SOCIAL DYNAMICS

COMPARATIVE ANALYSIS OF STUDENTS' COLLECTIVE CONSCIOUSNESS IN THE RUSSIA-EU AND RUSSIA-CHINA BORDER REGIONS: MATHEMATICAL MODELLING

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Given the unique diversity of Russian regions, regional studies are becoming particularly important for ensuring the stability and development of Russia. There is an extensive body of literature on the economic and social characteristics of Russian regions, their types and ranking whereas the study of collective consciousness requires further attention. It is the collective consciousness that shapes human activity, the results of which largely determine the development of countries and their regions. The authors study the spiritual sphere of regions, the inner world of people, who are human capital. This study is particularly important in relation to Russian youth, who have become one of the most active social groups. The public demand for the analysis of collective consciousness has been constantly growing. The authors argue that there are regional differences in collective consciousness, which are manifested most prominently in the comparison of eastern and western regions. The growing intensity of interaction between Europe and Asia makes the comparison of the western and eastern border regions of Russia particularly important from the geopolitical point of view. The authors employ the principles of an emerging scientific direction, border regional studies, for a comparative analysis of the collective consciousness of students from two border regions located on the Russia-European Union and Russia-China borders. The authors present the results of the survey they conducted in the Immanuel Kant Baltic Federal University (Kaliningrad) and Amur State University (Blagoveshchensk). They examine the sociological phenomenon of 'regional consciousness' and substantiate the criteria for selecting the objects of research. It is the first time in sociology that logistic regression models reflecting the main characteristics of regional consciousness have been built. The article aims to confirm the multiplicity of types of regional consciousness and to demonstrate that in the socially homogeneous group, Russian graduate students, there are still regional differences even in the generally similar assessments of the ongoing social processes.

Regional consciousness

In Russian public discourse, the belief that we, the country's nationals, do not know our homeland well has become commonplace [1; 2]. This statement, which, among other things, gives Russian social scientists some criticism, is not entirely new. Naturally, there is an objective reason for it — Russia's constituent regions are extremely diverse in geographical, economic, social, demographic, historical, cultural, ethnic, confessional, political, administrative, legal, and environmental terms. Uneven post-Soviet development has made these differences even more visible. This holds true especially for regional disparities in economic prosperity. According to the World Bank, Russia has the highest level of regional inequality among large developing countries. This recent research area owes its immense popularity to societal concerns about sustainability and national socio-economic development.

Russia's regional diversity is reflected in the mass consciousness of regional populations, which, in its turn, affects all areas of social life, including the one that is taking a new urgency today, i.e. environmental management. Studying individual, group, and public consciousness is important both theoretically and practically since human actions are a product of thoughts and feelings. This may well apply to regional consciousness. It is a form of perception of group cohesion rooted in the feeling of territorial integrity. The territorial integrity component gives regional consciousness a political slant.

An integrated part of its country, the region constitutes an independent area of knowledge, and regional consciousness, which is part of national public consciousness, constitutes one too.

One of the basic concepts formulated by founders of the sociology of consciousness is as follows: the condition of mass consciousness can be described as one of the forms only at a very concrete level and in view of distinctive characteristics of the agent of mass consciousness [3—5]. The Russian theoretician of the sociology of mass consciousness, Boris Grushin, introduced in his authoritative work *Mass Consciousness: an attempt at a definition and problems of research* the concept of plurality of mass consciousness among different parts of society. He also highlighted the need to study individual carriers of mass consciousness [6]. Later on, individuals have been the focus of both Russian [7—10] and international [10—12] research into mass consciousness. The more concrete the object, the more operational the study is.

Historically rooted regional consciousness is one of the most stable forms of the practical existence of collective consciousness. Regional consciousness embodies collective consciousness in its very concrete state — that in which it reflects day-to-day life, the most permanent part of human experience associated with a special form of encountering and perceiving a given environment. In this sense, regional consciousness is closely linked to territorial identity, the meaning of which, as practice shows, has been increasing. Regional context affects the

consciousness of people living in a certain region. This circumstance takes on special significance in the process of regionalisation, which goes hand in hand with globalisation.

An important global process is the growing intensity of inter-civilisational, cross-cultural, and intergovernmental cooperation. It gives an ever more pivotal role to border regions, in which these collaborations take place. This holds especially for Russia, which has the longest national border in the world and is in contact with a vast number of civilisations, cultures, and states. Out of 85 Russian regions, 46 are border territories. Alongside general regional differences, there are border-specific characteristics. The border region is a remote periphery, an area with poorly developed industrial production, usually as a result of reluctance to erect large manufacturing facilities near borders. All this explains why Russian borderlands are so sparsely populated and why their economic development options are so few.

A principal characteristic of border regions is their ambivalent status. On the one hand, they are part of the distant provinces. On the other, they are politically visible centres and junctions where two neighbouring countries, two neighbouring societies, interact to create a third, intermediate border society, which is the focus of a new area of regional studies — border region studies. To explore regional consciousness of border area populations, we employed the concept of social mesosystems, which we proposed [13, p. 22—23] and successfully tested [14] in our earlier works.

Not only is the border an international legal institution that facilitates cooperation between neighbouring countries and ensures the inviolability of territorial integrity, but it is an object of activities undertaken by people living in the border districts that perform the mentioned functions. In the consciousness of the border district population, the border appears as an important symbolic sign of national affiliation [15]. The idiosyncrasy of the borderland mindset has been described in the literature. For example, as early as the beginning of the 20th century, Goerg Simmel cogently noted: ' [t] he boundary is not a spatial fact with sociological consequences, but a sociological fact that forms itself spatially' [16, p. 143].

Studies into the mass consciousness and day-to-day behaviour of people living in border areas reveal how the space of cross-cultural dialogue emerges, how its elements function, what rules determine the behaviour strategies of the local population, what role the border has in these processes, and how border regions differ in these parameters.

An attempt to explore the above was made in mid-2018. At the time, we carried out a comparative analysis of the mass consciousness of final-year university students from the Russian–EU and Russian–Chinese borderlands. Students were selected as the most digitally skilled and spatially dynamic homogenous social

group that is active across all the spheres of social life because all social processes, either directly or indirectly, affect their life, social standing, and image of the future. In their turn, society and authorities increasingly view young people as the most promising age group that has the greatest innovation potential and can solve the problems of Russia's socio-economic development [17; 18].

Over the last decade, young people across Russia have become more politically active. This fact lends further urgency to studying this age group: the psychology of the new, post-Soviet Russian generation is attracting interest from the general public. Unlike older generations, this highly mobile social group has accesses to vast information. It is open to discovering new cultures. It is less geographically dependent and thus less susceptible to the 'native soil' ideology. All the above makes a comparative analysis of the mass consciousness of the western and eastern borderlands more objective and 'chemically purer'. The theoretical and methodological vision should be supplemented by practical considerations: the social groups in question, the graduates of Russian universities, will soon have to solve the problems of the borderlands.

With this in mind, the following hypothesis was formulated. The socio-political consciousness of young people living in the western and eastern borderlands is largely shaped by the major forms of mass consciousness: economic, legal, historical, civilisational/cultural, and existential. To test the hypothesis, five factors were selected:

1) the economic factor: the financial situation of the respondent;

2) the legal factor, which, through the knowledge of laws, forms an idea about the functions of the state, helps to sort out priorities (a strong state vs high standards of living), and indicates the level of respondents' legal consciousness and their political orientation (liberal or statist);

3) the historical factor: the perception of the past and the vision of the future;

4) the civilisational/cultural factor, which shows how the civilisational identity of respondents affects their beliefs and opinions;

5) the existential factor, which deals with the ideas of security and viability of the country.

The criteria used to select objects for comparison

The criteria for border region selection allowed for Russia's bi-continental geography and its geostrategic position between two of the world's three largest economies — the EU (22.6% of the global GDP) and China (16.5% of the global GDP). The Russian–EU (western) borderlands comprise five territories — the Murmansk, Leningrad, Pskov, and Kaliningrad regions and the Republic of Karelia. The Russian–Chinese (eastern) borderlands also include five regions: Zabaikalsky, Khabarovsk, Primorsky, Amursky, and the Jewish autonomous re-

gion. We chose for analysis the regional centres that best represented the west and the east. Key representativeness criteria were the involvement of the region in the economic and sociocultural collaborations with the neighbouring state and the proximity of the regional capital to the state border.

The Kaliningrad region has an edge over other western regions: it is situated within the EU. The Amursky region has the longest, 1250 km-long, border with China, which runs along the River Amur. Russian–Chinese collaborations are thriving throughout the length of the border. Out of 19 districts in the region, the most densely populated ones are located along the Amur.

Sandwiched between Poland and Lithuania, the Kaliningrad enclave is the epitome of Russia's western borderlands. The sociocultural diffusion between Russia and the EU is at its highest there. Many joint ventures have been arranged in the region with Lithuanian and Polish businesses. The EU accounts for 65—70% of the territory's international trade. There is yet another important factor — the region's small area (15 000 km², a third of that of the Moscow region). Its capital is 37 km away from the Polish border. This proximity gives one a 'feeling of the border'. Kaliningraders often visit Lithuania and even more often Poland. To get to mainland Russia, the region's residents have to travel through two other countries — Lithuania and Belarus.

The Amursky region is, in its turn, the epitome of the eastern borderlands in terms of its location, past, and traditions of the neighbourhood. This holds especially for the region's capital — Blagoveshchensk. The city is a site of intense economic, recreational, and personal contacts between Russians and the Chinese. The river, which separates Blagoveshchensk and the Chinese city of Heihe is 520m wide. In effect, these two cities form an agglomeration held together by numerous connections — administrative, educational, cultural, and commercial ties and information transfer.

The Russian–Chinese borderlands have no other city that could match Blagoveshchensk in the scope and intensity of inter-civilisational cooperation. Both the Kaliningrad and Amursky regions are perfect examples of the sociocultural phenomenon of borderlands, whereas the residents of their capital cities sufficiently represent the urban population of the Russian–EU and the Russian–Chinese borderlands.

Regional consciousness of young people: differences between the west and the east

To conduct a comparative analysis of mass and group consciousness in the two borderlands, 200 final-year students of Kaliningrad and Blagoveshchensk universities were surveyed in mid-2018. The sample, which is represented by the students' faculties and specialisations, was calculated by the staff of sociology departments who carried out the survey.

Overall, differences in regional consciousness in the west and the east were clearly visible.

Although the Amursky region ranks lower than the Kaliningrad region on standards of living (52nd and 37th respectively, as of 2018), 40% of Blagoveshchensk residents and 29% of Kaliningraders see their financial situation as good. This is largely explained by the fact that when assessing their situation, the former compared themselves with the Chinese, and the latter, with more affluent Lithuanians and Poles.

There were significant differences in views on the cultural and civilisational place of Russia. In the east, 22% of respondents believe that Russia constitutes a special civilisation rather than belongs to the European one; in the west, this opinion is shared by 32%. This difference suggests that Kaliningraders have a better idea of the European civilisation.

The borderlands differ dramatically in the perception of external and internal threats to the country. In the east, 52% of respondents report fear of external threats, and 26%, of internal ones (as compared to 31 and 54% in the west). The neighbours of Kaliningrad are smaller states, whereas Blagoveshchensk borders on a large, ambitious, and rapidly developing country with a population and GDP that are ten times those of Russia.

The percentage of those who believe in the great future of their country is slightly higher in the east than it is in the west (32.5% and 29% respectively). There are, however, fewer pessimists in the east: only 11.5% believe that a great Russia is a thing of the past. In the west, 21% share this point of view. Remoteness from the centre of globalisation events makes the residents of Blagoveshchensk more optimistic about the future.

Although eastern and western respondents differed on most points, they had some similar attitudes and beliefs. There were no statistical differences in answers to legal-factor questions. In the west, 16% of respondents believed that national laws should make the state stronger; 78%, that they should work towards higher standards of living (as compared to 14.5% and 74.5% in the east).

Respondents had very similar opinions of the current socio-political processes. In the west, 38% strongly or somewhat agreed that the country was heading in the right direction; in the east, 36%. The percentage of those who strongly or somewhat disagreed was also almost the same: 53% in the west and 51% in the east.

Table 1 summarises statistics on the political (q_{polit}), economic (q_{econ}), legal (q_{leg}), cultural/civilisational (q_{civ}), historical (q_{hist}), and existential (q_{exist}) forms of consciousness.

The number of respondents who gave no answer ranged from 6% to 56% depending on the question. The only question that was not answered by more than half of respondents in both the east and the west was q_{hist}. Overall, there were more undecided respondents in the east regardless of the question.

Survey result statistics, %

Question	Answer	West	East
Our country is heading in the right direction (q_{polit})	Strongly/somewhat agree (1)	38	36
	Strongly/somewhat disagree (2)	53	51
	No answer(3)	9	13
What is the financial position of your family? (q_{econ})	Above average (1)	29	40
	Average or below average (2)	71	60
What should national laws be aimed at? (q_{leg})	Creating a strong state (1)	16	14.5
	Ensuring high standards of living (2)	78	74.5
	No answer (3)	6	11
Are the Russians part of the European civilisation (q_{civ})	Yes, they are (1)	54	49.5
	No, they are not (2)	32	22
	No answer(3)	14	28.5
What is the historical destiny of Russia? (q_{hist})	Russia has a great future (1)	29	32.5
	A great Russia is a thing of the past (2)	21	11.5
	No answer(3)	50	56
What is more dangerous for Russia? (q_{exist})	External threats (1)	31	52
	Internal threats (2)	54	26
	No answer (3)	15	22

Table 2 contains a statistical analysis of the difference in answers given in the west and the east.

**Statistical analysis of the difference (*d*) in answers given
by respondents in the west and the east**

Question	Difference, d_{sample}	95% confidence interval	Significance
$q_{polit\ 1}$	0.020 (0.059)	$-0.10 < d_{polit\ 1} < 0.14$	—
$q_{polit\ 2}$	0.020 (0.061)	$-0.10 < d_{polit\ 2} < 0.14$	—
$q_{econ\ 1}$	-0.110 (0.057)	$-0.22 < d_{econ\ 1} < 0.00$	*
$q_{leg\ 1}$	0.015 (0.045)	$-0.07 < d_{leg\ 1} < 0.10$	—
$q_{leg\ 2}$	0.035 (0.052)	$-0.07 < d_{leg\ 2} < 0.14$	—
$q_{civ\ 1}$	0.045 (0.120)	$-0.08 < d_{cult\ 1} < 0.17$	—
$q_{civ\ 2}$	0.100 (0.055)	$-0.01 < d_{cult\ 2} < 0.21$	*
$q_{hist\ 1}$	-0.035 (0.111)	$-0.15 < d_{hist\ 1} < 0.08$	—
$q_{hist\ 2}$	0.095 (0.047)	$0.00 < d_{hist.\ 2} < 0.19$	**
$q_{exist\ 1}$	-0.210 (0.058)	$-0.32 < d_{exist\ 1} < -0.10$	***
$q_{exist\ 2}$	0.280 (0.059)	$0.16 < d_{exist\ 2} < 0.40$	***

Comment 1: *, **, *** —10 %, 5 %, and 1 % are respective levels of significance.

Comment 2. The table does not contain results for the second answer ($q_{econ,\ 2}$, 'our financial position is average or below average') since they are the plane reflection of those for the first answer: $d_{econ,\ 2} = -d_{econ,\ 1}$. Results for the 'no answer' option have also been omitted.

The greatest difference (significance level of 1%) between the east and the west was the perception of external and internal threats (q_{exist}). The question about the destiny of Russia (q_{hist}) was also answered differently in the two regions. Although almost the same number of respondents believed that Russia had a great future, the difference in the number of answers 'a great Russia is a thing of the past' had a 5% significance level.

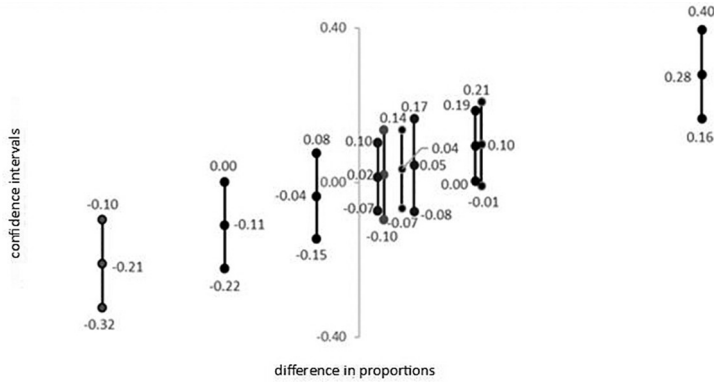Figure 1 shows the results from Table 2 as a diagram.

Figure 1. 95% confidence intervals for d

Comment: midpoints of confidence intervals correspond to differences in answers given in the west and the east.

Modelling east-west differences in regional consciousness

To test the hypothesis formulated at the end of the first section of this article, we selected five factors that affected the socio-political consciousness of Russian young people (q_{polit}): economic (q_{econ}), legal (q_{leg}), cultural/civilisational (q_{civ}), historical (q_{hist}), and existential (q_{exist}) [19]. Each factor, except q_{econ}, had three answers (see Table 1), including the 'no answer' option. As mentioned above, the distribution of answers by questions was not the same in the west and the east. Since the effect of differences in answers on the dependent variable (q_{polit}) was statistically insignificant, it was reasonable to assume that the effect of the factors was not the same in the two regions. To test whether that was true, two polynomial logistic regression models were constructed: one for the west and the other for the east. The results were unsatisfactory. In each regression, only the factor q_{hist} was significant[1]. That did not come as a surprise since the uncertainty [20] contained in the 'no answer' option was modelled too.

Four logistic regression models with binary regressions were produced: two for the west and two for the east. All calculations were performed using the SPSS Statistics 24 software and Microsoft Excel.

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[1] If the level of significance is not specified, it is 95%.

Logistical regression models (logit models) are widely used in sociology, particularly, in the statistical analysis of survey result (repressors) [21]. Sociologists prefer logit- to probit models for simple result interpretation [22]. A logistic regression models the probability p of the event y, which takes the value 0 or 1 depending on the series of accompanying factors (repressors) $x_1, x_2, \ldots, x_k$. The basic assumption[2] of the logit model is

$$p(y = 1|x_1, x_2, \ldots, x_k) = \frac{1}{1+e^{-\langle B, X \rangle}} = \frac{1}{1+e^{-(b_0 + b_1 x_1 + \cdots + b_k x_k)}}, (1)$$

where $X = (1, x_1, \ldots, x_k)$, $B = (b_0, b_1, \ldots, b_k)$ is the vector of required parameters; the scale product of the vectors is enclosed in the angle brackets $\langle \, \rangle$.

Formula (1) is usually written as

$$\text{logit}(p) = \ln \frac{p}{1-p} = b_0 + b_1 x_1 + \cdots + b_k x_k, (2)$$

where $p = p(y = 1|x_1, x_2, \ldots, x_k)$. It is assumed that there are no $x_1, x_2, \ldots, x_k$ such that $p = 0$ or $p = 1$.

The interpretation of logit model coefficients differs from that characteristic of analysis of simple linear regressions. For the factor x_i, the factor b_i, $i = 1\ldots, k$ is interpreted as a change in the function $\text{logit}(p)$ when x_i is incremented by 1; the value of the coefficient b_0 equals that of $\text{logit}(p)$ when the regressors are 'turned off', i.e. $x_1 = x_2 = \cdots = x_k = 0$.

The likelihood function corresponding to the events $y_1 \ldots, y_N$ is

$$L(B; y_1, y_2, \ldots, y_N) = \prod_{i=1}^{N} \left(\frac{1}{1+e^{-\langle B, X_i \rangle}} \right)^{y_i} \left(1 - \frac{1}{1+e^{-\langle B, X_i \rangle}} \right)^{1-y_i}, (3)$$

where X_i is the vector of the regressors, which correlates to the observed object i. The vector $\hat{B} = (\hat{b}_0, \hat{b}_1, \ldots, \hat{b}_k)$, which maximises the rhs of formula (3) is taken to be the maximum likelihood estimation of the vector of parameters B.

Each of the factors q_{leg}, q_{civ}, q_{hist}, q_{exist} is represented by two binary regressors. For the factor q_{hist}, these are the regressors $q_{\text{hist 1}}$ (1 — Russia has a great future, 0 — a different answer) and $q_{\text{hist},2}$ (1 — a great Russia is a thing of the past, 0 — a different answer). These regressors are not additional, i.e. $q_{\text{hist, 2}} \neq 1 - q_{\text{hist, 1}}$. The same holds for three more factors (see Table 1). The factor q_{econ} has one regressor, $q_{\text{econ, 2}}$ ('our financial position is average or below average').

Two logit models were constructed, one for the west and the other for the east, for the dependent binary variable $q_{\text{polit},1}$. Two more logit models were produced for the binary variable $q_{\text{polit, 2}}$.

Models were chosen by exclusion. The initial regression contained all nine regressors. The likelihood-ratio test was used as the model selection criterion. Table 3 shows the results of the logit regressions.

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[2] Another model assumption: the observations are mutually dependent.

Table 3

Model parameter evaluation

Factor	Model I (agree, the west)	Model II (agree, the east)	Model III (disagree, the west)	Model IV (disagree, the east)
$q_{econ,}2$	—	—	—	0.73** (0.34) 0.08 < b < 1.37
$q_{leg,}1$	1.97** (0.78) 0.44 < b < 3.51	0.86* (0.47) − 0.07 <b< 1.79	—	—
$q_{leg,2}$	—	—	1.63** (0.73) 0.20 < b < 3.06	—
$q_{civ,}1$	1.39** (0.56) 0.28 < b < 2.50	—	—	0.62* (0.34) − 0.01 <b <1.26
$q_{civ,2}$	—	—	1.42** (0.63) 0.19 < b < 2.65	—
$q_{hist,1}$	2.24*** (0.58) 1.09 < b < 3.39	1.84*** (0.35) 1.16 < b < 2.53	− 2.39*** (0.66) − 3.68 <b <− 1.09	− 1.58*** (0.34) − 2.27 <b <− 0.89
$q_{exist,}1$	—	0.97*** (0.35) 0.29 < b < 1.65	—	—
$q_{exist,2}$	—	—	0.87* (0.51) − 0.13 <b <1.87	1.08*** (0.34) 0.33 < b < 1.82
Constant	− 2.31	− 1.92	− 1.46	− 0.46
% of accurate-ly predicted 1 values	55.3	48.6	90.6	78.4
Total % of accurate pre-dictions	79.0	76.9	78	68.3
Number of ob-servations, N	200	200	200	200

In each regressor section in Table 3, the first line contains the coefficient estimate for that regressor, whereas the standard deviation of the estimate is given in round brackets.[3] The second line shows the 95% confidence interval for the coefficient. The table demonstrates coefficient estimates for only those regressors that were included in the final models. The regressor $q_{hist, 2}$ was not included in any of the models, nor is it shown in the table. To classify observations, the cutoff point of 0.5 was chosen. For the first two models, the percentage of accurately predicted 1 values was low, whereas that of accurately predicted 0 values was rather high. For more balanced predictions, ROC curves can be used to select the cutoff point [23, pp. 228—230].

Each pair of models reveals both differences and similarities between the two regions.

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[3] Or its asymptotic estimate, to be exact (see [23, pp. 193—194]).

For the first pair (I and II) significant answers were 'National laws should be aimed primarily at making the state stronger' (5% and 10% levels respectively) and 'Russia has a great future (1% for both regions). The answer 'Russians are part of the European civilisation' was significant only in the west; 'The most dangerous threats to our country are external', only in the east (1% level).

For the second pair (III and IV), a significant answer was 'Russia has a great future' (a 1% level for both regions).[4] The answer 'The most dangerous threats to our country are internal' was significant at a 10% level in the west and a 1% level in the east. The answer 'Laws should work towards higher standards of living' was significant only in the west; 'The financial position of my family is average or below average', only in the east.[5] As to the question whether Russia is part of the European civilisation, different answers were significant: 'The Russians are not part of the European civilisation' in the west and 'The Russians are part of the European civilisation' in the east (10% level). This difference is easily explained: living in the westernmost region of Russia, Kaliningraders have a realistic idea of the European civilisation, whereas, for residents of Blagoveshchensk, Europe is mostly vicarious experience.

The only answer that was significant in all models (at a 1% level) was given to the question about the historical destiny of Russia.

Finally, two integrated models were constructed to cover all 400 observations from the west and the east for both dependent variables − $q_{polit, 1}$ and $q_{polit, 2}$. Alongside the ten initial regressors (including the constant), the model included ten more regressors, which were obtained by multiplying each regressor by the dummy variable q_{east} (1 — the respondent is from the east, 0 — the respondent is from the west). When the regional specificity of answers was taken into account, the models corroborated the significance and signs of all regressors obtained for individual models. For same-sign regressors common for the west and the east, significant differences among coefficients were not confirmed.

Conclusion

Our comparative analysis of regional consciousness of students in Russia's western and eastern border regions, which was conducted for the first time in Russian social science, reveals significant regional differences even in functionally homogenous border territories and in the most homogenous social group. In most cases, these differences are accounted for by the geographical factor. The

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[4] Remarkably, that was the only answer that had the negative sign before regressors. This means that, overall, the group tended to disagree with the statement that 'Russia has a great future' rather than to agree with that 'a great Russia is a thing of the past'.

[5] Model IV was the only one, for which the factor q_{econ} was significant.

percentage of the undecided was different too: the percentage of those who chose the 'no answer' option was much higher in the east than it was in the west. Many social phenomena have already been digested in the west, whereas the east is still trying to grasp them. Despite pronounced regional differences, there is an important similarity in the state of the socio-political consciousness of students. Even in this case, regional idiosyncrasies have their say: similar opinions about the way Russia is developing today are products of different combinations of many region-specific factors.

The four models of logistic regression proved the hypothesis that the socio-political consciousness of students in two Russian borderlands was strongly affected by the basic forms of mass consciousness: economic, legal, historical, cultural/civilisational, and existential. Each regressor was significant at a 5% level in at least one model. The models have a high predictive capacity. The first three models had a total percentage of accurately predicted observations of above 75%; the fourth model, of 69.3%. Mathematical modelling is, therefore, effective in studying regional consciousness.

Our data analysis uncovered the effect of mass consciousness asymmetry, which means that some factors change differently in the west and the east as long as alternative questions are concerned. For example, the answer 'Russia has a great future' did not reveal significant differences between the west and the east, whereas the difference in the number of those who answered that 'A great Russia was a thing of the past' was statistically significant. This effect is rooted in the uncertainty the respondents are facing. The effect of asymmetry was co the Jewish autonomyrroborated by the model analysis. For example, the factor q_{econ} was insignificant both for the west or the east in the first pair of models. Yet, it was significant in the east and insignificant in the west when respondents were answering the alternative question 'Do you agree or disagree that our country is heading in the right direction'.

The models proved experimentally the initial hypothesis of this research: regional differences continue to have effect even when opinions and ideas about the current socio-political processes are rather similar.

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