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An axiological approach to mental maps: Croatian high-school students' views of Europe

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Abstract

The paper presents the results of a survey carried out in the academic year 2016/2017 and deals with the attitudes of Croatian high-school students towards European countries. This survey repeats an earlier study from 2000/2001 and thus allows a comparison of the opinions of young people from different generations. The data indicate a shift in residential preferences towards the Nordic countries, while preferences towards the Latin/Mediterranean countries have weakened. Applying an axiological approach to the original model of mental maps made it possible to gain insight into the value criteria used to assess the residential desirability of countries. Groups of evaluation criteria were identified, the most important of which being the following: (a) Employment opportunities, economic conditions and economic development; (b) Culture, way of life, cultural landscape; (c) Political and legal order, social security, and freedom; and (d) Ethnopsychological factors.



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1. INTRODUCTION

The concept of ‘mental map’ refers to a model directed at the understanding of mental representations of the external environment, its spaces, and its places.

For several decades already, there has been a certain amount of confusion about how the term *mental map* should be understood. In geography, as in other disciplines, especially in the behavioral sciences and psychology, this term overlaps with the idea of *cognitive map*. Some authors even use both terms interchangeably (cf. Stea, 1969; Downs and Stea, 1973) or in the same article (see, e.g., Saarinen, 1987). Both terms appear in academic writing with various senses and in various contexts. The use of numerous surrogates additionally contributes to the lack of a fixed and precise meaning (on this, see Kitchin, 1994, 5; Hannes et al., 2012, 144).

For this reason, it is important to clarify the concept of *mental map* upon which this article relies.

Unlike much of the literature on cognitive maps (see, inter alia, Golledge et al., 1983; Golledge et al., 2000; Brown and Broadway, 1981; and Uttal and Tan, 2000), this article does not discuss the immediate surroundings or space of everyday movement with accessible objects that can be perceived with the senses and comprehended through direct experience. It belongs to a tradition of research focused on macro-scale mental maps (Lynch, 1960; Saarinen, 1973, 1988; Gould and White, [1974] 2002; Gilmartin, 1985; Bailly, MacCabe and Saarinen, 1995; Dedelon et al., 2011; Didelon-Loiseau, de Ruffray and Lambert, 2018; Grasland, 2011; Holmén, 2018). It focuses on extensive spaces, the cognition of which is filtered through a variety of secondary sources – maps, verbal descriptions, photographs, movies, media, textbooks, and other texts.

This article does not address spatial relations – distances, directions, landmarks, routes, configurations (Gärling, 1989; Lloyd, 1989; Thorndyke, 1981; Tversky, 1992, 2000; Lynch, 1960; Matthews, 1980; Kitchin, 1997; Bartzokas-Tsiompras & Photis, 2020; Bartzokas-Tsiompras et al., 2021). Nor is it concerned with the influence of mental representations on orientation, route learning, and wayfinding (Blades, 1991; Golledge et al., 2000; Gärling and Golledge, 2000; Cornel and Heth, 2000). Here the mental map is not treated as a layout of objects or as a perceptual scheme (Neisser, 1978, 99, 1976, 111). Instead of the “geometry of space” (Downs and Stea, 1973) or “spatial relations among features and objects” (Golledge et al., 2000), this study focuses on non-spatial attributes and meaningful associations. It is about the connection that mental maps have with attitudes, meanings, symbolic properties, attributed values, and imagined worlds.

The mental map concept, like the cognitive map concept, emerged within the behavioral tradition with an emphasis on spatial structures that influence and explain behavior (Tolman, 1948; Stea, 1969; Downs and Stea, 1973). Subsequently, the broader debate about the process of spatial cognition and the representation of spatial knowledge shifted towards an interactionist perspective and led to many experimental results and theoretical insights (On this shift, see Kitchin, 2015 and Kitchin and Blades, 2000). The present work, however, proceeds in a different direction. That is, it continues a tradition of research that departs from the original behaviorist roots in another way – by stressing the importance of the evaluative, symbolic, and affective meaning of places (Tuan, 1975; Spenser and Dixon, 1983; Mathews, 1984; Šakaja, 2001a, 2001b, 2004; Šakaja and Mesarić, 2001; Didelon et al., 2011; Musolino, 2018; Matei, Ball-Rokeach and Qui, 2001). On the example of Croatian high-school students, this article studies the

dissimilarity of the countries of Europe from the standpoint of their residential desirability, but also in terms of the reasons and values that support evaluations of countries as “good” or “bad” to live in.

Since in this case the focus is on values and meanings, it seems justified to identify the approach to mental maps applied here as an axiological approach. Axiology deals with values, with principles that determine the direction of human activities, the motivation of human actions. It is associated with emotions, preferences, “rankings”, a hierarchy of values (Scheler, [1913] 1973). When we investigate mental representations of places, and in doing so, we take into account the meanings attributed to those places, we are actually exploring the axiological background of mental maps.

The main goal of this research was to examine how Croatian youth conceive Europe and its individual parts, to find out which countries are attractive to them and for what reasons, and to learn what traits of imaginative geography are produced today in Croatia by filtered information flows. The starting point of the research was the assumption that the Croatian high-school students’ attitudes toward European countries, which are formed under the influence of various cultural, educational, media and other filters, are reflected and can be read from their residential preferences. The initial position was that due to exposure to the same sources of information within groups, common attitudes are formed, including attitudes about different countries.

2. METHODOLOGY AND SAMPLE

The research presented here is based on a modified methodology of a classical model of mental maps (Gould and White, 1974) that measures the degree of desirability of different areas as places for living. Within this model, mental maps that exhibit spatial preferences are constructed by the researcher on the basis of survey data. In this study, the original methodology of Gould and White was extended by including open-ended questions in the survey. As a result, a large number of texts were obtained, which were then encoded. The addition of qualitative methods of text processing to quantitative methods of processing numerical data, which were used in the original methodology of Gould and White, made it possible to investigate not only spatial preferences themselves, but also their axiological background.

The study was conducted in twelve classes of graduating high-school students in the four largest Croatian cities – Zagreb, Split, Osijek, and Rijeka. The respondents were all 17 or 18 years old. The students were asked the following: “Suppose you were free to choose which European country you will live in. In which countries would you most like to live, and which ones would you not choose to live in?” On a list of all European countries (with the exception of Croatia and the Vatican), respondents were supposed to rate each one in order of desirability: the country where they would most like to live should be marked with the number one, their second choice with number two, and so on. By quantitative processing, the answers of all students were scaled and integrated into one series that shows the general trend in country scoring. The principal component method was used for this purpose, in the same way as performed and described by Gould and White ([1974] 2002, 164-168). The scores were scaled so that the best-liked countries received the largest score (100), while the most disliked countries received the score 0. For the three countries that the students awarded the best scores (1, 2, 3) and for the three countries that they gave the lowest scores (43, 44, 45), the students were asked to explain their ratings. The texts of the answers were coded and analyzed, which provided

insight into the reasoning for their choice and the criteria applied by high-school students in the evaluation of countries as the most desirable or most undesirable to live in.

The study presented here was carried out in the 2016/2017 academic year. It repeated an earlier study carried out in 2000/2001 (see Šakaja 2001a, 2001b, 2004; Šakaja and Mesarić 2001), which enabled a comparative analysis. The study was repeated, after an interval of 16 years, according to the same methodology, in graduating classes of the same high schools (i.e., on a similar sample). During the 2000/2001 study, 823 completed questionnaires were processed while the 2016/2017 study involved 757 processed questionnaires. The reason for the smaller sample in the second study was that there were fewer students in the final grades of the schools in question than at the time of the previous research. This fact corresponds to a steady fall in the number of students enrolled in Croatian schools during the interim period (*High schools and dormitories*, 2003, *High schools and dormitories*, 2018). Despite an effort to ensure a balance of "female" and "male" schools chosen for the study, there were still more girls than boys among the respondents: 60.2% vs. 39.8% in 2016/2017, and 62.5% vs. 37.5% in 2000/2001. Because of this imbalance, some of the research results will be presented according to gender.

In the next section, I will discuss the results of the 2016/2017 study. In the following section of the paper, these results will be compared with the previously published data from 2000/2001.

3. RESIDENTIAL PREFERENCES AND THEIR RATIONALE

This study showed that the Iron Curtain, as an imaginary divider, still exists. None of the countries of the former Socialist Bloc are among the group of countries most desirable for living (Figure 1 and Appendix). The best-liked countries are Great Britain, Switzerland, Germany, Austria, and France. The least desirable are Kosovo, Albania, Serbia, Moldova, and Macedonia.

By applying the principal component method, the assessments of all respondents were combined into one. It is therefore important to know how similarly or differently the same countries were rated by different respondents. Figure 2 shows the relationship between the median assessment of a particular country made by the respondents and the interquartile range (IQR) as a measure of the variability of these assessments. It is clear that the degree of agreement among the respondents is very high when it comes to the countries that are assessed as most positive or most negative. Most respondents agree in their negative assessments of some Balkan (Albania and Kosovo) and Eastern European (Moldova and Belarus) countries and in their positive assessments of some Western European countries (UK, France, Switzerland, Germany, and Spain).

There is a significantly lower degree of agreement about the countries ranked near the middle of the desirability scale. Greece, Russia and Serbia are particularly salient as the countries whose ratings vary the most. Insight into the textual part of the survey responses shows diametrically opposing views of these countries held by different respondents. Many respondents associated Greece with a rich heritage, early EU membership, and developed tourism. At the same time, "crisis", "debts", and "bankruptcy" were the words that most often appeared in the texts of the respondents in relation to this country. Neighboring Serbia attracts some respondents, but many others still perceive it against a background of "military conflict", "past unrest", "hostile

relations” and “political clashes”, even more than 20 years after Croatia's withdrawal from Yugoslavia and the 1991-1995 war.

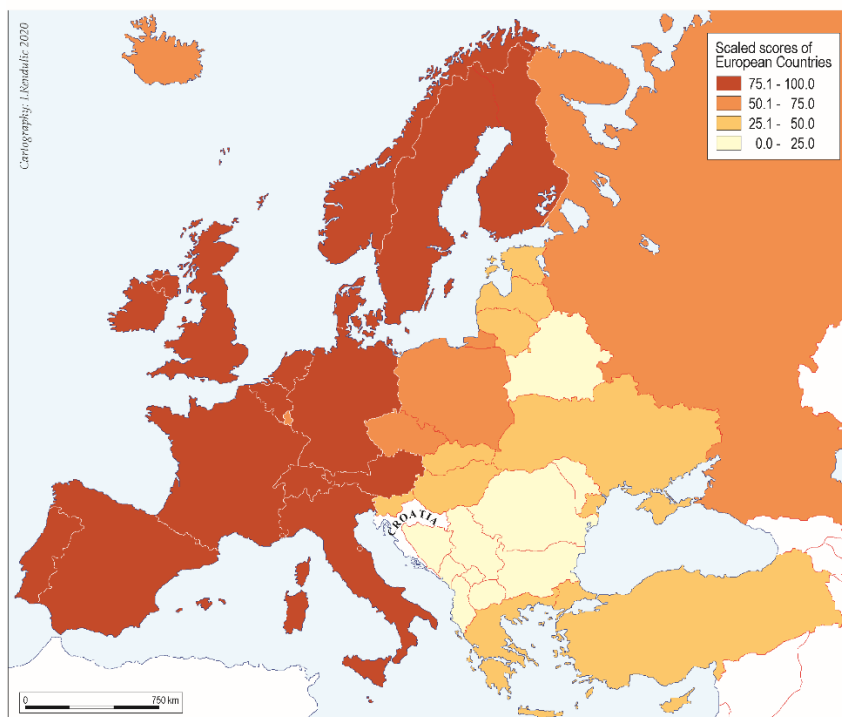


Figure 1. Degree of residential desirability of European countries

Although the basic tendency in the ranking of countries of the male and female sample is the same, there are still certain noticeable differences (Figure 3). Among these, the most obvious difference is in the assessment of the southern, i.e., Latin and/or Mediterranean countries. Namely, France, Spain, Italy, Portugal, San Marino, Malta, Andorra, Greece, and Turkey are more attractive to girls than to boys. It should be noted that a somewhat similar tendency was observed in the work of Çrasland et al. (2011, 132), where it is stated that women are more attracted by France and Italy than men.

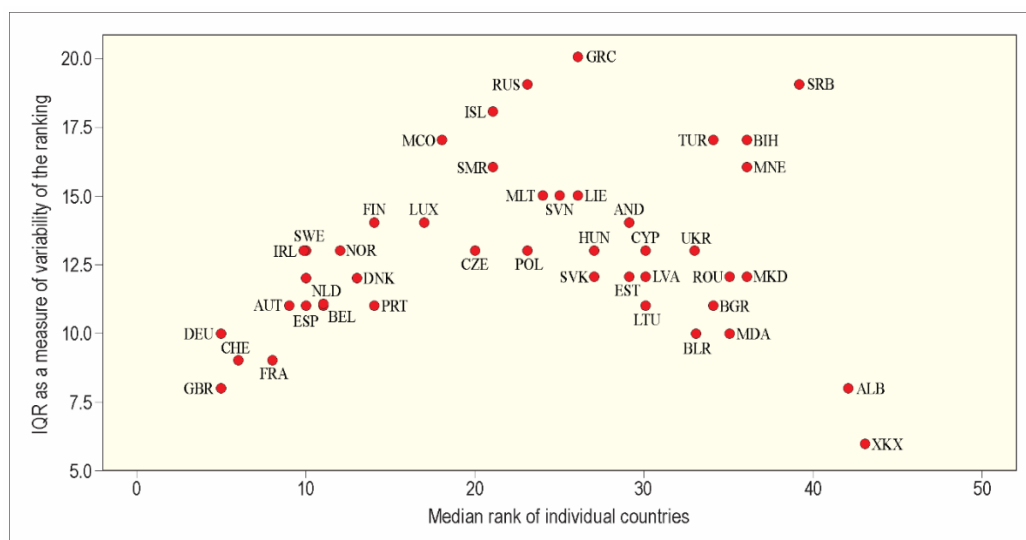


Figure 2. Variability in the ranking of countries

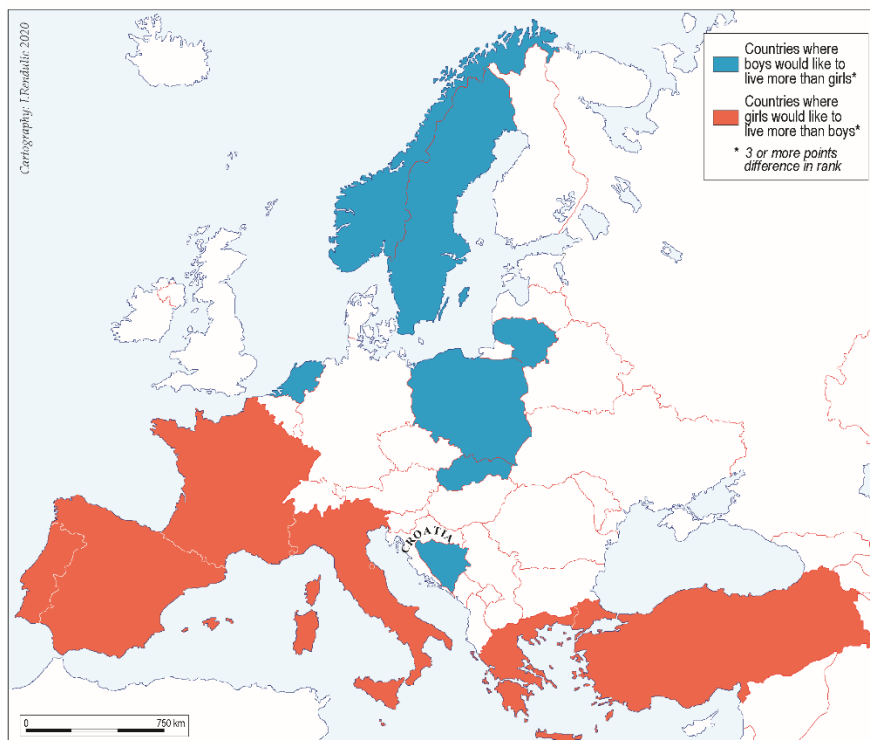


Figure 3. Gender differences in residential preference

What makes countries attractive or completely unattractive for resettlement? Based on the coding of the answers to the open questions of the survey, it was possible to single out the basic groups of the evaluation criteria used to assess the residential desirability of countries. These groups are the following:

1. *Employment possibilities, economic conditions, and economic development.* The arguments in this group were the most numerous. The phrase most commonly used in explaining the choice of countries as most attractive for living was “standard of living”. Other expressions and words used in this context were “developed economy”, “high GDP”, “economic stability”, “job”/“work”, “wages”, “wealth”, “employment”, “income”, “money”, “earnings”, and the like. At the other end of the spectrum were negative arguments for undesirable countries, among which the most commonly used phrases were those such as “underdeveloped country”, “low standard of living”, “poverty”, “weak economy”, “no jobs”, etc.
2. *Culture, way of life, cultural landscape.* This is the second group in terms of the number of arguments listed. It should be noted that, unlike the other most desirable countries in Europe, for which arguments of an economic nature predominate, the Latin countries - France, Spain, Italy and Portugal - are primarily represented by cultural factors (Figure 4). Attitudes towards them are mainly determined by factors such as language (“beautiful”, “melodic”), lifestyle, customs, rich history, heritage, tradition (including gastronomy), architecture, urban ambience and fashion. Arguments used to criticize countries also included culture, language, and way of life, but in combination with words such as “different”, “strange”, “difficult”, “backward”, etc. Some of the respondents used the adjective *Balkan* as a negative argument, and often the environment of an entire country was described as “dirty”.

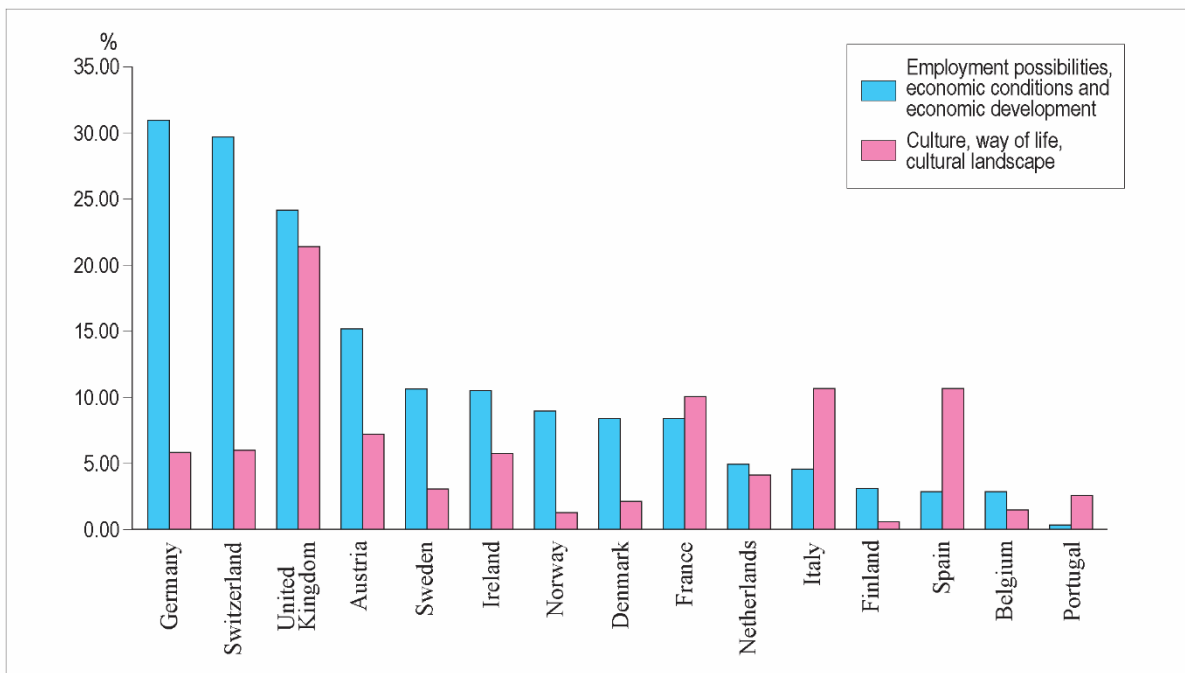


Figure 4. Percentage of respondents who explained the desirability of a given country using economic and cultural criteria out of the overall number of respondents

3. **Political-legal order, social security, and freedom.** The most frequently mentioned words from this group were “regulated” and “system”, in the phrases “regulated state”, “state system”, “just system”, “judicial system”, and “political system”. “Membership of the EU”, “stability”, and “organization” were all cited as arguments for a country's attractiveness. Also mentioned, although less frequently, were “liberalism”, “freedom”, “justice”, “democracy”, and “better politicians”. Switzerland was highly ranked, inter alia, for its neutrality and the Netherlands, for legalized soft drugs. Politics and security were frequently mentioned by respondents also in negative contexts, with typical expressions being “riots”, “war”, “insecurity”, “instability”, “crime”, “mafia”, etc.
4. **Ethnopsychological factors.** When explaining their (non-)desire to live in certain countries, the surveyed high-school students also referred to the population. The words “people”, “mentality”, and “nation” have been used most frequently. In positive contexts, these words were combined with the adjectives “good”, “kind”, “polite”, “cultural”, and in negative contexts, with the expressions “I don't like them”, “I don't fancy them”, “they are bad”. Ethnonyms, sometimes pejorative, were also used as words that do not require further explanation and imply a negative attitude towards the inhabitants of the country in question.
5. **Religious reasons,** although generally uncommon, were predominantly used in negative contexts. As an explanation for a lack of desire to live in Muslim countries, typical responses were “Islam”, “Muslim religion”, “different religion”, and “other faith”.
6. **Natural factors.** The most frequently mentioned natural factors were climate, the beauty of nature, beautiful landscapes, and the sea. Interestingly, the words “cold”, “winter”, and “snow” were used as often for positive as for negative arguments (with

- total frequencies of 46 and 48, respectively). Surprisingly enough, the word “cold” (34) was used more frequently than the word “warm” (15) as a positive argument. Some respondents indicated a cold climate among the positive arguments for living in Nordic countries, with comments such as “I like cold places”, “I love winter”, “I love snow”, “cold climate suits me best”, “interesting life in the winter”, etc.
7. *Proximity*. “It’s not far from home”, “it attracts me because it’s close”, “too far from Croatia” – these are variations that have been repeated many times as arguments to explain the (un)attractiveness of nearby or faraway countries.
 8. *Entertainment, recreation, sports*. Among the arguments included in this group, the most common by far was the expression “good football”. Other things mentioned were opportunities to engage in sports as well as numerous pubs. In the formation of negative attitudes towards a country, the factor of entertainment, recreation, and sports proved to be completely irrelevant.
 9. *Educational opportunities*, it appears, are also important in the desirability of countries, especially for girls. Prominent expressions in this realm were “access to education”, “free education”, or simply “studying” and “educational opportunities”. Many respondents link their possible move to plans for further education in the UK, as they have a good command of English. The Scandinavian countries with their accessible university programs in English are also highly regarded for their educational opportunities. Between 10% and 17% of all explanations for the desire to live in them have to do with the education system - significantly more than for any other European country.
 10. *Degree of informedness about the country*. Some respondents directly linked their desire to move to a country with the fact that they know the country well. On the other hand, many respondents associated their negative assessment of a number of countries with the fact that they knew nothing about them. However, as shown by the data on country visits, the influence of direct experience on preferences is very small, which indicates that respondents' attitudes are often uninformed. I will return to this question later in this chapter.
 11. *Personal reasons*. This group includes pragmatic factors of a personal nature that, in the event of relocation, could make adaptation to a new environment easier. The primary such factor is knowledge of the language of the country. Knowledge of English and knowledge of German proved to be an important argument in the choice of countries that are most attractive for resettlement. Another frequently cited personal reason is having relatives or friends in the country in question, on whom the respondent can rely. Already existing social capital in the country proved to be an important element in the thinking of young people about a possible life destination.
 12. *Unspecified reasons*. A large number of respondents were unable or unwilling to write specific arguments about why they rated a country high or low. Instead of an explanation, respondents sometimes wrote, “I don't know”, in the survey. Sometimes their explanations expressed a general impression (“beautiful country”, “nice country”, “country for enjoyment”, “land of possibilities”, or “it's strange”, “bad country”, etc.) or an affective attitude (“I don't like it”, or “I love it”, “I like it”, etc.). All such vague explanations were included into the large group of unspecified reasons.

There is no doubt that economic factors are the most prominent reason for the choice (Table 1). In the case of the most desirable countries, cultural reasons are the second most frequent. On the other hand, when it comes to the countries deemed the least desirable to live in, the second most frequent group of arguments were those related to the political and legal order, social security, and freedom. As it turns out, most of the countries with the lowest rating are perceived not only as economically unpromising, but also as areas of unrest, turbulence, conflict, criminal corruption, and legal uncertainty.

As a whole, the arguments used by girls and boys in their explanations are similar in both content and structure. However, it is noticeable that the girls attach more importance to culture and education. The cold climate of the northern countries (an argument from the natural factors group) bothers the girls more than it does the boys. Boys, on the other hand, are more likely than girls to use arguments related to economics, work and employment, government and (geo)politics, as well as reasons related to entertainment and sports, especially football. A similar tendency was observed by Didelon et al. (2011) when comparing specific vocabulary that women and men used in their textual descriptions of European countries.

Table 1. Arguments for the assessment of countries as the most desirable or as least desirable for living, 2016/2017

Groups of arguments cited when explaining assessments	Frequency of reasons “for” and “against”					
	Attractive countries: arguments “for” (%)			Unattractive countries: arguments “against” (%)		
	All respondents *	Girls	Boys	All respondents *	Girls	Boys
Employment possibilities, economic conditions, and economic development	31.29	28.55	35.81	29.02	28.77	29.35
Culture, way of life, cultural landscape	18.97	21.00	15.70	11.60	12.56	10.37
Political-legal order, social security, and freedom	8.11	7.36	9.27	19.67	18.52	21.40
Ethnopsychological factors	6.21	6.69	5.33	9.38	9.29	9.62
Religious reasons	0.36	0.52	0.12	2.28	2.15	2.42
Natural factors	8.72	8.85	8.46	2.44	3.01	1.59
Proximity/distance	2.03	2.38	1.51	1.21	1.45	0.75
Entertainment, recreation, sports	2.14	1.19	3.65	0.00	0.00	0.00
Educational opportunities	4.79	5.35	3.82	0.72	0.91	0.33
Degree of informedness about the country	1.17	1.38	0.87	5.83	6.07	5.35
Personal reasons	6.66	6.91	6.37	0.65	0.64	0.67
Unspecified reasons	9.55	9.81	9.10	17.20	16.64	18.14
Total of all listed reasons	100	100	100	100	100	100

* Respondents who did not specify their gender are included

One of the most interesting questions about attitudes to different countries is how such attitudes are formed. This study shows that attitudes are strongly mediated. Although almost all respondents (96.1%) had been to at least one foreign country, it would be wrong to conclude that young people base their opinions about countries on their own experience. On the contrary, only 28.91% of those who chose a particular

country as one of the top three most desirable had been to that country. For only a few countries (traditional Croatian emigration destinations - Austria, Germany, and Italy) can one conclude that the students' assessments are based on their own experience: more than 60% of the respondents who rated them at the top of their desirability rankings had visited those countries.

The image of negatively perceived countries relies even less on respondents' direct experience. Only 6.72% of them had actually been in one of the countries that they rated as least desirable. In fact, less than 1% of the students surveyed had been to Albania or Kosovo, which more often than other countries occupied the bottom end of the rankings.

Thus, there is no doubt that the mental maps reconstructed here are for the most part not based on personal experiences, but conditioned by secondary sources of information. Indeed, it can be said with certainty that the mental image of the European space, and especially its undesirable part, is almost entirely a reflection of the broader imaginatory geography, discourses formed by various communication filters.

4. CHANGES AND CONSTANTS IN MENTAL MAPS: A COMPARISON OF THE 2000/2001 AND 2016/2017 STUDIES RESULTS

As mentioned above, the survey presented here repeated the survey conducted in 2000/2001. The repetition of the study was prompted by two facts. First, in the period between the two studies, Croatia became a member of the European Union. Secondly, high-school students surveyed in 2016/2017, unlike the high-school students in 2000/2001, were born after the breakup of Yugoslavia, after Croatian independence, and after the end of the Croatian Homeland War. Did these facts affect the mental maps of young people? Have attitudes towards Europe been modified by Croatia's accession to the EU? How different are the notions of a generation that did not experience the political upheavals and wartime events of the 1990s from the notions of their predecessors?

The comparison was slightly complicated by the fact that, due to changes in the political map of Europe, the list of European countries presented to students differed in the two surveys: Yugoslavia was no longer on the 2016/2017 list, while the countries that emerged from its disintegration – Serbia, Montenegro, and Kosovo – had been added to it (see Appendix). Also added to the list of countries was Cyprus, whose accession to the EU in 2004 unambiguously positioned the country in the European space. The comparison shows that there are similarities and differences in the mental maps of the young people of the two generations. The most conspicuous feature of these mental maps – the division into a desirable West and an undesirable East – remained the same. The position of the Balkan countries in the lower part of the scale of preferences remained unchanged, and not even the very bottom of the scale changed: Yugoslavia and Albania were at the bottom of the list at the beginning of the millennium, while sixteen years later, Albania and two countries that emerged from the breakup of Yugoslavia – Serbia and Kosovo – still occupied that place. Judging by the rhetoric of the texts, the stereotype of the Balkans as a space of disorder, conflict, and disorganization was reproduced as a long-lasting phenomenon. Nevertheless, in the texts in which the respondents explain their assessments of the Balkan countries, there is a noticeable shift towards less xenophobic discourse. Unlike the responses to the 2000/2001 survey, definitions such as “smelly”, “disgusting”, “repulsive”, “mentally retarded”, “primitive”, “barbarian” and “dull” are no longer used or are used less.

Significantly more changes have taken place in the category of desirable countries (Appendix and Figure 5).

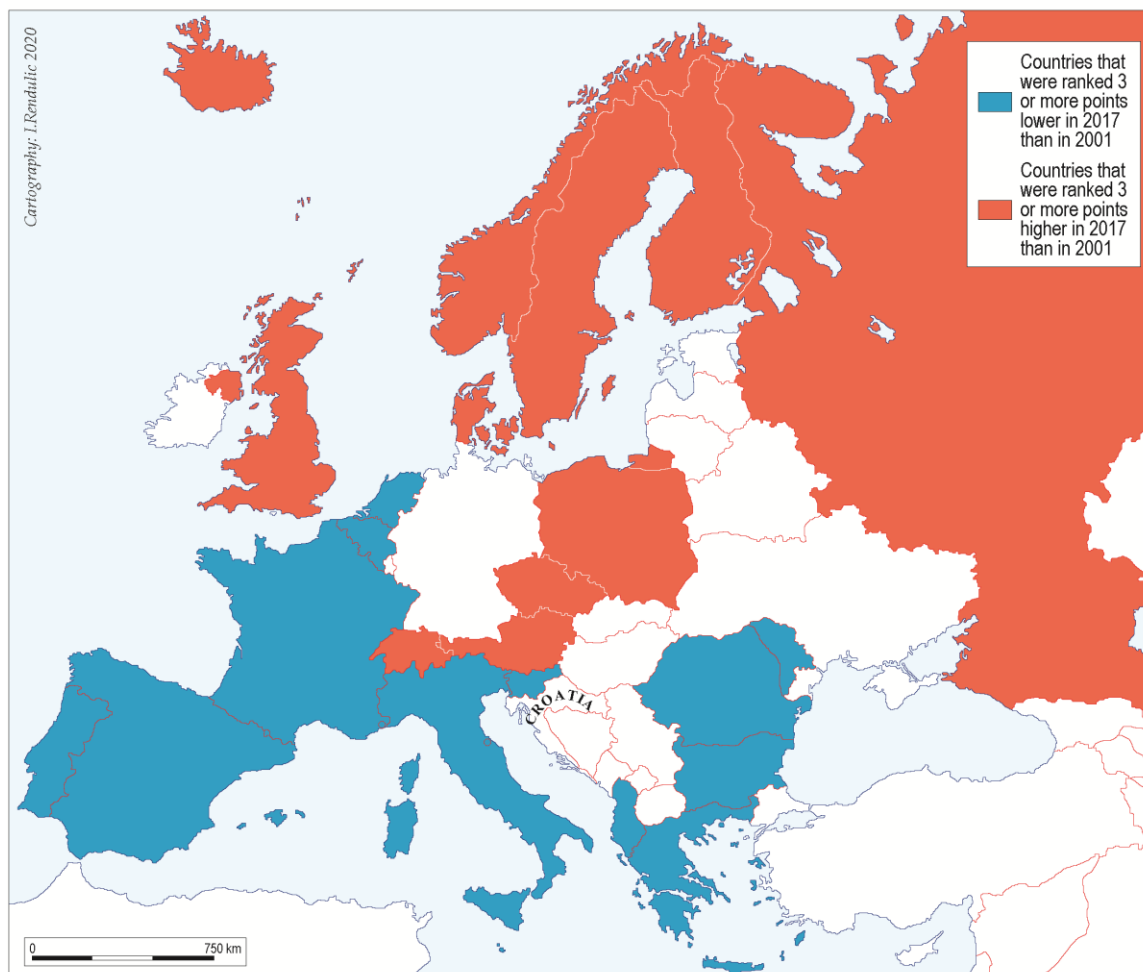


Figure 5. Changes in residential preferences, 2000/2001 us. 2016/2017

The three most desirable countries at the beginning of the millennium from the perspective of Croatian high-school students were Italy, France, and Spain. These countries, like all Latin and/or Mediterranean countries, have fallen in the degree of their desirability. Thus, Italy fell from first place to eighth, France from second to fifth, Spain from third to sixth. Portugal, Monaco, San Marino, Malta, Andorra, and Greece – all these countries fell by at least three places in the ranking of residential preference. On the other hand, the status of, among others, all Nordic countries has risen. These changes point to a clear shift in preferential space from southern to northern Europe.

It is plausible to assume that in addition to the obvious influence on preferences of economic factors and refugee pressure in the South, fear of climate change may also be a possible reason for a better image of the North. In any case, as the data show, the attitude towards the cold climate of Nordic countries has become more positive in the face of global warming. It is indicative that in the 2000/2001 survey the words *cold*, *winter*, or *snow* appeared 3 times in total as a positive argument, while in 2016/2017 these words were used 46 times in positive contexts.

Changes in the ranking of countries as desirable places to live are consistent with changes in the reasoning behind such rankings (Table 2). A comparison of the

argumentation structure of two generations shows that it has changed somewhat in favor of more pragmatic arguments.

Table 2. Arguments for the assessment of countries, 2000/2001 and 2016/2017

Groups of arguments cited when explaining assessments	Frequency of listed arguments (%)					
	2000/2001			2016/2017		
	All respondents *	Girls	Boys	All respondents *	Girls	Boys
Employment opportunities, economic conditions, and economic development	29.02	27.40	31.47	30.36	28.60	33.09
Culture, way of life, cultural landscape	17.12	19.83	13.44	15.95	17.57	13.56
Political-legal order, social security, and freedom	12.29	11.92	13.50	12.84	11.91	14.24
Ethnopsychological factors	11.81	11.83	10.63	7.51	7.79	7.10
Religious reasons	1.06	1.13	0.79	1.15	1.18	1.06
Natural factors	9.74	9.65	9.56	6.15	6.47	5.67
Proximity/distance	1.30	1.33	1.13	1.69	2.00	1.20
Entertainment, recreation, sports	2.31	1.37	2.87	1.27	0.70	2.15
Educational opportunities	1.04	1.31	0.73	3.12	3.55	2.42
Degree of informedness about the country	1.74	1.97	1.47	3.08	3.29	2.70
Personal reasons	2.17	2.05	2.47	4.20	4.34	4.00
Unspecified reasons	10.42	10.22	11.92	12.68	12.61	12.81
Total of all listed reasons	100	100	100	100	100	100

* Respondents who did not specify their gender are included

The main feature of this argumentation is still the overwhelming dominance of arguments of an economic nature, with the proportion of economic factors even slightly higher than in 2000/2001. There is also an increase in factors related to educational opportunities, but also in personal arguments such as family and other ties and language skills, i.e. pragmatic factors that contribute to successful integration into the host country's labor market.

On the other hand, the proportion of less practical arguments decreased. Culture, tradition, heritage and history still play a major role in forming positive attitudes towards countries, but the comparison shows that the new generation values these factors somewhat less than their predecessors. People are also given less importance: ethnopsychological factors in respondents' statements were mentioned much less often than in the previous study. Less importance is also attached to natural features, especially the sunny and warm climate and the Mediterranean Sea (although, as mentioned above, the role of the climate as positive factor has increased in relation to the Nordic countries).

Many countries have changed their status in the ranking of residential attractiveness, but by far the greatest change occurred in the degree of desirability of the Russian Federation (see Appendix). While in 2000/2001 it was the fifth most undesirable country to live in, in 2016/2017 it was shifted to the middle of the desirability rankings. Unlike

the respondents in 2000/2001, who were very consistent in their negative attitude towards Russia, the ratings of respondents in 2016/ 2017 are much fuzzier. Some respondents perceive Russia, like their predecessors, in a very negative light, through notions of a weaker economy (“underdevelopment”, “poverty”, “misery”) and a cold climate (“winter”, “cold”, “weather”). But the other respondents are positive about the country, explaining this by the opportunities it provides (“emerging economy”, “a country full of wealth”) and by the parameters of cultural identity (“Slavic culture”, “diversity of the country”, “soul”, “way of life”, “similar language”, “mentality”). Russia’s military power delights some young people (“mighty superpowers”, “strong military power”), but it intimidates others (“violent country”, “militaristic and expansionist system”, “threat of nuclear war”). Politically, Russia is described positively as a “progressively conservative country” with a “strong government” and “good state leadership”, or negatively as a country ruled by “political limitations” and an “illiberal political system”.

A sharp rise in Russia’s status may be an early sign of the destabilization of the binarity between the European East and West, although this binary in the mental maps, as we have seen, is still very pronounced.

Table 3. Croatia’s residential desirability and plans to migrate

Questions on Croatia contained in questionnaire	“If you could choose where to spend your further life, would you choose to live in Croatia or in some other European country?”		“Where do you think you will live in five years?”	
Year of research	2000/2001	2016/2017	2000/2001	2016/2017
Options of responses	“in Croatia” “in some other country”	“in Croatia” “in some other country”	“in Croatia” another country was listed	“in Croatia” another country was listed
Share of respondents who chose this response in total number of respondents (%)	43,2 56,8	48,3 51,7	81,3 18,7	63,4 36,6

Where is Croatia itself on the map of the European preferential area? Has EU accession influenced the assessment of the attractiveness of one’s own country as a place to live? As the data show (Table 3), although a stay in Croatia became somewhat more desirable than before the country joined the EU, one in two respondents still wanted to leave the country in 2017 and one in three believed that they would actually emigrate within five years. These results correspond to the actual figures for the increase in emigration after EU accession in 2013 (see Zhuparich-Ilich, 2016; Ivanda, 2017; Drazhenovich, Kunovac and Pripuzhich 2018). Between 2013 and 2017 Croatia’s annual negative migration balance has increased more than sixfold (Bališa 2019, 116).

5. CONCLUSION

Many works have been written about mental maps to date. This article differs in two ways. Firstly, it extends the mental map model by using an axiological approach. Secondly, it applies a longitudinal analysis, opening up the possibility of catching tendencies of change in spatial preferences.

The application of the axiological approach enables a number of conclusions to be made. As the textual answers to the survey show, young people in Croatia look at life through a filter in which different values are intertwined – cultural, ethnopsychological, political, etc. – but in which economic values prevail. It is the economic criteria that are most numerous in the explanations of their choices of countries desirable to live in. Accordingly, all the countries that were assessed as the most desirable are economically highly developed. Therefore, we can assert that, regardless of the variety of preference criteria, opportunities of a non-economic nature gain meaning only if the country considered as a residential destination meets certain economic expectations (see Demko, 1974). Moreover, a comparison of the textual responses of respondents from the two studies (2000/2001 and 2016/2017) revealed that the new generation makes more use of arguments of a pragmatic nature: the likelihood of getting a well-paid job, access to quality education, the existence of family connections, and knowledge of the language of the destination country.

The data tell us that most of the countries selected as highly desirable or highly undesirable had been visited by a very small number of respondents. Therefore, these are “second-hand” images, mediated by circulating information. This information filter involves the exchange of not only experience and knowledge but also prejudices and clichés. On the mental maps of young people, the spaces of Europe are highly value-coded. In the case of Austria, *close* only means ‘close’, and in the case of Serbia, Bosnia and Herzegovina, and Macedonia, it can also mean ‘too close’ (as some respondents actually wrote). Similarly, the phrase *low temperatures* in the case of Russia means ‘too cold’, while in the case of Finland or Norway, it means ‘interesting climate’. These facts warn us that, in addition to answering the question of *what* a phenomenon is, it is important to answer the question of *where* this phenomenon is located – that is, to which (positively or negatively imagined) spatial whole it belongs. Just as mental maps generalize and smooth out forms, it is obvious that they also generalize different attributes of a space that is mentally understood as a whole.

It is interesting to compare the results of these two studies with the conclusions of Gould and White. Examining the mental maps of Europe, they noticed a tendency towards “boundary thinking” ([1974] 2002, 149-154). They noted that the models of thinking of many Europeans reflect old boundaries and linguistic similarities – the Swedes having a strong preference for Scandinavia, the Italians having a preference for a mixture of countries with Latin languages (France and Spain), and the Germans having a strong preference for Austria, Switzerland, The Netherlands, Denmark, and Sweden.

The research of mental maps of Croatian high-school students, however, showed a somewhat different situation. Due to its historical location between the Ottoman Empire, the Habsburg Monarchy, and the Venetian Republic and the resulting cultural influences, before the break-up of Yugoslavia, Croatia defined its culture as belonging to three cultural circles – Balkan, Mediterranean, and Central European.

Croatia's political independence, the war with Yugoslavia, and its turning to the EU led to the country's distancing from the Balkan cultural circle. After the disintegration of Yugoslavia, the Balkans became the constituting Other in the redefinition of Croatian identity.

Accordingly, the 2000/2001 study already revealed a high degree of negative stereotyping of Balkan countries and, conversely, very strong preferences for both Mediterranean countries (Italy, France, and Spain) and Germanic Central European countries (Germany, Austria, and Switzerland).

In the 2016/2017 study, the Balkans continue to be highly negatively stereotyped. Croats continue to be strongly attracted to Germanic Central European countries. However, preferences towards Mediterranean countries (especially neighboring Italy) have weakened, while at the same time preferences towards distant Scandinavian countries are strengthening. The logic that forms the mental maps of Europe today seems to be considerably more fuzzy than boundary thinking. This logic is associated not only with belonging and identity but also with the pursuit of peace and security, and above all with the economy and prosperity.

The results of this research also raise new questions: Is even the fear of climate change embedded into the logic of mental maps today? Is the abandoning of boundary thinking one of the signs of the construction of new feelings of belonging within the wider European community? Answers to these questions could be provided by further research.

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Appendix: Evaluation of European Countries according to residential desirability in 2000/2001 and 2016/17

Country	Residential desirability in 2016/2017		Residential desirability in 2000/2001		Change in country's ranking II - I
	Scaled scores	Country's typical ranking I	Scaled scores	Country's typical ranking II	
United Kingdom	100.00	1	94.46	4	3
Switzerland	97.74	2	92.66	6	4
Germany	97.38	3	92.87	5	2
Austria	90.25	4	86.13	8	4
France	89.90	5	98.82	2	-3
Spain	86.17	6	95.65	3	-3
Sweden	85.93	7	72.68	14	7
Italy	85.44	8	100.00	1	-7
Ireland	85.37	9	75.80	11	2
Netherlands	84.83	10	86.14	7	-3
Norway	81.89	11	67.89	18	7
Denmark	81.41	12	69.78	16	4
Portugal	77.45	13	78.30	10	-3
Finland	75.75	14	61.78	20	6
Belgium	75.42	15	73.25	12	-3
Luxembourg	67.58	16	69.18	17	1
Monaco	64.88	17	80.47	9	-8
Czech Republic	61.37	18	54.20	22	4
San Marino	56.73	19	72.97	13	-6
Iceland	56.35	20	50.19	24	4
Russia	51.86	21	17.81	37	16
Poland	50.94	22	40.33	26	4
Malta	49.16	23	71.18	15	-8
Liechtenstein	47.00	24	50.82	23	-1
Slovenia	44.98	25	58.40	21	-4

Greece	42.95	26	67.73	19	-7
Hungary	41.12	27	37.47	28	1
Slovakia	40.14	28	38.94	27	-1
Estonia	36.52	29	31.34	29	0
Andorra	35.55	30	48.74	25	-5
Lithuania	34.30	31	27.63	30	-1
Latvia	34.30	32	27.54	31	-1
Cyprus	33.87	33	-	-	-
Turkey	26.77	34	20.21	33	-1
Ukraine	25.11	35	18.24	36	1
Belorus	24.76	36	14.94	38	2
Bosnia and Herzegovina	22.75	37	14.70	39	2
Bulgaria	22.49	38	19.95	34	-4
Montenegro	20.94	39	-	-	-
Romania	20.13	40	21.09	32	-8
Macedonia	19.40	41	11.90	40	-1
Moldavia	18.15	42	19.83	35	-7
Serbia	15.51	43	-	-	-
Albania	3.06	44	4.85	41	-3
Kosovo	0.00	45	-	-	-
Yugoslavia	-	-	0.00	42	-