3.6	-18.1	+4.1	-8.3		
Belarusians	2009	69.8	68.4	71.7	70.1	54.3	87.3	53.2	75.4	11.0	70.1
	2019	71.0	83.2	85.3	83.6	60.5	61.5	58.6	67.7	11.2	67.7
	+/-	+1.2	+14.8	+13.6	+13.5	+6.2	-25.8	+5.4	-7.7		
Russians	2009	96.5	97.4	96.4	96.7	93.3	97.9	95.2	97.1	1.5	96.7
	2019	97.2	88.8	99.1	99.3	97.5	99.3	97.9	96.1	3.5	97.9
	+/-	+0.7	-8.6	+2.7	+2.6	+4.2	+1.4	+2.7	-1.0		
Poles	2009	50.9	59.6	46.3	71.4	50.0	79.8	29.2	84.0	18.3	59.6
	2019	52.4	68.9	60.6	58.2	49.7	71.3	44.5	60.9	8.9	60.6
	+/-	+1.5	+9.3	+14.3	-13.2	-0.3	-8.5	+15.3	-23.1		
Ukrainians	2009	88.4	82.8	91.6	88.6	85.9	94.6	87.2	92.4	3.8	88.6
	2019	89.1	67.9	97.3	95.2	92.4	98.0	94.9	91.3	9.7	94.9
	+/-	+0.7	-14.9	+5.7	+6.6	+6.5	+3.4	+7.7	-1.1		
Jews	2009	95.9	93.9	96.7	95.3	94.2	96.4	94.3	96.6	1.1	95.3
	2019	96.6	92.9	98.5	98.4	98.5	97.2	97.9	87.8	3.8	97.9
	+/-	+0.7	-1.0	+1.8	+3.1	+4.3	+0.8	+3.6	-8.8		
Tatars	2009	83.5	92.4	86	95.7	63.3	92.6	80.3	96.6	10.9	92.4
	2019	85.5	64.3	72.7	99.2	71.6	97.1	92.9	85.7	12.8	85.7
	+/-	+2.0	-28.1	-13.3	+3.5	+8.3	+4.5	+12.6	-10.9		
Lithuanians	2009	65.5	87.3	82.5	89.3	45.1	72.9	80.7	82.8	14.0	82.5
	2019	68.1	48.2	76.6	78.1	66.6	68.5	71.0	62.0	9.3	68.5
	+/-	+2.6	-39.1	-5.9	-11.2	+21.5	-4.4	-9.7	-20.8		

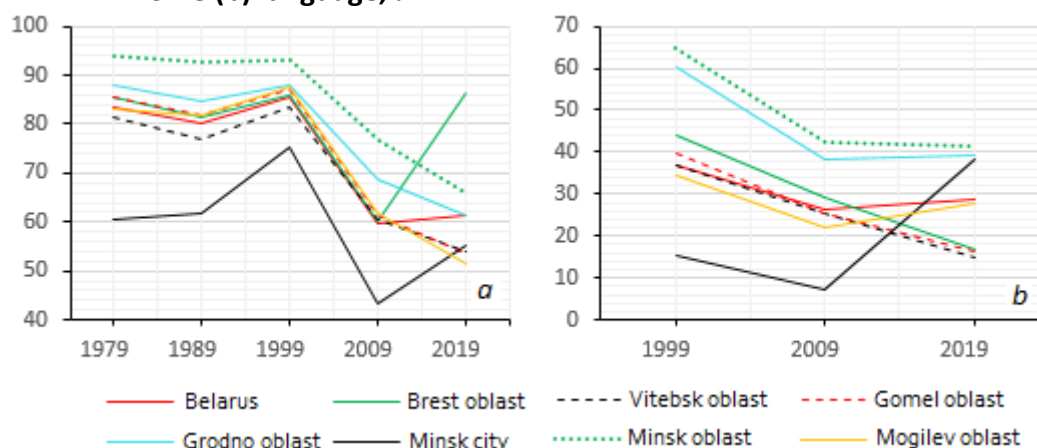
Source: Author's calculations based on Belstat data.

Table 8. Change in the share of ethnic languages as home language for the population of Belarus and individual nationalities, 2009-2019, %

Nationality and census year		Belarus	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast	σ	Me
Poles	2009	1.3	3.2	6.3	2.6	3.3	4.7	0.5	3.2	1.7	3.2
	2019	1.2	7.8	5.3	2.5	2.4	4.8	1.4	1.8	2.2	2.5
	+/-	-0.1	+4.6	-1.0	-0.1	-0.9	+0.1	+0.9	-1.4		
Ukrainians	2009	3.5	7.7	2.1	2.6	1.8	1.6	2.4	2.0	2.0	2.1
	2019	4.0	11.8	0.9	2.0	2.1	1.1	2.0	1.3	3.6	2.0
	+/-	+0.5	+4.1	-1.2	-0.6	+0.3	-0.5	-0.4	-0.7		
Jews	2009	0.8	0.7	0.1	0.3	0.9	0.2	0.3	0.5	0.3	0.3
	2019	0.5	0.4	0.1	0.2	0.1	0.3	0.0	0.1	0.1	0.1
	+/-	-0.3	-0.3	0.0	-0.1	-0.8	+0.1	-0.3	-0.4		
Tatars	2009	0.5	0.1	0.1	1.0	0.6	0.1	0.8	1.4	0.5	0.6
	2019	0.7	0.1	0.0	0.1	0.1	0.1	0.1	6.5	2.2	0.1
	+/-	+0.2	0.0	-0.1	-0.9	-0.5	0.0	-0.7	+5.1		
Lithuanians	2009	5.4	0.6	1.6	0.4	10.9	1.9	0.8	2.6	3.4	1.6
	2019	4.6	22.4	0.2	0.3	5.4	2.1	0.6	2.0	7.4	2.0
	+/-	-0.8	+21.8	-1.4	-0.1	-5.5	+0.2	-0.2	-0.6		

Source: Author's calculations based on Belstat data.

Figure 1. Dynamics of the share of Belarusians calling Belarusian their native (a) and home (b) language, %



Source: Author's calculations based on Belstat data.

At the same time, many sociological studies paint a completely different picture of the spread of the Belarusian language in these regions. Thus, a study conducted simultaneously with the population census in November 2019 showed that in the Mogilev oblast the share of the population using the Belarusian language in everyday life does not exceed 3% (Khamutovskaya 2021: 208). Moreover, in this study, as in the census, respondents were told to choose only one language and there were no such options as “two languages”, “trasyanka”, etc., the presence of which in sociological surveys often explains significant discrepancies between the census results (where such options are absent) and opinion polls.

Also, the results of numerous studies (Hentschel, Kittel 2011: 69; Khentschel 2017: 232) state that in large cities the role of the Belarusian language is smaller than in the whole country, and in Minsk the share of people using it is minimal. In any case, there was not a single study that recorded at least some increase in the use of the Belarusian language by the population of Minsk until the results of the 2019 census appeared, according to which more than a third of the population called Belarusian their home language (34.1% vs. 5.8% in 2009), i.e., far more people than in any other large city of Belarus.

It is interesting to analyze the shares of those calling Belarusian their native and home language among the population that did not indicate nationality in the census form (Table 9). These shares in all regions are noticeably declining, and only in the city of Minsk are they increasing, and many times over, especially the share of Belarusian as a home language, which has increased almost 200 times (from 0.1 to 19.3%), while the value in other oblasts is no more than 0.5%.

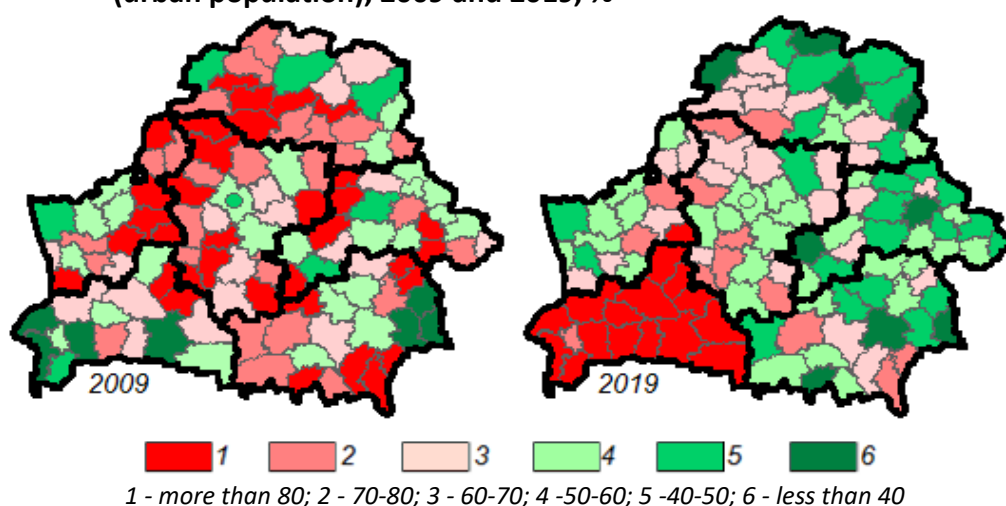
If we look at the change in the share of Belarusian as a native language for Belarusians in terms of administrative regions and types of locality (Figures 2-4), then there is a clear localization of high values of this indicator in 2019 and its increase in 2009-2019 within the administrative boundaries of the Brest oblast for both the urban and rural population. Of the 16 districts of the Brest oblast, only two for the urban population and three for the rural population did not experience an increase in the share of Belarusian as a native language by more than 5%. Of all the other regions of the country, on the contrary, such an increase occurred only in 4 out of 102 regions.

Table 9. Belarusian as native and home language for persons not indicating nationality in the census form

	Number of persons not indicating nationality, persons		Share of persons calling Belarussian native language, %		Share of persons calling Belarussian home language, %	
	2009	2019	2009	2019	2009	2019
Brest oblast	12 883	18 233	4.5	1.2	2.1	0.3
Vitebsk oblast	21 040	24 315	3.1	0.6	1.4	0.2
Gomel oblast	13 292	29 494	3.9	1.4	1.7	0.4
Grodno oblast	14 078	16 248	5.0	1.5	2.6	0.4
Minsk city	134 047	38 810	0.6	4.4	0.1	19.3
Minsk oblast	16 058	34 591	6.3	2.2	4.7	0.5
Mogilev oblast	15 131	26 063	2.7	2.1	1.0	0.5
Belarus	226 529	187 754	2.1	2.2	1.0	4.3

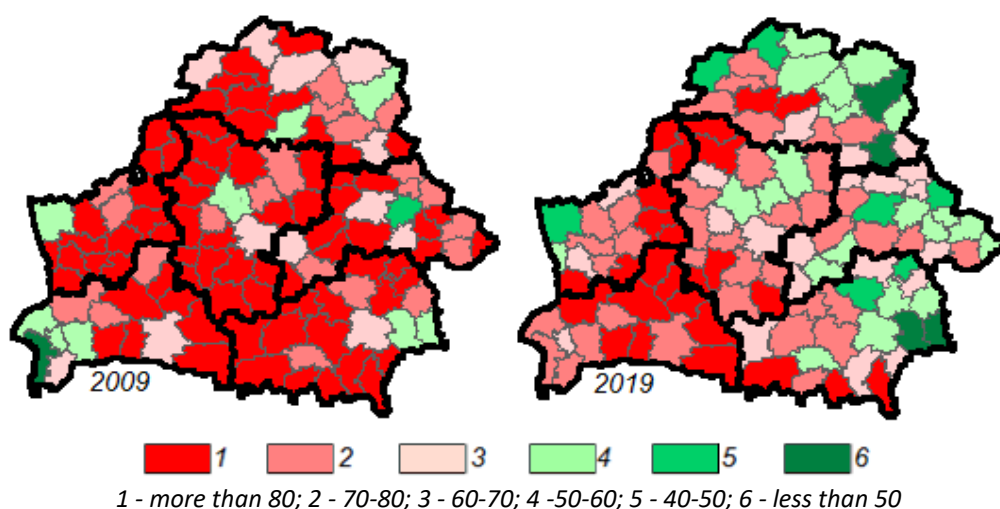
Source: Author's calculations based on Belstat data.

Figure 2. Percentage of Belarusians calling Belarusian their native language (urban population), 2009 and 2019, %



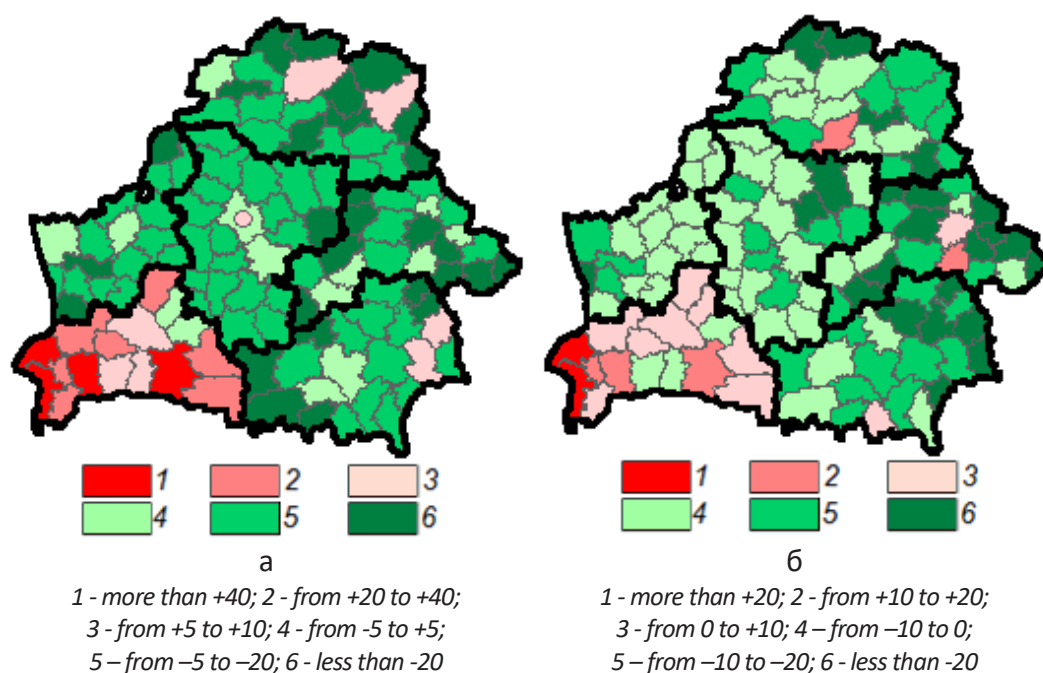
Source: Author's calculations based on Belstat data.

Figure 3. Percentage of Belarusians calling Belarusian their native language (rural population), 2009 and 2019, %



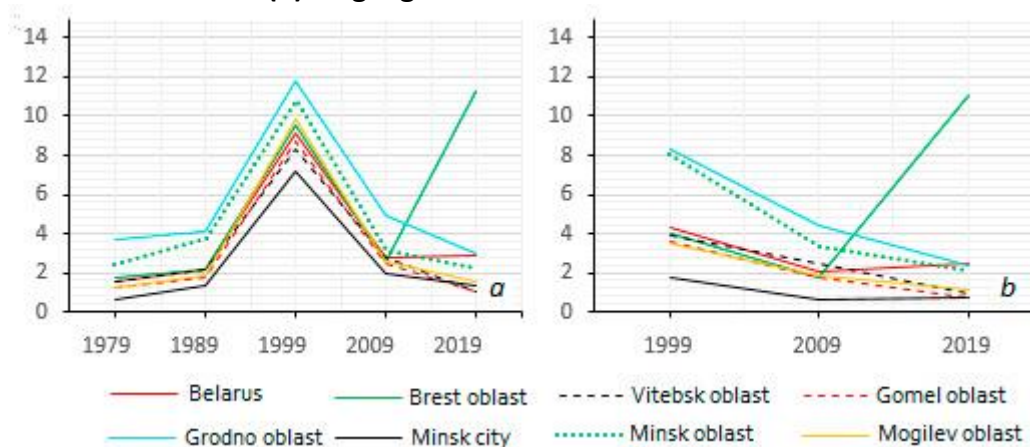
Source: Author's calculations based on Belstat data.

Figure 4. Change in the share of Belarusians calling Belarusian their native language among the urban (a) and rural (b) population, 2009-2019, %



Source: Author's calculations based on Belstat data.

Figure 5. Dynamics of the share of Russians calling Belarusian their native (a) and home (b) language



Source: Author's calculations based on Belstat data.

For Russians, an increase in the share of Belarusian as both their native and home language was noted only in the Brest oblast. At the same time, we see a rather interesting situation in which, in the Brest oblast, the share of Belarusians calling Belarusian their home language in 2009-2019 decreased more than in any other region - 12.8%, while among Russians it increased by 6.2 times. In the oblast's center - the city of Brest - these figures are even more striking: the share of Russians indicating Belarusian as their native language increased from 1.5 to 14.1%, and as their home language - from 0.3 to 22.9%. The results of the analysis of the dynamics of these indicators over several decades (Figure 5) also show that until 2019, no sharp and opposite changes in direction to other regions were observed in any region.

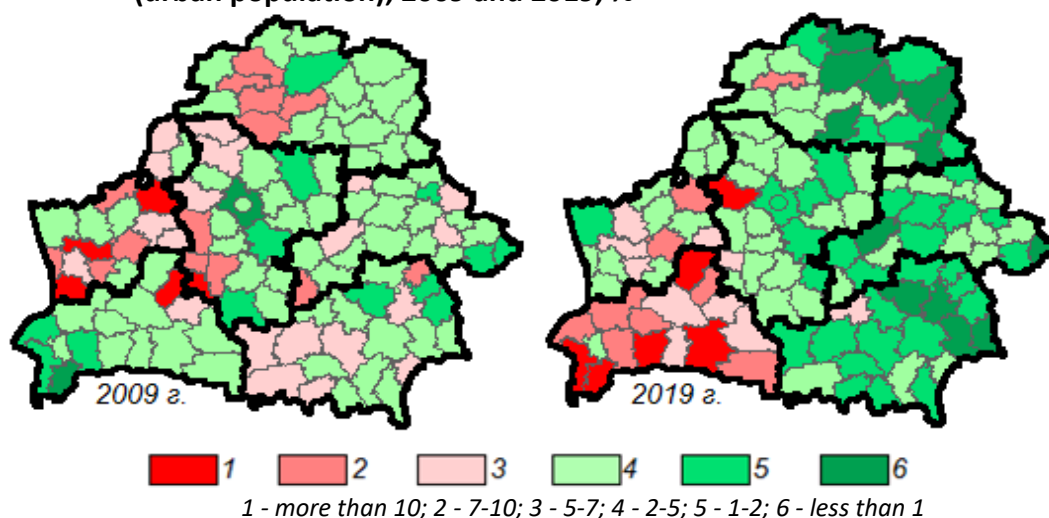
Table 10. The share of Belarusian as native and home language for Russians with different levels of education, %

Education level	Region							Belarus
	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast	
Native language								
Primary	2.7	2.6	1.9	9.3	0.9	3.6	2.3	3.1
Upper primary	9.1	2.0	1.4	4.9	1.8	3.1	2.4	3.4
Secondary	6.8	1.6	1.7	4.6	1.4	1.7	1.0	2.3
Vocational	2.3	1.5	0.8	2.2	0.8	2.4	2.0	1.5
Specialized secondary	8.4	1.0	1.0	3.3	1.7	2.7	1.9	2.6
Higher and postgraduate	13.8	0.6	0.8	2.1	1.2	1.6	1.2	3.1
Home language								
Primary	4.4	3.2	2.5	9.5	1.6	6.5	2.6	4.2
Upper primary	10.6	2.5	1.6	5.0	1.0	3.9	3.0	3.9
Secondary	4.9	1.9	1.3	4.4	0.5	1.9	1.2	2.0
Vocational	2.2	1.7	0.6	2.2	0.5	2.9	1.5	1.4
Specialized vocational	8.4	0.8	0.5	2.5	0.8	2.5	1.3	2.2
Higher and postgraduate	11.6	0.4	0.5	1.3	0.7	1.2	0.6	2.4

Source: Author's calculations based on Belstat data.

The anomalous growth in the share of Russians calling Belarusian their native and home language is reflected in other characteristics as well. For example, the 2019 census data on the distribution of the Russian population with Belarusian as their native and home language by educational level in the regions of Belarus (Table 10) show a huge difference in this indicator between the Brest oblast and other regions, especially for the population with higher education. Moreover, while in all other regions the proportion of people calling Belarusian their native and home language is generally lower among people with higher education than among those with any other level of education, in the Brest oblast the opposite is true.

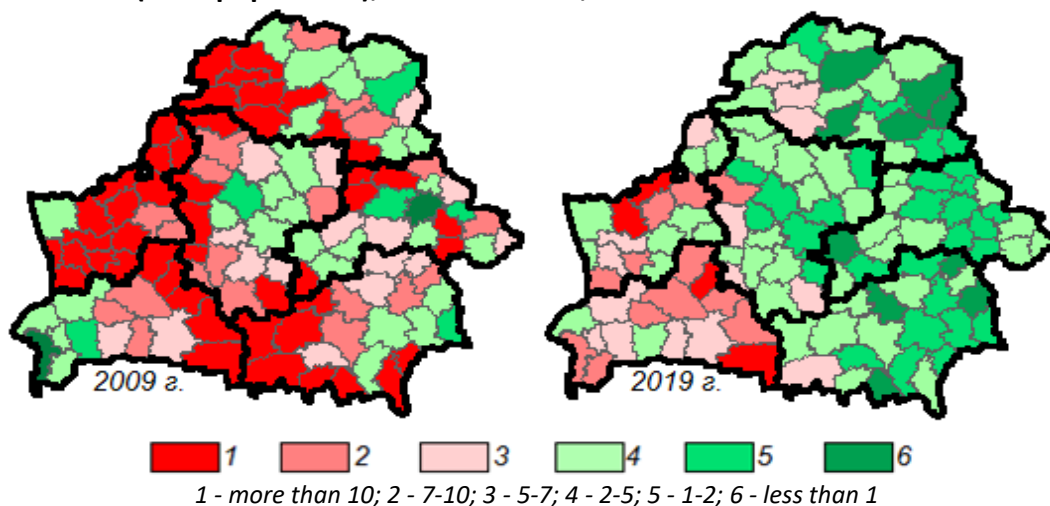
Figure 6. Share of Russians calling Belarusian their native language (urban population), 2009 and 2019, %



Source: Author's calculations based on Belstat data.

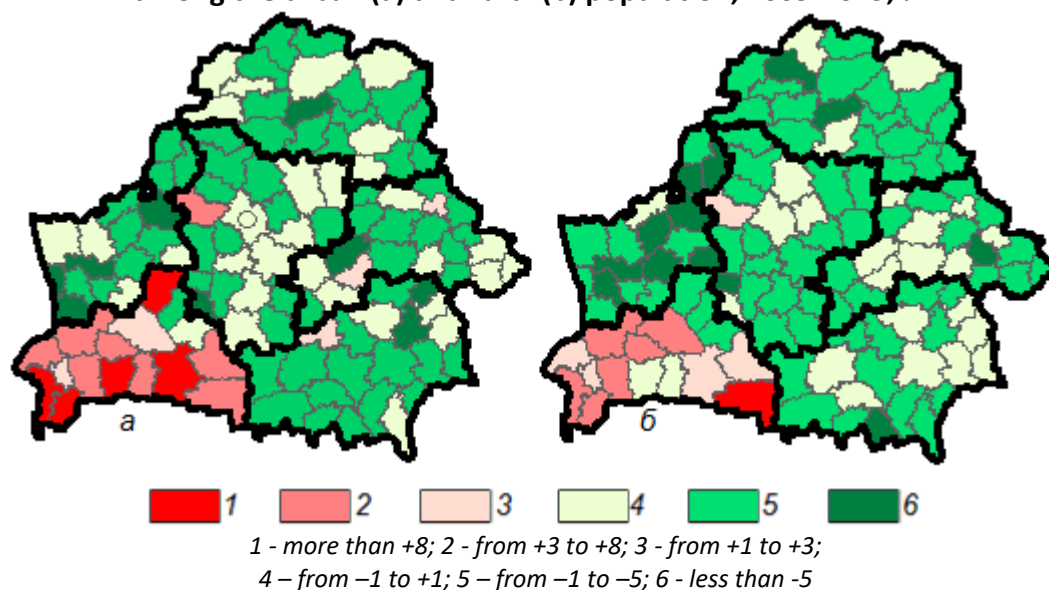
In terms of administrative districts and types of locality (Figures 6-8), among Russians the situation with the share of Belarusian as a native language and its dynamics in 2009-2019 is generally similar to that among Belarusians: an increase in this share is found in almost all administrative districts of the Brest oblast and in almost none outside the region.

Figure 7. Share of Russians calling Belarusian their native language (rural population), 2009 and 2019, %



Source: Author's calculations based on Belstat data.

Figure 8. Change in the share of Russians calling Belarusian their native language among the urban (a) and rural (b) population, 2009-2019, %

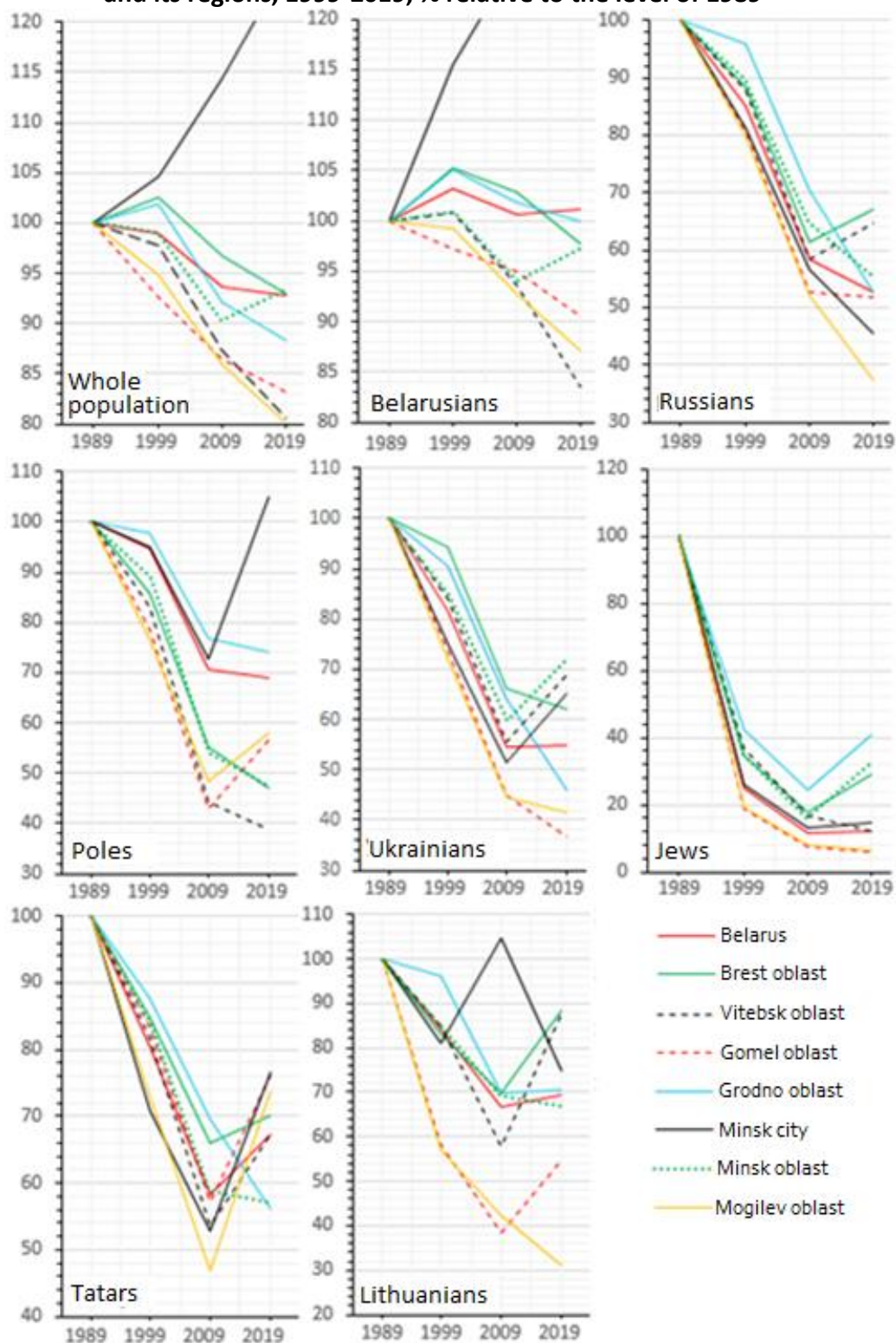


Source: Author's calculations based on Belstat data.

Ultimately, it was the anomalous changes in some regions (1-2 regions for each indicator) that ensured the growth in the share of Belarusian both as a native and as a home language for the population of Belarus as a whole, as well as for the Belarusian and Russian populations separately.

The changes in the size of the Russian and Belarusian population of the regions and the number of those calling Belarusian their native and home language are revealing (Figure 9; Table 11).

Figure 9. Base population growth rates of individual nationalities in Belarus and its regions, 1999-2019, % relative to the level of 1989



Source: Author's calculations based on Belstat data.

As can be seen in Figure 9, the most recent census showed for the first time very different changes in the populations of the nationalities in question by region compared to previous censuses, which showed largely synchronized changes.

For example, the population of Russians, which has been continuously and significantly declining in all regions, unexpectedly increased in the Brest and Vitebsk oblasts in 2019, while in both these regions the total population, as well as the number of Belarusians, decreased. Moreover, in the Vitebsk oblast the decrease in the size of the Belarusian population and of the entire population as a whole turned out to be the greatest of all regions, as did the increase in size of the Russian population. On the other hand, in Minsk the population of all major nationalities increased, with the exception of Russians, whose population noticeably decreased, although it is in Minsk that the share of Russians relative to the entire Russian population in Belarus is the highest - more than 20%. At the same time, there are no objective factors capable of explaining the growth in the size of the Russian population in the Brest and Vitebsk oblasts, given the decrease in the total population in them and the significant decrease in the absolute number of Russians in other regions.

Among Belarusians, a significant increase in their numbers was recorded in Minsk, which accounts for the small increase in persons of Belarusian nationality in the country as a whole. It is precisely for Minsk that the largest increase in the population is accompanied by the largest increase in those calling Belarusian their native and home language (Table 11). For Russians, the population growth is accompanied by an increase in the number of those calling Belarusian their native and home language only in the Brest oblast, while for the Vitebsk oblast the situation is the opposite.

Traditionally, population growth in Minsk is explained by migration, since Minsk has always had the lowest population replacement rates among all regions, which, moreover, have been continuously decreasing since 2014. Nevertheless, it was precisely Minsk that between the 2009 and 2019 censuses had the highest absolute increase in the population of Belarusians below working age among all regions (38.4% versus 5.2% for all other regions as a whole) and one of the highest increases in its share among the entire population. Compared with the dynamics of this indicator between the 1999 and 2009 censuses, for Minsk in 2009 the change in the number of Belarusians below working age was -22.8%, which was slightly higher than the national average (-26.2%) and corresponded to the indicators for other regions (from -22.2 to -31.4%, and in general for all regions, except for the city of Minsk, -26.8%). After the census, in 2020 and 2021, the population of Minsk, according to current figures, steadily decreased.

For Russians, the difference in the growth of the population below working age varies dramatically by region, with a maximum value in the Brest oblast of + 76.9% and also very high numbers in the Vitebsk and Gomel oblasts. In other oblasts, this indicator falls by tens of percent. Between the 1999 and 2009 censuses there was, as for the Belarusians, no such difference between the regions, with the value of this indicator ranging from -64.3% in Minsk to -71.6% in the Gomel oblast.

In the Brest and Gomel oblasts, the child-woman ratio (the ratio of children aged 0-9 years to the number of women of reproductive age of the corresponding nationality) more than doubled, and in the Vitebsk oblast is also noticeably higher than the national average (Table 12).

Based on these indicators and their dynamics, it can be assumed that there is a connection between the anomalous changes in language characteristics and the anomalous increase in the population, especially in the group below working age. Thus, in Minsk, which is the leader in terms of population growth of Belarusians in this group, there is an abnormally high increase in the number of those calling Belarusian their native and home language. The Mogilev oblast, where the increase in the proportion of the population of Belarusians below working age in 2009-

2019 was the highest among all regions of Belarus and the overall population growth one of the lowest, shows an anomalous increase in the number of people identifying Belarusian as their home language. In the Brest oblast, where the Russian population registered an increase in the size of the population under working age much higher than in other regions, there occurred at the same time an anomalous increase in the number of Russians calling Belarusian their native and home language. The same patterns were recorded for other nationalities, as will be shown below.

Table 11. Changes in the population size and the number of those calling Belarusian their native and home language among the Belarusian and Russian population of the regions of Belarus

Oblasts and Minsk city	Population size			Including those under working age			Belarusian native			Belarusian home		
	2009	2019	+/-, %	2009	2019	+/-, %	2009	2019	+/-, %	2009	2019	+/-, %
Belarusians												
Brest oblast	1 233 385	1 171 835	-5.0	235 059	241 747	+2.8	735 662	1 009 981	+37.3	362 320	195 083	-46.2
Vitebsk oblast	1 047 979	934 925	-10.8	167 269	158 930	-5.0	634 931	504 027	-20.6	266 235	136 977	-48.6
Gomel oblast	1 271 022	1 211 234	-4.7	224 750	238 530	+6.1	778 740	648 302	-16.7	321 295	198 394	-38.3
Grodno oblast	715 251	701 190	-2.0	130 172	142 392	+9.4	492 182	430 443	-12.5	274 547	276 472	+0.7
Minsk city	1 455 875	1 753 122	+20.4	228 127	315 667	+38.4	633 119	968 556	+53.0	102 212	674 762	+560.2
Minsk oblast	1 258 672	1 302 780	+3.5	215 324	247 400	+14.9	965 908	862 223	-10.7	534 560	538 146	+0.7
Mogilev oblast	975 148	915 633	-6.1	165 641	168 575	+1.8	600 845	469 607	-21.8	212 735	255 409	+20.1
Russians												
Brest oblast	89 685	97 936	+9.2	7 019	12 418	+76.9	2 299	11 107	+383.1	1 610	10 831	+572.7
Vitebsk oblast	124 958	138 075	+10.5	9 079	14 452	+59.2	3 462	1 324	-61.8	3 084	1 196	-61.2
Gomel oblast	111 085	108 712	-2.1	7 583	10 508	+38.6	2 751	1 137	-58.7	2 025	729	-64.0
Grodno oblast	87 451	65 550	-25.0	9 013	6 565	-27.2	4 291	1 980	-53.9	3 847	1 576	-59.0
Minsk city	184 070	148 079	-19.6	11 849	10 180	-14.1	3 700	1 905	-48.5	1 123	963	-14.2
Minsk oblast	101 579	86 408	-14.9	7 051	6 316	-10.4	3 172	1 863	-41.3	3 314	1 787	-46.1
Mogilev oblast	86 256	62 232	-27.9	6 556	4 248	-35.2	2 281	940	-58.8	1 650	699	-57.6

Source: Author's calculations based on Belstat data.

Pearson's linear correlation coefficient between the increase in the population of Belarusians by regions of Belarus and the increase in the number of Belarusians calling Belarusian their home language is $r = +0.93$, $p < 0.01$.

The author can assume that the anomalous increase in the population, especially of those below working age, in certain regions for certain nationalities, together with a completely different dynamics of this indicator in other regions and an equally anomalous increase in the share of the Belarusian language (in some cases, a statistically significant correlation is observed between these indicators), is the result of a deliberate distortion of the census results (primarily by overstating the population size below working age.). Moreover, for the vast majority of the populations recording anomalous (distorted) growth, a single language was reported as both native and home: Belarusian as native and home for the Belarusians of Minsk, as well as for the Russians of the Brest oblast, Belarusian as the home language for the Belarusians of the Mogilev oblast, Russian as native and home for Russians in the Vitebsk and Gomel oblasts, Belarusian as

native and home for Poles in the Gomel and Mogilev oblasts and Minsk, Belarusian as native for Ukrainians in the Vitebsk oblast, Ukrainian as native for Ukrainians in the Mogilev oblast, etc.

It is for this reason that the child-woman ratio skyrocketed over 10 years, and all this against the backdrop of a decline in fertility, when the crude birth rate decreased from 11.5 in 2009 to 9.9 in 2019, and the total fertility rate from 1.40 to 1.27. It is possible that the overstatement of the number of persons below working age eliminates the need to correct such census results as belonging to the labor force, education, marital status, etc., categories which here are not relevant, and in general creates a more favorable demographic picture against the backdrop of the sharp decline in fertility that began in 2017. At the same time, since 2019, Belstat has completely stopped publication of any data at all on the natural movement of the population and of the Demographic Yearbook and corresponding bulletins, and has excluded thematic sections from all other statistical collections. Among nationalities with a small population, such an overstatement is more pronounced compared to Belarusians and Russians and leads to such results as when, for example, in 2009 in the Minsk oblast there was 1 child per 5 women among Jews, and in 2019 18 children per the same 5 women (Table 12).

Table 12. Change in the child-woman ratio by regions and nationalities

Region		Whole population	Belarusians	Russians	Poles	Ukrainians	Jews	Tatars	Lithuanians
Belarus	2009	0.38	0.40	0.18	0.29	0.08	0.24	0.14	0.20
	2019	0.49	0.51	0.29	0.47	0.25	1.50	0.42	0.30
Brest oblast	2009	0.43	0.46	0.18	0.19	0.09	0.30	0.10	0.06
	2019	0.56	0.58	0.37	0.36	0.22	3.97	0.40	0.22
Vitebsk oblast	2009	0.35	0.38	0.17	0.16	0.06	0.21	0.07	0.10
	2019	0.45	0.47	0.32	0.30	0.41	0.97	0.37	0.13
Gomel oblast	2009	0.39	0.42	0.15	0.07	0.06	0.20	0.07	0.14
	2019	0.51	0.54	0.30	0.38	0.18	1.25	0.45	0.24
Grodno oblast	2009	0.39	0.44	0.26	0.32	0.10	0.43	0.26	0.26
	2019	0.55	0.58	0.36	0.50	0.26	2.87	0.45	0.34
Minsk city	2009	0.32	0.34	0.17	0.14	0.06	0.24	0.16	0.22
	2019	0.42	0.44	0.23	0.36	0.26	1.20	0.39	0.41
Minsk oblast	2009	0.40	0.42	0.16	0.18	0.08	0.20	0.10	0.17
	2019	0.52	0.54	0.24	0.33	0.28	3.57	0.42	0.42
Mogilev oblast	2009	0.38	0.40	0.18	0.10	0.06	0.29	0.06	0.14
	2019	0.49	0.51	0.23	0.38	0.28	0.95	0.55	0.51

Note: Cases of an increase in the indicator by more than 2 times have been identified.

Source: Author's calculations based on Belstat data.

It should also be noted that for the majority of the population below working age, the answers to the census questions (including about their native and home language) are provided by parents. Parents also choose the language of instruction for children in preschool and general secondary education. Therefore, it is necessary to analyze the data on the languages of instruction in these institutions by regions of Belarus (Table 13). In Minsk, the proportion of students whose schooling is in the Belarusian language is noticeably lower than in all other regions; in the Mogilev oblast this proportion is also lower than the national average and at the same time is trending downward, although it is precisely these regions that had the maximum increase in the absolute number of Belarusians identifying Belarusian as their home language and in its share among the entire population (Tables 6; 11).

Table 13. Belarusian as the language of instruction in preschool and general secondary school, 2012-2018, %

Region	Preschool		General secondary	
	2012	2018	2012	2018
Brest oblast	15.7	13.1	22.9	17.4
Vitebsk oblast	10.8	6.6	14.9	7.6
Gomel oblast	7.5	6.8	13.8	9.8
Grodno oblast	18.5	15.7	19.6	12.5
Minsk city	3.1	3.5	2.0	2.1
Minsk oblast	20.5	15.4	28.9	20.1
Mogilev oblast	9.0	6.7	14.8	9.8
Belarus	11.4	9.1	16.5	11.1

Source: (Belstat 2019).

In this regard, there is a paradoxical situation: parents are responsible for their children, for example, using Belarusian at home, yet at the same time they choose Russian as their language of instruction, and the share of Belarusian in educational institutions is constantly and steadily declining. In addition, the figures given in Table 13 are provided mainly by rural schools, in most of which the language of instruction is Belarusian, so that parents have no actual choice, since there are no other schools within reach and there is only one group for each grade. At the same time, there are cases when parents, dissatisfied with this state of affairs, have been seeking for years the possibility of having their children schooled in Russian¹. In cities (where 77.5% of the population lives), in some cases the number of schoolchildren studying in the Belarusian language is a mere handful^{2,3}. A vivid example is the only completely "urban" region - the city of Minsk, where 2.1% of school students study in the Belarusian language, while in Minsk, according to this census, the proportion of those calling Belarusian their home language "soared" from 5.8% in 2009 to 34.1% in 2019, and in absolute numbers from 102,212 to 674,762 people - that is, this figure increased by 560% (!).

Standing out against the general background is the Brest oblast, where anomalous changes have occurred in almost all administrative districts: out of 16 districts in 2019, the size of the Russian population increased in 11, the share of Russians calling Belarusian their native language in 13 and their home language in 11, and the share of Belarusians calling Belarusian their native language in 15, while the share of Belarusians calling Belarusian their home language decreased in absolutely all regions. Between the increase in the number of Russians in the administrative districts of the Brest oblast and the increase in the number of Russians calling Belarusian their home language, there is a significant rank correlation: Spearman coefficient $R = +0.52$, $p < 0.05$. Also, for the districts of the Brest oblast, a fairly high linear correlation was established between the increase in the number of Belarusians and of Russians both calling Belarusian their native tongue ($r = 0.81$, $p < 0.001$).

These features in the Brest oblast differ sharply both from all other regions and from the results of previous censuses, when they were not observed. So, for example, for the share of

¹ In Zhirovichi, they fought for 10 years to change schooling into Russian. <https://sputnik.by/20211018/v-zhirovichakh-10-let-dobivalis-chtoby-perevesti-obuchenie-v-shkole-na-russkiy-yazyk-1057278559.html>

² Another Belarusian-speaking classroom opened in Belarus. <https://news.rambler.ru/cis/34613020-v-belorussii-otkrylsya-esche-odin-belorusskoyazychnyy-klass/>

³ Class for one student in a school with a swimming pool.: <https://ru.hrodna.life/2019/08/16/pervoklassniki-grodno-po-belorusski/>

those who called Russian their native language among the entire urban population, only in the Brest oblast did the indicator of variation of this value by administrative districts sharply decrease. While in 2009 the standard deviation of this indicator for the districts of the Brest oblast was 16.6, in 2019 it was 4.0 (thus decreasing by 4.2 times), whereas for all other regions of Belarus this value in 2019 was 7.5-13.6, and its maximum decrease in 2009-2019 1.8 times. As a result, while in 2009 the difference between the minimum and maximum values of the indicator for the urban population of the districts of the Brest oblast was very significant (57.9%), in 2019 it was only 13.2%; all values were around the 20% mark, deviating from it by an average of 3.4% and a maximum of 7.1%. It can be assumed that it was the figure of 20% that became the value that was initially administratively set as a benchmark to which it was necessary to “adjust” the results.

“Adjustment” of the results to the same initially given value for all districts led to an extremely high Pearson linear correlation coefficient ($r = +0.98, p < 0.01$) between the proportion of the urban population who called Russian their native language in 2009 and the modulus of change of this indicator. For other regions of Belarus, the situation is diametrically opposite, and this coefficient has a negative value ($r = -0.52, p < 0.01$), with similar values shown by the calculation of this indicator for each region separately.

The statistical significance of the differences between the Brest oblast and other regions in terms of the share of Russian as a native language is also confirmed by the calculation of Student's t-test. Thus, its calculation for the indicator of the change in the share of Russian as a native language for two populations (districts of the Brest oblast and all other districts of Belarus) showed its value $t = 12.3$ (with $t_{critical} = 2.61$ for $p < 0.01$). The calculation of the t-test for 5 pairs of populations of districts of the Brest oblast and each of the other oblasts also showed a high value from 8.1 to 10.4. At the same time, there were no significant differences in the t-test for any of the pairs of other regions. A similar result was shown by calculations of the t-test for the rural population.

Thus, the anomalous increase in the population, especially in working age, together with other ways of distorting the census results that are not related to population registrations (for example, a sharp increase in the share of Belarusian as a native language for Belarusians in the Brest oblast is not accompanied by an anomalous increase in the share of people below working age), made it possible to achieve "ideal" results - an increase by a small amount in the share of Russian and Belarusian both as native and as home languages for both Russians and Belarusians, as well as for the entire population as a whole.

Change in the population size and language structure of other nationalities

The third largest nationality in Belarus are the *Poles*, more than three-quarters of whom live in the Grodno oblast and who in 2009 had the country's lowest level of urbanization (61.4%). Just as for all other major nationalities, the 2019 census for the first time showed multidirectional dynamics of the Polish population in different regions (Figure 9; Table 14).

At the same time, attention should be paid to the fact that the population growth, quite noticeable, occurred only in regions that historically were not the traditional place of residence of the Poles: in the Mogilev and Gomel oblasts and especially in Minsk, where over 10 years their number increased by 44.5% - the largest relative increase in the number of all nationalities in Minsk for the period 2009-2019. (Largely due to this, the urbanization coefficient for Poles increased by 9.9%, which is a record among all nationalities - more than 3 times higher than the

increase in this coefficient on the national average). In these regions, the growth of the Polish population was ensured primarily by the population below working age, for which the growth rate is more than an order of magnitude higher than its national average, and the birth rate increased by 2.6-5.4 times (Table 12). And it was precisely in these regions that the number and proportion of the population calling Belarusian their native and home language grew, also significantly (Tables 3; 6; 15).

Table 14. Growth of the Polish population in the oblasts and in Minsk

Regions	Population size			Including those under working age		
	2009	2019	+/-, %	2009	2019	+/-, %
Belarus	294 549	287 693	-2.3	36 766	44 692	+21.6
Brest oblast	17 539	14 893	-15.1	1 264	1 594	+26.1
Vitebsk oblast	11 141	9 806	-12.0	589	873	+48.2
Gomel oblast	1 958	2 572	+31.4	57	348	+510.5
Grodno oblast	230 810	223 119	-3.3	32 602	37 334	+14.5
Minsk city	13 420	19 397	+44.5	838	2 749	+228.0
Minsk oblast	17 908	15 785	-11.9	1 344	1 541	+14.7
Mogilev oblast	1 773	2 121	+19.6	72	253	+251.4

Source: Author's calculations based on Belstat data.

Table 15. Growth in the number of those calling Belarusian their native and home language among the Polish population of the oblasts and Minsk

Region	Belarusian, native			Belarusian, home		
	2009	2019	+/-, %	2009	2019	+/-, %
Belarus	171 287	156 650	-8.5	120 378	132 366	+10.0
Brest oblast	9 673	6 518	-32.6	6 480	4 273	-34.1
Vitebsk oblast	6 195	4 284	-30.8	5 366	3 668	-31.6
Gomel oblast	860	1 176	+36.7	464	1 035	+123.1
Grodno oblast	133 920	125 113	-6.6	93 995	109 210	+16.2
Minsk city	5 491	8 370	+52.4	1 684	5 081	+201.7
Minsk oblast	14 553	10 277	-29.4	12 168	8 425	-30.8
Mogilev oblast	595	912	+53.3	221	674	+205.0

Source: Author's calculations based on Belstat data.

The coefficient of linear correlation between the population growth in the regions and the increase in the proportion of those calling Belarusian their native language of the whole Polish population is quite high ($r = 0.79$, $p < 0.05$), and the increase in the proportion of those calling it their home language is even higher ($r = 0.84$, $p < 0.05$).

In regions where the Polish population size is decreasing, the relative value of the decrease in those calling Belarusian their mother tongue is 2 or more times higher than the decrease in the total size of the Polish population. In regions with an increasing number of Poles, on the contrary, the relative increase in the number of people with Belarusian as their native and, especially, home language, exceeds the overall relative increase. Exclusively in the Brest oblast, the proportion of Poles calling Polish their home language has noticeably increased - up to 7.8%, which is 6.5 times higher than the national average; in the Grodno oblast, where the total number of Poles decreased by 7.7 thousand people, the number of those calling Belarusian their native language also decreased by 8.8 thousand people, but the number of those calling it their home language increased by 15.2 thousand people.

For Ukrainians, who reside mainly in the Brest oblast (about a quarter of all Ukrainians), the peculiarities of changes in language characteristics are also closely connected to

administrative districts. Just as for the Poles, a significant increase in the Ukrainian population, and in particular an increase of hundreds of percent of the population under working age, was observed only in regions where a relatively small number of Ukrainians live, while in the Brest and Gomel oblasts, which in 2009 had the largest number of Ukrainians, it decreased (Table 16). However, in the end, all the same, in the country as a whole the results of the census showed a slight increase in the Ukrainian population, even though all previous censuses had shown a synchronous decrease in the number of Ukrainians across all regions (Figure 9).

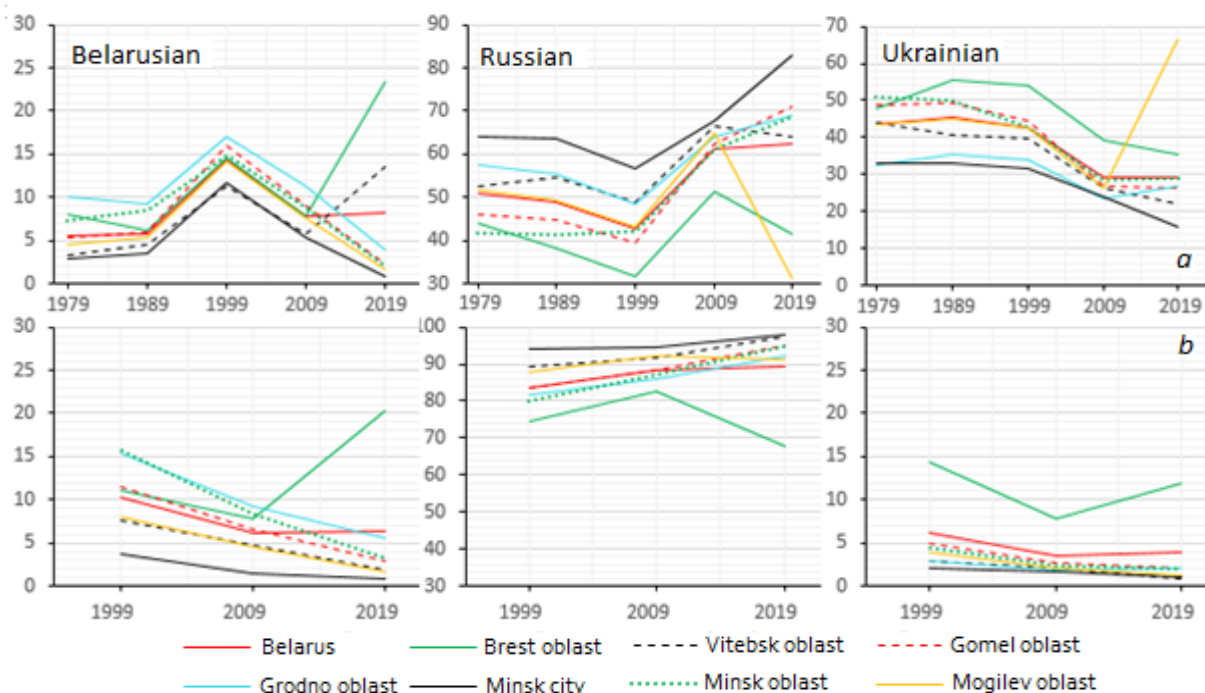
Table 16. Growth of the Ukrainian population in the oblasts and Minsk

Region	Population size			Including those below working age		
	2009	2019	+/-, %	2009	2019	+/-, %
Belarus	158 723	159 656	+0.6	5 986	13 884	+131.9
Brest oblast	40 046	37 648	-6.0	2 365	3 138	+32.7
Vitebsk oblast	14 557	17 993	+23.6	403	2 341	+480.9
Gomel oblast	30 920	25 085	-18.9	967	1 480	+53.1
Grodno oblast	14 983	10 767	-28.1	654	814	+24.5
Minsk city	27 362	34 662	+26.7	610	2 993	+390.7
Minsk oblast	17 745	21 273	+19.9	618	1 994	+222.7
Mogilev oblast	13 110	12 228	-6.7	369	1 124	+204.6

Source: Author's calculations based on Belstat data.

The share of Belarusian as a native language among Ukrainians increased sharply only in the Brest and Vitebsk oblasts (by 2.9 and 2.3 times, respectively). In all other regions this indicator continued a noticeable decline, which was typical for all regions in 1999-2009. (Figure 10). The share of Belarusian as a home language increased sharply (2.6 times) only in the Brest oblast, and its dynamics in the Vitebsk oblast did not differ from the dynamics in other regions.

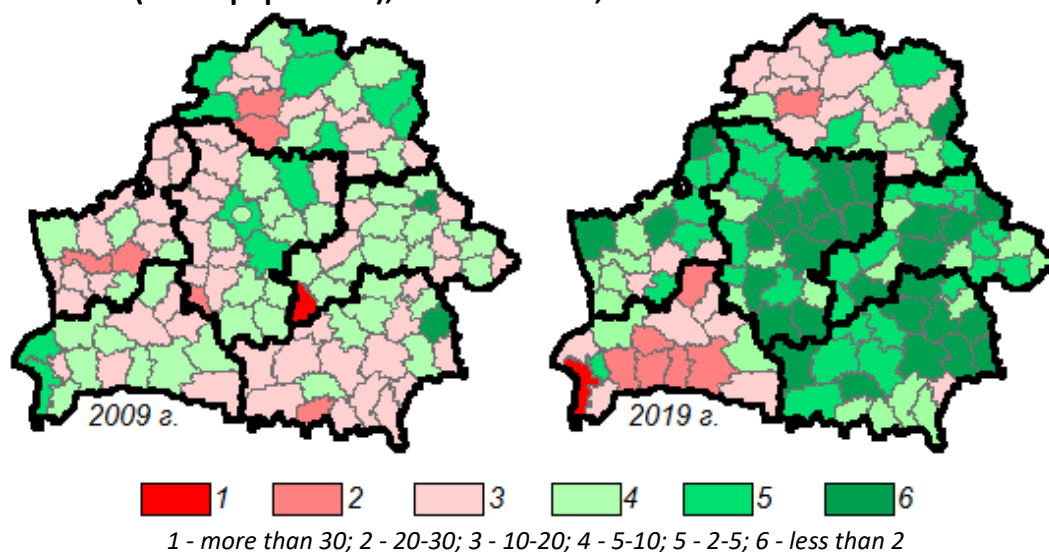
Figure 10. Dynamics of the share of Belarusian, Russian and Ukrainian as native (a) and domestic (b) language for the Ukrainian population, %



Source: Author's calculations based on Belstat data.

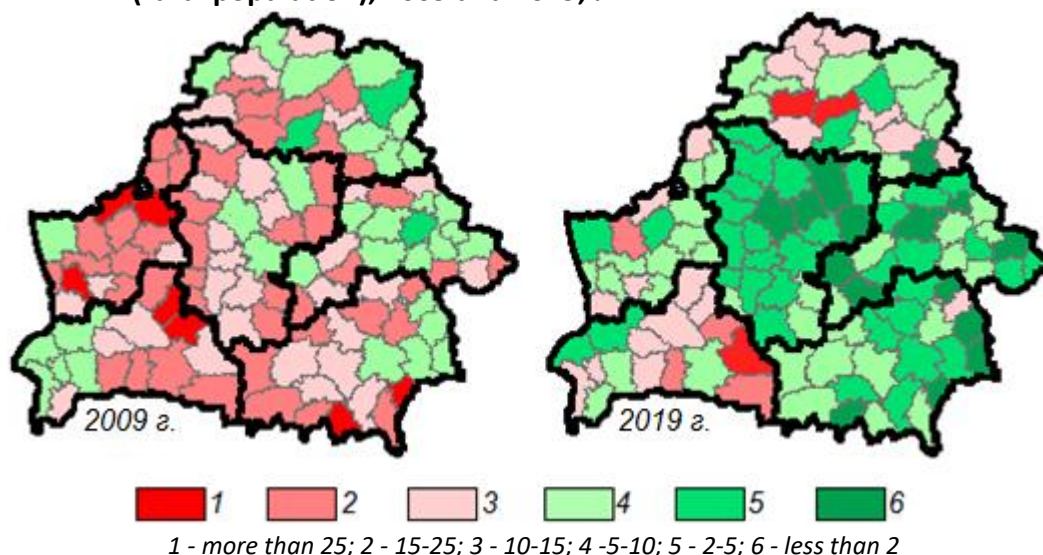
Figure 11 shows that an increased (more than 10%) share of Belarusian as a native language among the urban population was observed in 2009 in 57 out of 118 administrative districts of Belarus. Of these districts, only 26% were in the Brest and Vitebsk oblasts. In 2019, such values were observed only in 28 districts, and already 86% of them are districts of the Brest and Vitebsk oblasts, and outside them they were recorded only in 4 districts. Among the rural population (Figure 12), the picture is similar - in 2019, out of 26 districts where the share of Belarusian as a native language exceeds 10%, 20 districts are located in the Brest and Vitebsk oblasts.

Figure 11. Share of Ukrainians calling Belarusian their native language (urban population), 2009 and 2019, %



Source: Author's calculations based on Belstat data.

Figure 12. Share of Ukrainians calling Belarusian their native language (rural population), 2009 and 2019, %

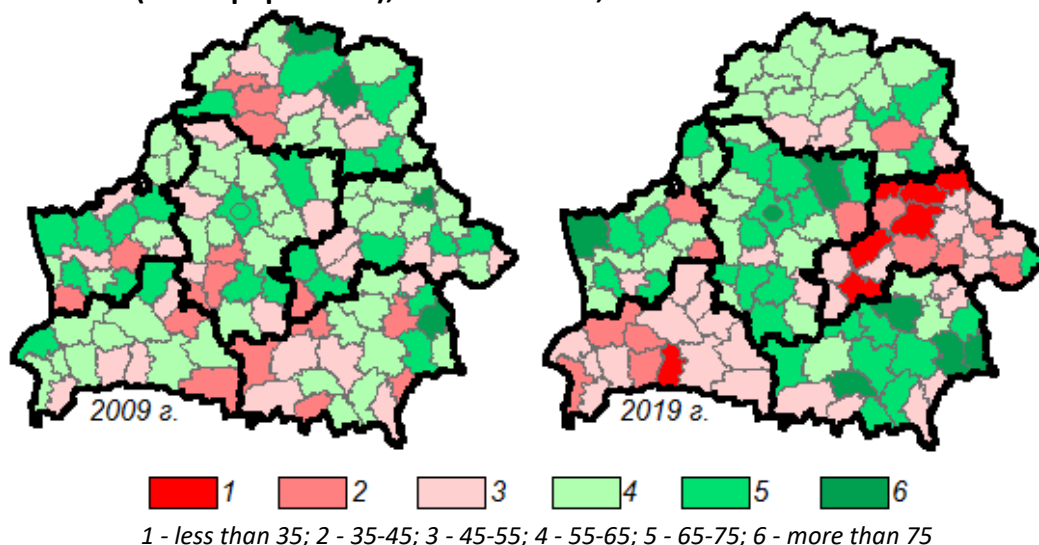


Source: Author's calculations based on Belstat data.

In terms of the decrease in the share of Russian as a native language for the urban population (Figure 13), the Brest and Mogilev oblasts clearly stand out, where in absolutely all districts, except for one district of the Mogilev oblast, it fell below 55% in 2019. The Mogilev

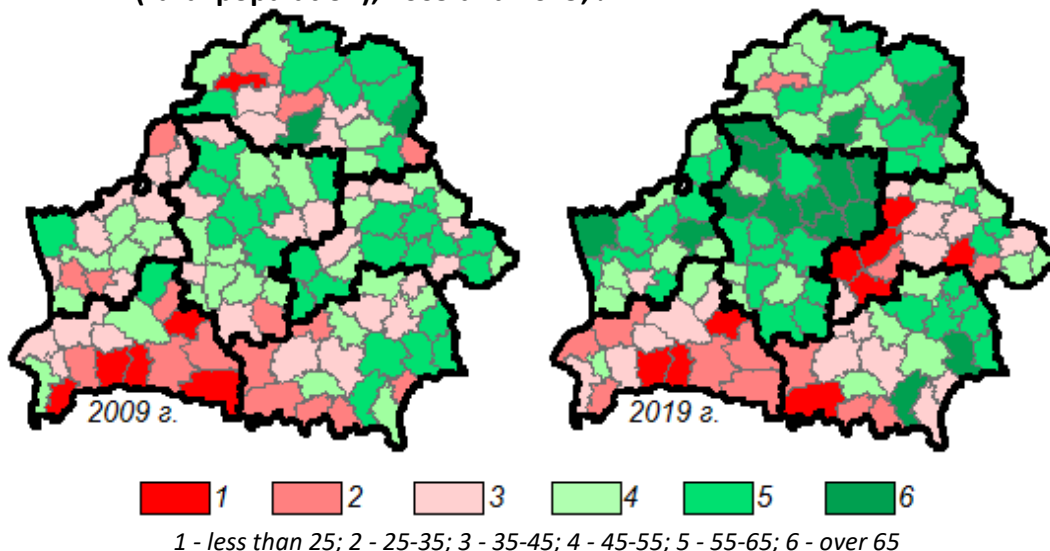
oblast was also the only one in Belarus to see a noticeable decrease in the share of the Russian language among the rural population in most districts (Figure 14).

Figure 13. Share of Ukrainians calling Russian their native language (urban population), 2009 and 2019, %



Source: Author's calculations based on Belstat data.

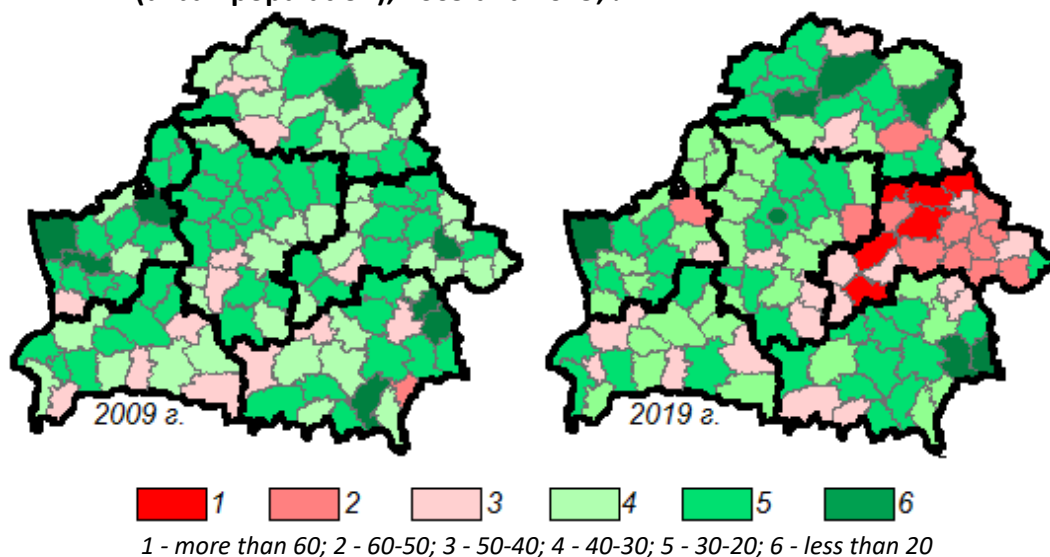
Figure 14. Share of Ukrainians calling Russian their native language (rural population), 2009 and 2019, %



Source: Author's calculations based on Belstat data.

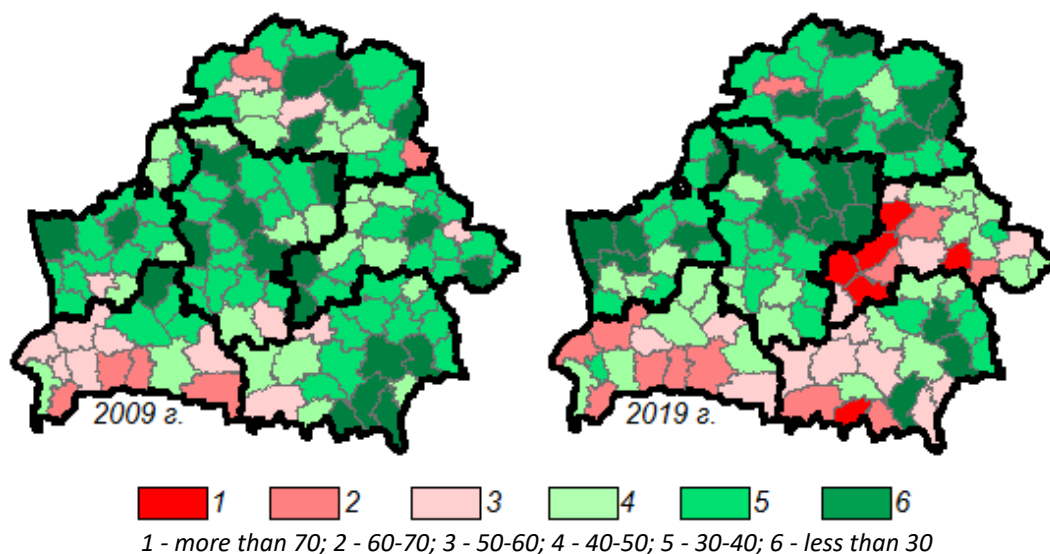
The urban population of the districts of the Gomel and Brest oblasts has no fundamental differences in these indicators from other regions. This is clearly seen in Figures 15 and 16, which show that the situation with Ukrainian as a native tongue did not change significantly between 2009 and 2019, with the exception of anomalous results in the Mogilev oblast, which, despite never having had a high level of Ukrainian, became the only oblast to see a dramatic increase in its share as a native language, moreover, in 20 out of 21 districts at once.

Figure 15. Share of Ukrainians calling Ukrainian their native language (urban population), 2009 and 2019, %



Source: Author's calculations based on Belstat data.

Figure 16. Share of Ukrainians calling Ukrainian their native language (rural population), 2009 and 2019, %



Source: Author's calculations based on Belstat data.

Thus, the dynamics of native languages for Ukrainians have pronounced individual features in different regions (Table 17).

As for the dynamics of the share of home languages, only the Brest oblast saw an increase in the shares of Belarusian (by 2.6 times) and Ukrainian (by 1.5 times) and a corresponding decrease in the share of Russian, while in other regions it is the other way around. In the Mogilev oblast, the share of all three languages is falling. This became possible due to a sharp increase in the proportion of people who did not indicate their home language during the census.

Table 17. Changes in the share of languages as native among Ukrainians by regions

Native language	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast
Belarusian							
Russian							
Ukrainian							

Note:

- – decrease over 4%;
- – magnitude of change \pm 4%;
- – increase over 4%.

Source: Compiled by the author.

In general, this indicator is an excellent illustration of the strict correlation of the dynamics of language characteristics to administrative units and individual nationalities, which cannot be the result of natural causes, but indicates a deliberate distortion of the census results (Table 18).

Table 18. Dynamics of the share of persons not indicating their native and home languages, by nationalities and regions, 2009-2019

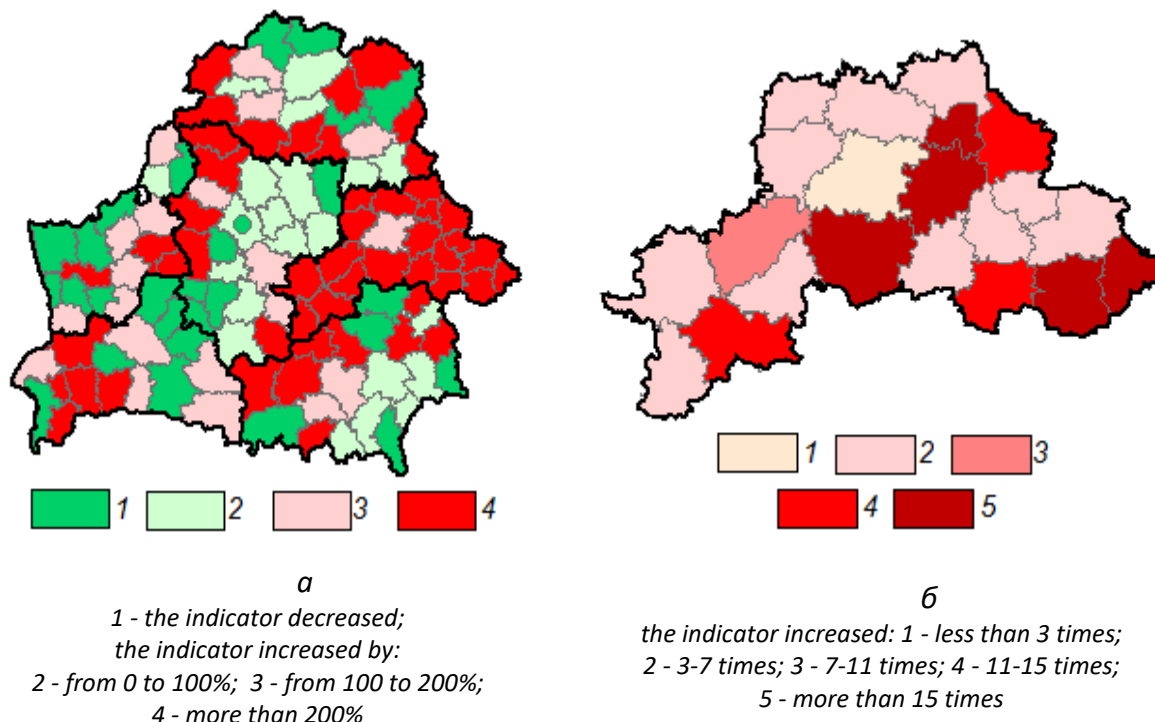
Nationality		Native language							Home language						
		Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast	Brest oblast	Vitebsk oblast	Gomel oblast	Grodno oblast	Minsk city	Minsk oblast	Mogilev oblast
Belarusians	2009	0.5	0.4	0.5	0.5	1.1	0.7	0.4	0.8	0.7	0.9	1.0	1.4	1.3	0.7
	2019	0.0	0.0	0.0	0.0	0.0	0.1	4.2	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Russians	2009	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.4
	2019	0.4	0.5	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
Poles	2009	0.4	0.1	0.3	0.4	0.9	0.3	1.6	0.5	0.2	0.3	0.7	1.1	0.5	1.7
	2019	0.0	0.1	0.3	0.3	0.3	0.6	4.3	0.0	0.0	0.0	0.1	1.1	1.3	6.7
Ukrainians	2009	0.4	0.4	0.5	0.3	0.7	0.6	0.5	0.5	0.5	0.5	0.3	0.8	0.8	0.5
	2019	0.0	0.6	0.2	0.2	0.2	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	5.7
Jews	2009	1.6	1.0	1.5	0.4	0.7	0.9	1.4	1.4	0.7	0.8	0.2	0.4	0.1	0.3
	2019	1.2	0.6	0.7	0.4	0.2	3.7	6.1	0.0	0.0	0.1	0.0	0.0	0.0	10.0
Tatars	2009	0.6	0.7	1.7	0.7	0.7	0.5	0.2	0.3	0.1	0.8	0.5	0.3	0.4	0.0
	2019	0.5	0.9	0.4	0.1	0.4	4.6	11.5	0.1	0.0	0.0	0.0	0.0	0.0	7.4
Lithuanians	2009	1.4	1.9	1.1	0.5	1.2	1.1	1.5	0.0	1.1	1.1	0.5	1.1	0.4	0.7
	2019	0.9	1.0	1.0	0.9	0.0	2.8	5.0	0.0	0.0	0.0	0.0	0.0	1.5	6.5

Source: Author's calculations based on Belstat data.

The Mogilev oblast is the only one where the proportion of people who did not indicate their native and home languages increases many times among all nationalities and becomes much larger than in all other regions. This is especially noticeable for the home language, where in other regions there is practically no population that did not indicate the home language, while in the Mogilev oblast, among all nationalities, the proportion of such people is very significant and reaches 10% (for Jews). For the native language, this indicator is also clearly differentiated by nationality. For example, in the Mogilev oblast, among all Russians only 2 people in 2019 did not indicate their native language, and among Ukrainians, too, the change compared to 2009 is also insignificant. However, a very sharp increase is observed for all other nationalities, reaching a maximum among the Tatars, where the proportion of those who did not indicate their native language increased by almost 60 times. It is obvious that the question why, out of all the regions, only in Mogilev a significant proportion of the population of the main

nationalities decided to hide their native and home languages from the census takers, while the Russian and Ukrainian population, unlike other nationalities, hid only their home languages, is rhetorical in nature, and these results (as well as other anomalies localized within administrative units) allow us to draw a conclusion only about the quality of the census and the level of reliability of its results.

Figure 17. Change in the number of people not indicating their native language, by regions of Belarus (a) and the Mogilev oblast (b), 2009-2019



Source: Author's calculations based on Belstat data.

It must be said here that the proportion of people who did not indicate their languages increased in many districts not only of the Mogilev oblast (Figure 17a); however, in all other regions there is no pattern in the dynamics of this indicator by district, and in different districts there are different directions and degrees of change. And only in the Mogilev oblast did all districts without exception show an increase in this indicator, moreover severalfold, almost everywhere by more than 3 times (Figure 17b). Among the entire population of the oblast, the proportion of those who did not indicate their native language increased in 2009-2019 from 1.7 to 6.2%, while in all other regions of Belarus this share did not exceed 2.4% in 2019. Despite the fact that in the Mogilev district of the Mogilev oblast, the increase in the proportion of the population that did not indicate their native language is the smallest of all districts of the oblast (due to the initially high value of the indicator in 2009), this share in it is 8.0%, which is the highest value among all regions of the country. Overall, 4 out of 5 regions of Belarus where this indicator exceeds 5% are located in the Mogilev oblast.

In 1989-2009 the number of Jews in all regions was declining at the fastest rate of all the nationalities considered (Figure 8) and in Belarus it decreased by 75%, including in 1999-2009 by 53%. In 2009-2019 the country recorded an increase in the number of Jews, which (with the exception of Minsk) was noted only in regions where it was minimal in 2009 (and this increase is very significant - 65.4-106.5%) (Table 19). At the same time, a huge increase, reaching 1.000% in the Minsk oblast, was recorded for the population below working age. The proportion of people

below working age in Belarus as a whole increased by more than 3 times, and in the Minsk oblast by more than 5 times. The child-woman ratio for Jews in Belarus as a whole increased by 6.2 times, which is 4.7 times higher than its growth for the entire population. In some regions, this value is even higher, for example, in the Brest oblast, where it increased by 13.4 times from 0.30 in 2009 to 3.97 in 2019 (Table 12). As a result, in 2019 the child-woman ratio for Jews became the highest of all nationalities, exceeding by 3.1 times its value for Belarus as a whole, despite the fact that in 2009 it was below the national average.

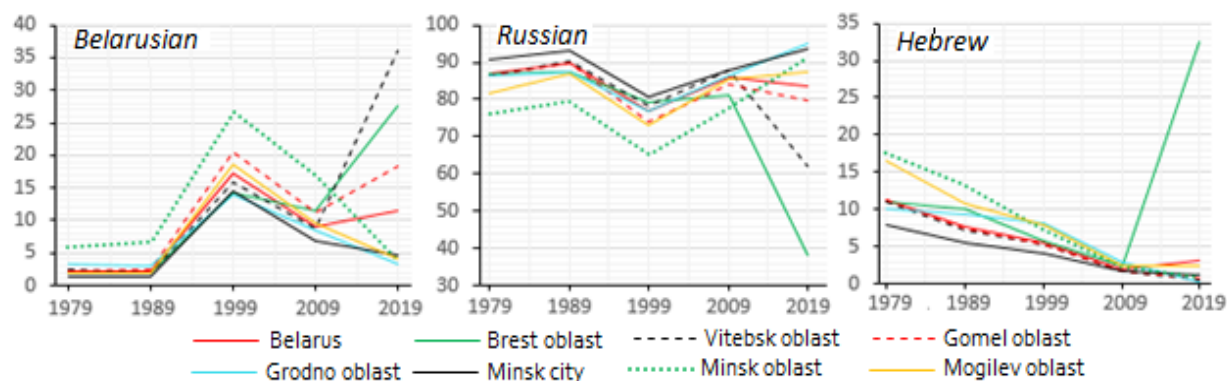
Such drastic changes in population size were accompanied by drastic changes in language characteristics, with, for the first time in 2019, a multidirectional character in different regions (Figure 18).

Table 19. Increase in the number of Jews by region

Region	Population size			Including those below working age		
	2009	2019	+/-, %	2009	2019	+/-, %
Belarus	12 935	13 705	+6.0	545	1 767	+224.2
Brest oblast	570	943	+65.4	32	173	+440.6
Vitebsk oblast	2 127	1 561	-26.6	70	133	+90.0
Gomel Oblast	2 341	1 962	-16.2	89	239	+168.5
Grodno oblast	538	905	+68.2	34	167	+391.2
Minsk city	5 194	5 699	+9.7	225	677	+200.9
Minsk oblast	703	1 452	+106.5	23	253	+1000.0
Mogilev oblast	1 462	1 183	-19.1	72	125	+73.6

Source: Author's calculations based on Belstat data.

Figure 18. Share of Belarusian, Russian and Hebrew as native language for the Jewish population in Belarus and its regions, %



Source: Author's calculations based on Belstat data.

An enormous increase in the number of people calling Belarusian their native language is clearly visible in the cities and rural areas of the Brest, Vitebsk and Gomel oblasts (in some cases by hundreds of percent), as well as Hebrew exclusively in the Brest oblast (more than 10 times). According to the results of the 2009 census, there were no Jews among the rural population in any district of the Brest oblast who called Hebrew their native language. According to the 2019 census, they appeared in 12 out of 16 districts, despite the fact that among all other districts of Belarus, the census showed their presence only in 2. As for the languages of home communication, only the Brest oblast also stands out here, with a 2.9-fold increase in the share of the Belarusian language (Table 6).

Table 20. Administrative units with the largest increase in the urban population of Jews calling Belarusian their native language, pers.

Region	Population size		Belarusian native		Belarusian home		Russian native		Russian home		Hebrew native	
	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019
Brest oblast												
Brest	234	328	24	68	6	42	183	169	215	282	8	86
Baranovichi	116	267	16	85	3	13	100	75	113	254	0	104
Pinsk	146	177	15	44	1	0	120	66	138	176	5	63
Vitebsk oblast												
Orshansky district	272	188	34	61	4	1	231	127	266	187	2	0
Polotsky district (without Novopolotsk)	238	157	13	67	1	0	211	88	233	157	8	0
Vitebsk	1 315	912	89	303	11	5	1 194	595	1 292	903	12	4
Novopolotsk	108	130	4	49	0	3	98	75	105	127	4	2
Gomel oblast												
Gomel	1 684	1 281	135	182	26	9	1 463	1 083	1 623	1 267	27	10
Mozyr	167	215	28	66	4	1	135	140	161	211	1	2

Source: (Belstat 2020).

Table 21. Change in the population size of Jews and in the number of those calling Russian, Belarusian and Hebrew their native and domestic language among the rural population, pers.

Region	Population size		Belarusian native		Belarusian home		Russian native		Russian home		Hebrew native	
	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019
Brest oblast	18	86	3	31	1	5	15	21	16	81	0	33
Vitebsk oblast	63	89	9	50	5	3	51	38	56	85	0	0
Gomel oblast	54	103	8	31	4	4	43	65	48	97	1	0
Grodno oblast	15	99	4	3	4	2	11	95	11	97	0	0
Minsk oblast	131	622	20	19	9	11	102	581	120	610	4	4
Mogilev oblast	34	46	7	1	4	1	23	41	29	22	0	0
Belarus	315	1 045	51	135	27	26	245	841	280	992	5	37

Source: (Belstat 2020).

The number of *Tatars* shows an abrupt increase of 15.0% between the 2009 and 2019 censuses (in 1989-2009 it decreased by 42.1%), largely due to regions where Belarusian Tatars have not historically lived, while in the Grodno oblast, which is just such a region, their number decreased by the maximum value (Figure 8; Table 22). In the Mogilev oblast, where the share of Tatars in 2009 was minimal, the increase in their number in 2019 was maximum. Also, the number and proportion of the population younger than working age and the child-woman ratio increased many times over, and a close negative correlation was recorded

between the population younger than working age in 2009 and its relative increase in 2019 ($r = -0.77, p < 0.05$).

Table 22. Increase in the number of Tatars by region

Region	Population size			Including those below working age		
	2009	2019	+/-, %	2009	2019	+/-, %
Belarus	7 329	8 445	+15.2	370	1 132	205.9
Brest oblast	725	773	+6.6	31	92	196.8
Vitebsk oblast	822	1 033	+25.7	23	137	495.7
Gomel oblast	776	1 030	+32.7	27	149	451.9
Grodno oblast	1 710	1 385	-19.0	160	168	5.0
Minsk	1 558	2 240	+43.8	70	309	341.4
Minsk oblast	1 239	1 201	-3.1	44	154	250
Mogilev oblast	499	783	+56.9	15	123	720

Source: Author's calculations based on Belstat data.

Comparison of the dynamics of the urban population of the Tatars and the share of the Belarusian language as native language and home language showed clearly individual regional features of changes in this set of indicators. The Brest and Vitebsk oblasts are characterized by an increase by tens of percent of the population of Tatars with a simultaneous increase by hundreds and thousands of percent of the share of Tatars calling Belarusian their native and home language. The Gomel oblast differs from them only in the stabilization of the population in large regional centers with a sharp increase in its population in the regional center and the absence of an increase in the share of the Belarusian language as a home language. At the same time, in a number of districts with a decrease or slight increase in the urban population of the Tatars the share of the urban population that called Belarusian their native language increased sharply: in the Zhlobin district from 0 to 21.1%, in the Mozyr district from 0 to 22.2%, and in the Rechitsa district from 1.5 to 21.8%.

In the Grodno and Minsk oblasts, in not a single district with a population of more than 15 Tatars does the share of Belarusian increase either as a native or as a home language, while the number of Tatars everywhere decreases or is stable. In Minsk, the number of Tatars increases noticeably, with a significant decrease in the share of the Belarusian language. In the Mogilev oblast, the number of Tatars increases by tens of percent and the shares of the Belarusian language continue to remain near zero, with a sharp increase in the number of Tatars who did not indicate their native language during the census. Also, the Mogilev oblast is the only one where the share of the population that named Tatar as their home language increased, and by 4.6 times at once.

A more detailed picture for the urban population is provided by Table 23, the data of which show sharp differences in the dynamics of the share of the Belarusian language in various oblasts and huge figures for the increase in the share of the Belarusian language in large cities of the Brest, Vitebsk and Gomel oblasts.

The cities listed accounted for 20% of the urban population of Tatars in 2009; in 2019 this figure increased to 60%. Excluding the city of Minsk, these values were 9 and 30%, respectively.

Features of the dynamics of the number and share of the Belarusian language for the rural population of Tatars by region (Table 24) have some similarities with the urban ones: in the Brest, Vitebsk and Gomel oblasts, the share of Belarusian as a native language is increasing, while the population is decreasing; in the Grodno oblast, both of these indicators are declining, and in the

Minsk and Mogilev oblasts, the increase in population is accompanied by a decrease in the share of the Belarusian language. The share of the Tatar language as a native and home language continues to be insignificant.

Table 23. Administrative units with the largest growth of the Tatar population for the urban population (only those where the number in 2009 exceeded 15 people were taken into account), pers.

Region	Population size		Belarusian native		Belarusian home		Russian native		Russian home		Tatar native		Tatar home	
	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019
Brest oblast														
Brest	225	271	4	120	0	119	178	101	222	151	37	43	0	1
Baranovich	101	129	7	59	4	53	73	54	95	76	19	16	0	0
Pinsk	38	47	3	25	0	25	26	14	38	22	9	8	0	0
Vitebsk oblast														
Orshansky district	54	144	1	80	1	50	39	20	53	94	12	41	0	0
Polotsky district (without Novopolotsk)	86	109	1	56	2	30	68	30	86	79	16	22	0	0
Vitebsk	201	408	6	224	3	117	144	107	197	289	45	67	0	0
Novopolotsk	83	72	1	32	1	19	64	27	80	53	16	12	1	0
Gomel oblast														
Gomel	235	514	7	216	0	1	180	236	225	511	41	61	2	0
Minsk oblast														
Minsk	1558	2240	201	138	62	61	1 057	1 812	1 442	2 174	238	266	2	2
Mogilev oblast														
Mogilev	127	306	2	0	2	0	91	213	125	258	33	79	0	22
Bobruysk	147	237	7	2	2	0	97	122	140	203	40	51	5	16

Source: (Belstat 2020).

Table 24. Change in the population size of Tatars and of the number of those calling Russian and Belarusian their native and home language among the rural population, pers.

Region	Population size		Belarusian native		Belarusian home		Russian native		Russian home	
	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019
Brest oblast	167	163	9	35	12	37	128	104	153	125
Vitebsk oblast	181	151	39	51	41	37	103	71	136	113
Gomel oblast	198	170	8	29	8	3	139	111	185	167
Grodno oblast	195	128	52	20	50	13	113	86	129	116
Minsk oblast	407	507	63	29	56	27	266	366	345	479
Mogilev oblast	107	117	4	2	3	2	73	84	103	111
Belarus	1255	1236	175	166	170	119	822	822	1 051	1 111

Source: (Belstat 2020).

The number of *Lithuanians* in Belarus decreased from 1989 to 2009 by 33.1%. The 2019 census recorded its growth from 2009 to 2019 at 3.9%. At the same time, the change in numbers differs sharply by region and age group (Table 25). The traditional region of residence of Lithuanians is the Grodno oblast, where a little less than half of the entire Lithuanian population of Belarus is located. In it, the number of Lithuanians practically did not change. A sharp increase occurred only in the Brest, Vitebsk and Gomel oblasts, where the number of Lithuanians below working age more than doubled.

The calculation of the correlation coefficients showed a very close relationship between the growth of the total size of the Lithuanian population by region and the growth in the proportion of Lithuanians calling Belarusian their native language ($r = 0.93$, $p < 0.05$). A positive relationship is also observed between the growth of the Lithuanian population below working age and the proportion of Lithuanians calling Belarusian their language of home communication ($r=0.71$, $p<0.05$). The share of those who named Lithuanian as their native language fell significantly in all regions, except for the city of Minsk, where it changed insignificantly.

Table 25. Increase in the number of Lithuanians by region

Region	Population size			Including those below working age		
	2009	2019	+/-, %	2009	2019	+/-, %
Belarus	5087	5287	+3.9	426	623	+46.2
Brest oblast	355	450	+26.8	11	38	+245.5
Vitebsk oblast	624	944	+51.3	27	60	+122.2
Gomel oblast	271	388	+43.2	18	43	+138.9
Grodno oblast	2153	2174	+1.0	245	291	+18.8
Minsk city	935	669	-28.4	74	101	+36.5
Minsk oblast	476	462	-2.9	31	62	+100.0
Mogilev oblast	273	200	-26.7	20	28	+40.0

Source: Author's calculations based on Belstat data.

As for those calling Lithuanian their home language, a sharp increase in their number occurred only in the Brest oblast (from 2 to 101 people). In other regions, except for the Grodno oblast, such persons are almost entirely absent both in 2009 and in 2019. In the Grodno oblast, where they represent a significant share of the Lithuanian population, their number nonetheless decreased twofold from 2009 to 2019.

If we analyze the change in the number and language characteristics of Lithuanians at a lower level of the administrative division (among the urban and rural population of the districts), we see that a maximum increase in their number is characteristic of the urban population of several administrative units listed in Table 26. The total number in these administrative units increased by 85.7% (for the whole of Belarus, by 3.9%, and for the entire urban population, by 13.2%). While in 2009 the urban population of the 26 regions indicated in the table was 13.7% of the total number and 21.2% of the urban population of Lithuanians, in 2019 it was 24.5 and 37.7%, respectively, and most of these regions did not belong to the areas of their historical residence.

Also revealing is the increase in these administrative units of the number of people calling Belarusian their native and home language. These indicators, with the exception of the regions of the Grodno oblast, increased by hundreds and thousands of percent. Among the urban population of a number of other regions (districts with large regional centers), these indicators also increased sharply. Thus, in the city of Pinsk, the number of Lithuanians calling Belarusian their native language increased from 4 to 16, and of those calling it their home language, from 1 to 12. Elsewhere, the corresponding figures were: in Novopolotsk, from 5 to 38 and from 0 to 13, respectively; in the Orsha district, from 5 to 46 and from 2 to 14; in Grodno, from 53 to 164 and from 21 to 60; in the Borisov district, from 12 to 27 and from 4 to 21; in Mogilev, from 19 to 29 and from 7 to 29; in Bobruysk, from 7 to 21 and from 4 to 18. A similar picture is observed among the rural population of the Minsk district (where a significant part of the rural settlements is actually suburbs of Minsk), from 8 to 44 and from 8 to 32.

The total urban population of Lithuanians in the regions considered in Table 26 who called Belarusian their native language increased by 353%, and of those calling it their home language, by 283%. (For comparison: among the Lithuanians of Belarus as a whole, these figures increased by 86.0 and 13.1% respectively, and among the urban population, by 116 and 78%). The share of this population among all Lithuanians of Belarus calling Belarusian their native language and home language increased from 20.0 to 48.7% and from 11.1 to 37.4%, respectively, and among the urban population alone, from 32.5 to 68.1% and from 28.6 to 61.5%, respectively.

Table 26. Administrative units with the largest increase in Lithuanians for the urban population (only those where the number in 2009 exceeded 15 people were taken into account), pers.

	Population size		Belarusian native		Belarusian home		Russian native		Russian home		Lithuanian native		Lithuanian home	
	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019	2009	2019
Brest oblast														
Brest	105	166	18	101	8	60	61	45	95	64	20	17	0	42
Baranovichi	75	97	12	53	10	29	36	25	62	45	21	18	1	23
Vitebsk oblast														
Vitebsk	120	366	18	284	7	93	61	61	109	273	38	20	1	0
Polotsky district (without Novopolotsky)	39	90	2	64	1	22	24	16	37	67	10	6	0	1
Postavsky district	43	62	3	29	5	15	20	23	33	47	18	10	1	0
Gomel oblast														
Gomel	101	172	13	115	0	35	61	41	98	136	24	14	0	1
Mozyr	28	39	4	26	1	11	17	9	25	28	6	3	0	0
Zhlobinsky district	17	37	4	26	0	11	10	7	17	26	3	4	0	0
Grodno oblast														
Voronovsky district	75	133	45	51	39	33	18	70	32	99	10	10	0	0
Oshmyany	30	49	11	12	7	4	14	30	23	45	4	7	0	0
Smorgon	64	83	19	41	12	13	24	29	41	69	19	13	3	1

Source: (Belstat 2020).

Conclusions

An analysis of the dynamics of the ethnolinguistic structure of the population of Belarus as a whole and by region shows a number of anomalous changes which ultimately lead to an overestimation of the population size and the proportion of the population calling Belarusian their native and home language. What is striking about these anomalous changes is the pronounced multidirectional dynamics of the indicators of the ethnolinguistic structure in the regions of Belarus (which was not observed according to the results of previous censuses) and the fact that the changes are found in most administrative districts of the corresponding regions.

In all regions for all nationalities where anomalous population growth was observed, the number of persons below working age was simultaneously increasing, by many times more than the total population in these regions and than the population below working age in all other regions.

Abnormally abrupt changes in the characteristics of the ethnolinguistic structure in 1-2 regions provide a small change in the same direction of these characteristics throughout the country as a whole. For example, an increase in the share of Belarusian as a native language among the entire population and among ethnic Belarusians only in the Brest oblast (respectively +23.3 and +26.6%) and the city of Minsk (+13.5 and +11.7%) ensured its slight increase among similar categories of the population of Belarus as a whole (+0.9 and +0.4%, respectively).

The increase in the share of Russians calling Belarusian their native language, seen only in the Brest oblast (by 8.7%), also ensured a slight increase in the country as a whole of the share of Russians calling Belarusian native (by 0.1%). An increase in the proportion of Ukrainians calling Belarusian native in only the Brest (by 15.4%) and Vitebsk (by 7.8%) oblasts led to an increase in this indicator for the country as a whole of 0.3%. The countrywide increase in the share of Belarusian as their native language among the Jews and Tatars (by 2.4 and 1.9%, respectively) resulted from a significant (up to 27.3% for Jews and up to 33.0% for Tatars) increase in this indicator in the Brest, Vitebsk and Gomel oblasts. A very significant increase in the proportion of Ukrainians calling Ukrainian their native language in the Mogilev oblast (+40.1%) ensured that the value of this indicator among the entire Ukrainian population of Belarus remained almost at the same level (it decreased by only 0.1%). The above-listed sharp increases in the share of the Belarusian and Ukrainian languages in these regions, accompanied by an equally sharp decrease in the share of the Russian language, led to the fact that in the country as a whole the share of the Russian language as a native language among the entire population, Belarusians, Russians and Ukrainians, increased slightly (by 0.8, 1.1, 0.5 and 1.2%, respectively), although in other regions this increase was in some cases an order of magnitude higher. The share of Hebrew as a native language for the Jewish population increased in Belarus by 1.3% solely due to its increase by 30.1% in the Brest oblast.

The increase in the share of Belarusian as a home language among the entire population of the country (+2.6%) and among ethnic Belarusians (+2.4%) resulted from a sharp increase (5.9 and 5.5 times, respectively) in this share among the population of Minsk, while the increase among Russians and Ukrainians (+0.4 and +0.3%) was due to the Brest oblast alone (+9.3 and +12.4% respectively). A similar picture is observed for Jews and Tatars: slight changes in the share of Belarusian as a home language (for Jews +0.1%, for Tatars -0.9%) are due to a significant increase in this share in the Brest oblast (+4.3 and +12.0%). For Russian, as both home and native language, there is a slight increase in its share for the entire population and individual nationalities in Belarus as a whole due to a sharp decrease in the share in some regions, while in other regions its increase is many times greater. The share of other ethnic languages as home languages also changed by an insignificant amount (by no more than 0.8%) in the country as a whole, despite sharp changes in certain regions. For example, among Lithuanians, the share of Lithuanian as a home language decreased by 0.8% in the country as a whole, with an increase in the Brest oblast of 21.8%, while among the Tatars the share of the Tatar language as a home language increased by 0.2% nationwide with an increase of 5.1% in the Mogilev oblast alone, where the number of Tatars was the highest of all regions - +56.9%.

Along with a 0.95% decrease in the total population of the country, the number of ethnic Belarusians increased by 0.42% due to the increased number of Belarusians below working age in Minsk, an increase of 38.4% compared to 2009, 7.4 times higher than the value for all other regions as a whole (5.2%). And it was in Minsk, as mentioned above, that there was a sharp and simultaneous increase in the share of Belarusian as both native and home language.

A characteristic feature of the anomalous changes in ethnolinguistic characteristics in individual regions is that they also occurred in most or all areas of the respective regions. Thus, in the Brest oblast, the number of districts where the share of Belarusian as a native language among the urban population of Belarusians increased by more than 5% from 2009 to 2019 is 14 out of 16, while in the Vitebsk and Gomel oblasts there are 2 such districts each, and in the Mogilev, Minsk and Grodno oblasts - not a single one. Among the rural population, the number of districts where, in principle, there was an increase in the share of Belarusian as a

native language is 13 out of 16, while among all other districts of Belarus - only 4 out of 102. Among the urban population of Ukrainians, the number of districts with a share of the population calling Belarusian native greater than 10% is 26, of which 22 are located within the Brest and Vitebsk oblasts (despite the fact that in 2009 there were only 15 such districts out of a total of 59). Among the rural population in 2019, there were 20 out of 26 such districts in these regions, and in 2009 - 21 out of 81. Among the urban population of Ukrainians, the number of districts with a share of the population calling Ukrainian native greater than 50% is 17, of which 15 are in the Mogilev oblast (in which there are 21 districts in total), whereas in 2009 there was not a single such district in the Mogilev oblast and only 1 in the entire republic.

The 2009 census showed neither abnormally sharp changes in ethnolinguistic indicators in several regions opposite to those in other regions, nor a strict administrative localization of these changes in a few districts that differed greatly from most other districts. In our view, it is not possible to explain this situation by any factors other than administrative influences (for example, migration, inter-ethnic marriages, a change of ethnic identity, the "salmon effect", etc.) affecting the census results. Unlike in large or mountainous countries and regions, there are no fundamental ethno-cultural differences between the regions of the small, flat Belarus, and besides, the anomalous changes are localized within the boundaries of administrative rather than ethno-cultural regions. The factor of changing ethnic self-identification cannot explain why there is a noticeable increase in the number of Russians only in the Brest and Vitebsk oblasts when it is decreasing in the country as a whole. (Besides, in Belarus this factor causes the change of self-identification of Russians to Belarusians, and not vice versa, as in Russia). Moreover, the number of Russians in the Brest oblast indicating Belarusian as their home language increased from 2009 to 2019 by 573% (!), while in the Vitebsk oblast it decreased by 61% (whereas the number of Belarusians in the Brest oblast indicating Belarusian as their home language decreased by 46%). Nor can this factor explain the noticeable increase in the number of Poles in the Gomel and Mogilev oblasts when it is decreasing in the country as a whole (and especially the 510.5% growth in the Gomel oblast of the Polish population below working age), since such processes can occur mainly in the Grodno oblast bordering Poland, where 77.6% of Belarusian Poles live and where their number has decreased; and for Lithuanians, whose number has increased, especially in the Gomel and Vitebsk oblasts, a change of ethnic self-identification is not typical at all. Nor did these regions see any significant migration of Poles and Lithuanians from either Poland and Lithuania or from the Grodno oblast. Neither has any migration of Jews to Belarus been recorded, making it difficult to explain a noticeable increase in their numbers in several regions (especially of those below working age, for example in the Minsk oblast, where their number increased ten-fold) and an increase, moreover by 13 times, in the share of Hebrew as a native language exclusively in the Brest oblast; even among the rural population of the Brest oblast, cases of Hebrew being indicated as their native language were noted in 12 out of 16 districts (in 2009, such a population was completely absent), despite the fact that in the rest of Belarus this was recorded only in 2 districts. Migration of Russians and Belarusians from other CIS countries to Belarus took place mainly in the 1990s and 2000s. In the 2010s, not only was its scale markedly smaller, but it was directed to all regions; it is unlikely that a significant part of such a population would indicate its home language as Belarusian. And most importantly, when considering factors that might explain the unusual census results, it should be borne in mind that they would have had to start appearing only between 2009 and 2019 in order to have such a significant impact and explain the results of the census only in 2019.

On the whole, the scale of false attributions of those calling Belarusian their home language is higher than of those calling it native, since the real drop in the proportion of the population calling Belarusian their home language is much more pronounced, and thus to ensure the growth of the share of Belarusian as both a native and home language, the latter requires a greater degree of inflation, which is clearly seen in the example of Minsk.

The increase in the population size and in the number of those calling Belarusian both their native and home language, caused by an artificial inflation of these data, is much more noticeable for nationalities that are characterized in Belarus or in certain regions by a relatively small number. It is for such groups that the anomalous increase (positive or negative), absent in previous censuses, reaches hundreds of percent and leads to such results as, for example, in the Gomel oblast, where, in 2009, among the Polish population an average of 14 women of childbearing age accounted for 1 child aged 0-9 years, while in 2019 those same 14 women already accounted for 5 children, or in the Vitebsk oblast, where the increase in the number of Lithuanians of working age in 2019 in absolute terms is 10 times higher than their number below working age in 2009. Although such changes for ethnic groups which represent an extremely small proportion of the entire population of Belarus do not particularly affect the overall picture, they are, firstly, an indicator of the presence of administrative distortion of the results, and secondly, can have socio-political significance, demonstrating that ethnic diversity is preserved and that small ethnic groups also consider the Belarusian language valuable and use it in everyday life, that they are an integrated part of the Belarusian civil nation who have nonetheless not lost their national languages in favor of Russian.

Thus, we can conclude that the results of the census do not show real changes in the number and distribution of the languages of the population of Belarus and of individual nationalities, but rather are the result of distortions aimed at obtaining a politically desired result.

References

- Anarbek N. (2019). Sociocultural mechanisms for the reproduction of society's spiritual values. *Sociological Almanac*, 10, 106-116. https://socio.bas-net.by/wp-content/uploads/2020/05/Sotsiol_Almanah_Vyp-10.pdf
- Bahlova O.V., Bahlov I.V. (2020). Identity politics in the context of nation-building and integration interaction (on the example of the Union State of Belarus and Russia). *Regionology*, 4, 723-753. <https://doi.org/10.15507/2413-1407.113.028.202004.723-753>
- Belstat (2019). *Education in the Republic of Belarus*. <https://www.belstat.gov.by/upload/iblock/02f/02f0dcce5ea8e20041bca7728366684c.pdf>
- Belstat (2020). *Final data of population censuses of the Republic of Belarus*. <https://census.belstat.gov.by>
- Goritskaya O.S. (2021). *Language and boundaries: Lexical and grammatical specifics of the Russian language in Belarus*. Minsk: MSLU. https://e-lib.mslu.by/bitstream/edoc/8798/1/Горицкая_Язык%20и%20границы%20_2021.pdf
- Linchenko A.A., Belyaeva E.V. (2020). The Union State - a common memory? Ethical foundations of the historical policy of Russia and Belarus in the XXI century. *Discourse-Pi*, 2(30), 97-111. <https://doi.org/10.24411/1817-9568-2020-10206>.

- Mechkovskaya N.B. (2003). *The Belarusian language: sociolinguistic essays*. Munich: Verlag Otto Sagner. <https://library.oapen.org/bitstream/id/f54402c6-d761-487e-a54e-fbc5a4b570de/1003951.pdf>
- Minstat (2001). The national composition of the population of the Republic of Belarus and the prevalence of languages. Volume 1. Minsk: Min. stat. and analysis.
- Rakachev V.N., Khalafyan A.A. (2012). Estimation of the population of the Kuban in the 1930s-1940s using statistical modeling methods. *Historical and socio-educational thought*, 5, 150-156. <https://elibrary.ru/item.asp?id=18244715>
- Manakov A.G., Sokolov A.S., Suvorkov P.E. (2022). Formation of the ethnic and linguistic structure of the population of the Republic of Belarus and an ethnographic forecast up to 2069. *The Pskov Regional Journal*, 1, 35-55. <https://elib.gsu.by/handle/123456789/38766>
- Sokolov A.S. (2021). Regional aspects of the dynamics of the use of the Russian language by the population of Belarus in 2009–2019. *Demographic review*, 8 (1), 127-149. <https://doi.org/10.17323/demreview.v8i1.12396>
- Khamutovskaya S.V. (2021). Russian and Belarusian languages in the "mirror" of public opinion of the inhabitants of the Belarusian region of the Russian-Belarusian border area. In M.E. Lustenkov (Ed.), *The Russian-Belarusian borderland: linguistic and socio-cultural aspects of interaction* (pp. 207-209). Mogilev: BRU. <http://e.biblio.bru.by/handle/1212121212/18178>
- Hentschel G. (2017) Eleven questions and answers about the Belarusian “trasyanka”. *The Russian language in a scientific light*, 1, 209-250. <http://rjano.ruslang.ru/ru/archive/2017-1/209-250>
- Khentschel G., Kittel B. (2011) The Language Situation in Belarus: Belarusians' Opinion on the Prevalence of Languages in the Country. *Sociology*, 4, 62-78. <https://elib.bsu.by/bitstream/123456789/39989/1/62-78.pdf>
- Shimov V.V. (2020) The language issue as a factor of potential political instability in Belarus. *Journal of Belarusian State University. Sociology*, 1, 67-70. <https://journals.bsu.by/index.php/sociology/article/view/2903/2864>