

JSACE 3/8

Cultural  
Differences  
in Landscape  
Perception

Received  
2014/05/20

Accepted after  
revision  
2014/07/23

# Cultural Differences in Landscape Perception

**Irina Matijošaitienė\***

Kaunas University of Technology, Faculty of Civil Engineering and Architecture  
Studentu st. 48, LT-51367 Kaunas, Lithuania

**Okyay Ucan**

Nigde University, Faculty of Economics and Administrative Science  
Bor-Nigde Yolu, Campus, Nigde, Turkey

**Armenui Minasyan**

Peoples' Friendship University of Russia, Faculty of Philology, Department of Linguistics  
Miklukho-Maklaya st. 6, 117198, Moscow, Russia

\*Corresponding author: [irina.matijosaitiene@ktu.lt](mailto:irina.matijosaitiene@ktu.lt)



<http://dx.doi.org/10.5755/j01.sace.8.3.7150>

Novelty of the research presented in this paper is highlighted by the fact that first time the road landscape perception of the representatives of cultures of the post-Soviet countries was compared: Lithuanian, Armenian, Russian, adding to them Turkish, Arabian and African cultures. Sociological survey based on the assessment of road landscape views according to 7-rank semantic differential scale was conducted to the respondents of all six cultures. Linear regression analysis let us build a regression model of the hedonomic road landscape for each culture. The results demonstrate quite considerable differences in landscape perception by the Turkish, Arabian and especially African respondents comparing them to the Lithuanian, Armenian and Russian cultures. While landscape perception of the Lithuanians, Armenians and Russians also differs from each other in the group of the analysed post-Soviet cultures. The most contrast and different results are derived from the analysis of African culture.

**KEYWORDS:** aesthetic, culture, hedonomic, landscape, road.

## Introduction

The perception of landscape by different cultures has been analysed since the middle of 19080s, mostly concentrating on comparison of landscape preference consisted of cross-cultural correlations of preference ratings for the same sample of settings (Herzog et al. 2000). The correlations were high for the similar cultures (Americans, Europeans or Australians) and lower for different cultures (for instance, Americans and Indians) (Kaplan and Herbert 1987, Kaplan and Kaplan 1989). Later B. Yang and R. Kaplan (1990) investigated Korean, Japanese and Western landscape styles (all observed in Korea) in terms of Korean and Western people, finding subtle differences in landscape perception. A group of researchers analysed the perception of Australian natural landscapes by American and Australian respondents, finding that preference correlations were generally high, and yielding six perceptual categories (vegetation, open smooth, open coarse, rivers, agrarian, and structures) (Herzog et al. 2000). C. Priego with colleagues analysed perception, use and behavior of people from Chile, Germany and Spain in various urban landscapes, concluding that „people of different social and cultural backgrounds use and perceive urban landscape in different ways“ (Priego et al. 2008). T. Schoenberg (2008) investigated differences and similarities in perception of landscape photographs between American-English, Spanish-Catalan and Russian speakers. In the research of the hedonomic road landscape I. Matijosaitiene (2011) states that visual perception of landscape and factors



influencing its hedonimcs may differ for the representatives of different cultures and countries. The differences in landscape perception can be revealed in different social groups: age, ethnicity, place of residence (urban or rural), gender, education (high or elementary school), occupation etc. In our research we concentrate on cultural groups of people as an object of the research. The novelty of this research is highlighted by the fact that cultures of three post-Soviet countries have been analysed: Lithuanian, Armenian and Russian, adding to them Turkish, Arabian and African cultures.

For the identification of cultural differences (or similarities) in landscape perception by the representatives of different cultures sociological survey was conducted in three countries, where the data was collected about six cultures. Sociological survey was organized in April, 2014. Students from universities in Lithuania (representatives of Lithuanian culture), Turkey (representatives of Turkish culture) and Russia (representatives of Armenian, Russian, Arab and African cultures) of the age 20-26 years were the respondents. Since the task of this research is to analyse and compare as more cultures as possible the particular cultures were chosen as the authors of the paper were able to collect reliable data from the proper representatives of these cultures. The respondents of all six cultures were surveyed using the same questionnaires. The number of Lithuanian respondents N=50 (84% males and 16% females), Turkish respondents N=50 (66% males and 34% females), Armenian respondents N=59 (44.5% males and 55.5% females), Russian respondents N=55 (50.9% males and 49.1% females), Arab respondents N=58 (51.7% males and 48.3% females), African students N=24 (62.5% males and 37.5% females). It is worth to mention that Arab students are from Syria and Palestine, and African students are from Nigeria, Zimbabwe, Zambia, Angola.

The survey questionnaire consists of sixteen pictures of road landscape and questions for each picture. Landscape views of Lithuanian national road No 140 Kaunas-Šakiai were selected for the survey because of the higher variety of landscape on this road. Questions consist of six pairs of bipolar landscape assessment criteria (landscape describing words), which are represented in the scale of semantic differential. The semantic differential scale 0-1-2-3-4-5-6 was used, where 0 means the most negative opinion (for example, 'very nasty'), and 6 means the most positive opinion (for example, 'very pleasant'). Landscape assessment criteria were selected with reference to the previous researches (Matijosaitiene 2014), where hedonomic road landscape (a landscape which provides its users joy, happiness and pleasure while driving the road) was identified as natural, relaxing, and willing to drive. To these criteria we added three criteria which are important and often used for the visual analysis of landscape: pleasant, provides positive emotions, and arouses. Having in total six criteria, we made of them bipolar word pairs which were used in our research to measure respondents' emotions about viewed road landscape.

The research was conducted in two steps. First, respondents answers about each landscape view separately and all views in general (the whole road) have been analysed separately for males and females of each culture. In this way, according to each landscape assessment criteria the best assessed landscape view for females and males was identified. Then comparing of average values of females' and males' answers gave us a deeper understanding of cultural differences in females' and males' landscape perception. Second, the regression model for hedonomic road landscape for each culture was built, based on both males' and females' answers. The derived regression models of hedonomic road landscape for each culture are not very accurate and are not suitable for prediction and identification of hedonomic roadscape in general for a certain culture due to a little number of independent variables used. Though, these regression models are built only for the comparison of landscape perception in different cultures. SPSS software was used for the data analysis and building the regression models.

---

## Methods

## Results

### Visual quality of landscape

Analysing every landscape view according to each criteria for all six cultures let us clearly see the differences in landscape perception. For the comparison of landscape perception in different cultures roadscape views which were assessed as the best according to each criteria are presented in the table 1. We see that the major part of males and females of all cultures prefer roadscape views with alleys of trees on the both sides of the road (views No 11 and No 13). Armenians, Russians and Arabs more positively accept driving through a not large urban environment (for instance, a small town or village) than people of other cultures. Lithuanians much more positively assess curvy (horizontally or vertically) roads. Arabian respondents more positively assess views which are vertically closed by natural or anthropogenic objects. For the representatives of all cultures, except Africans, landscapes with electric transmission lines and massive poles and other objects which are visual trash in the environment are the least favourable. Moreover, in the most of cases respondents assess the same two views as the best (both views with alleys of trees on the both sides of the road), except Turkish and Arabian preference of the second best view which differs from other cultures', and except Africans who assess these two views as the least preferable. Also respondents of almost all cultures, except Africans, assess the same two views as the worst (both views with not nice engineering infrastructure objects) if comparing assessment to all six criteria, while the visual preference between the best and worst assessed views differs among the cultures. The most similarities we observed in roadscape perception by the Turkish and Arabian respondents, also Armenians and Russians have many common points of view. African landscape perception is the most different from all observed cultures: for instance, views which are less preferable for other cultures are the most preferable for the Africans, and the views which are the least preferable for other countries seem to be pleasant for the African respondents.

**Table 1**

The best views of road landscape according to six landscape assessment criteria (based on respondents' opinion). Here F means females, and M means males

The best views of road landscape (according to the respondents' opinion)	Pleasant - Nasty	Provides positive emotions - Provides negative emotions	Arouses - Makes me sleepy	Natural - Artificial	Relaxing - Stressing	Willing to drive on this road - Not willing to drive on this road	Respondents of different cultures
 View No 1					M		African
	F	F					Turkish
 View No 2						F	Arabian
	M	M	M	M		M	African
 View No 2-1			M				African

View No 4							African	
				M				
View No 6	F	F	F		F	F	Russians	
View No 9							Arabian	
						M		
View No 10	F	F	F	F	F	F	African	
View No 11				F	F	F	Lithuanians	
		M			M	M		
		F	F	F	F	F	Turkish	
	M	M	M	M	M	M		
		F		F		F	Armenians	
	M	M	M	M	M			
		M	M		M		M	Russians
		F	F	F	F			
		M	M	M	M	M	M	Arabian
		F		F				
View No 12			M	M			Lithuanians	
View No 13						M	Armenians	
		F		F				
View No 14-2	M						Lithuanians	
		F		F				
						M	Armenians	
				F				
View No 17			M		M		Russians	
		F						
View No 14-2		F					African	
View No 17	F						Arabian	

Comparing the average rates of all landscape views assessed by the representatives of four different cultures (table 2), we see that Turkish males and females gave the lowest rates according to all six landscape assessment criteria, and both Arabian and African males and females gave the highest rates. The Armenians given rates are also significantly higher than Russians, Lithuanians and Turkish.

**Table 2**

.Average values of landscape assessment for all views according to six landscape assessment criteria. Here A means Pleasant-Nasty, B means Provides positive emotions-Provides negative emotions, C means Arouses –Makes me sleepy, D means Natural-Artificial, E means Relaxing-Stressing, F means Willing to drive on this road-Not willing to drive on this road

	A	B	C	D	E	F
<b>Lithuanian</b>						
Females	4.39	4.30	3.94	3.94	4.07	4.03
Males	4.25	4.20	4.12	3.95	4.17	4.16
<b>Turkish</b>						
Females	3.38	3.25	3.00	3.50	3.24	3.21
Males	4.04	3.82	3.56	3.95	3.70	3.83
<b>Armenian</b>						
Females	4.81	4.76	4.63	4.78	4.66	4.71
Males	4.88	4.74	4.71	4.69	4.60	4.78
<b>Russian</b>						
Females	4.39	4.35	4.17	4.41	4.17	4.23
Males	4.50	4.38	4.30	4.17	4.29	4.30
<b>Arabian</b>						
Females	5.33	4.96	4.88	4.93	4.88	4.92
Males	5.17	4.80	4.73	4.73	4.75	4.80
<b>African</b>						
Females	5.02	4.89	4.83	4.78	4.85	4.98
Males	5.06	4.97	4.91	5.00	4.88	5.01

Further analysis of the data demonstrates the slight differences in females and males assessments in Lithuanian, Armenian, Russian, Arab and African cultures: 0.07-0.24 difference in points when females give higher values for landscape views than males, and 0.01-0.18 when males give higher values than females. Russian females assess landscape higher than males only in one criterion of six, Lithuanian females assess landscape higher than males in two criteria, and Armenian females assess landscape higher than males in three criteria. Arabian females assess landscape views better than males in all six criteria. That is absolutely opposite to Turkish assessment. That is due to in the Arabic culture females are more dominant, and the decisions are taken on the condition of a woman's approval. The Turkish and African females assess the views lower than males in all six criteria. In Turkish culture we observe quite high difference of 0.47-0.63 points between females and males assessments, moreover, Turkish males assess observed landscape much better than Turkish females according to all six assessment criteria. In Turkish culture observed high difference of 0.47-0.63 points between

females and males assessments can be explained with a hidden word “patriarchal”. Nowadays, the modernity shows that also ladies drive but a majority part of the people think that females don’t drive the car while a male is in this vehicle. Of course this has to be understood as a family relation. And in the African culture, the women are more tensed, being under pressure of responsibility of being perfect and constant struggle for things. Also in African culture males are more active in life, more outgoing and having I-want-to-know-everything attitude, whereas ladies are more concentrated on their thoughts and their goals. Added to this, the Africans still live in the society where men are dominant.

In all six cultures, except Arabs, females express less willingness to drive on the road in comparison with males, and the landscape makes females of all six cultures, again except Arabs, sleepier than males. Also Lithuanian, Turkish, Russian and African females find the analysed road landscape more stressing, than males. This can be explained by the insights into the beginning of driving era in these cultures, where males were playing the main role for many years, and therefore males are more used to drive and feel less stress while driving. Comparison of other criteria, which are related more with aesthetical value of landscape (A, B and D columns in the table), shows us that Lithuanian and Arabian females are keen to see landscape as more pleasant, for Lithuanian, Armenian and Arabian females landscape provides more positive emotions than for males, also Armenian, Russian and Arabian females see landscape as more natural than males of the same cultures.

### Identification of hedonomic landscape for each culture

According to the six landscape assessment criteria the regression equation describing hedonomic road landscape was composed. The application of the multiple linear regression analysis leads to one regression model for each culture (table 3). For Lithuanian culture one regression equation was selected of three regression models, for Turkish, Armenian, Russian and African

Constant	Provides positive emotions	Arouses	Natural	Relaxing	Willing to drive on this road
<b>Lithuanian</b>					
0.742	0.626		0.121	0.094	
<b>Turkish</b>					
0.397	0.505	0.154	0.110		0.178
<b>Armenian</b>					
0.682	0.625		0.253		
<b>Russian</b>					
0.477	0.585	0.082	0.059		0.189
<b>Arabian</b>					
0.445	0.429	0.297			0.199
<b>African</b>					
1.326	0.186	0.316		0.157	0.113

**Table 3**

Regression models expressing hedonomic road landscape for each culture.

cultures one regression equation was selected of four regression models, for the Arabian culture one regression equation was selected of five regression models. According to the ANOVA and Coefficients tables (calculated by the IBM SPSS software) we find the point estimates for each regression equation. Also the statistical acceptance of the coefficients of all analyzed cultures' models was estimated ( $p$ -value shall not have to exceed  $\alpha=0.05$ ). Then the coefficient of determination  $r^2$ , the adjusted coefficient of determination  $r^2$  adj and the non-standardized coefficient B as well as the variables, which influence hedonomics of road landscape were identified. The linearity of the regression equation selected for all the road landscape is approved (according to ANOVA  $p=0.000<0.05$ ). The hypothesis that the coefficients are equal to zero was rejected ( $p=0.000<0.05$ ).

The regression model derived for the Lithuanians demonstrates that the respondents consider the roadscape to be hedonomic if it provides positive emotions, if it is natural and relaxing. Also we see that the constant in the regression model for the Lithuanians is quite high 0.742. It means that it does not explain the dispersion of all the variables that is why the remaining part of the factors determining the hedonomics of the road landscape remains unknown for us.

Turkish respondents see hedonimic road landscape as providing positive emotions, arousing, natural and willing to drive.

For the Armenians hedonomic road landscape associates with the landscape which provides positive emotions and is natural. Though, on the other hand, the large constant 0.682 in the regression model does not explain the dispersion of all the variables, that means that might be more factors influencing the hedonomics of road landscape in the Armenian perception but these factors remain unknown for us.

In Russian culture hedonomic road landscape is associated with the provision of positive emotions, landscape naturalness, willingness to drive on the road, and with the landscape ability to arouse (not to make a human sleepy).

Hedonomic road landscape for the Arabs means that it should provide positive emotions, be arousing and willing to drive on this road.

For the Africans hedonomic road landscape associates with positive emotions, willingness to drive on the road, if a roadscape is arousing and relaxing. Though, the constant in the regression model for the Africans is very high 1.326. From that we can conclude that the big part of the factors determining the hedonomics of the road landscape are still unknown.

The linearity of all four regression equations is approved (according to ANOVA  $p=0.000<0.05$ ). The hypothesis that the coefficients are equal to zero was rejected ( $p=0.000<0.05$ ), it means that the regression lines are suitable for making predictions. In order to assess the accuracy of the compiled predictions the histograms of the standardized residuals were drawn for each culture together with the diagrams of the standardized residuals P-P. The conclusion was derived that the histogram of the standardized residuals is harmonized with the normal distribution curve in all the cases. The absence of the autocorrelation was approved (for Lithuanians Durbin-Watson=1.927, for Turkish Durbin-Watson=1.818, for Armenians Durbin-Watson=1.919, for Russians Durbin-Watson=1.962, for Arabian Durbin-Watson=2.002, for African Durbin-Watson=1.951), as well as the absence of multicollinearity (for the Lithuanians the highest value of VIF is 2.681, for the Turkish the highest value of VIF is 2.306, for the Armenians the highest value of VIF is 2.959, for the Russians the highest value of VIF is 3.195 for the Constant, for the Arabs the highest value of VIF is 3.855 for the Constant, for the Africans the highest value of VIF is 2.073 for the Constant).

---

## Discussion

Linking the theoretical and practical results of this research it can be stated that there is definitely the difference in landscape perception by the representatives of different cultures. The reasoning under such a difference in landscape perception between the Armenians and the Russians lies in the cultural peculiarities and the climate. The Armenians have always lived in big spacey houses in rural areas next to the rocks and mountains with fresh air to breathe and the sun to warm them up, i. e. everything that lets you enjoy the life and gives a chance to contemplate over the creation and the beauty of the world. Love for aesthetics come genetically, in this case. The Russians, on the other hand, mainly prefer to live in smaller houses or flats in a city with the developed infrastructure. In such a case, being more practical, the Russians didn't really have time to stay on their own and mediate on the essence of life. Though living in a mixed multicultural society and being influenced by the Eastern perception of the beauty, there is an obvious tendency for a change which might be well displayed by the little difference in landscape perception. The conception might also be proved by the comments of the interviewers. For example ladies of the Armenian origins contemplated a lot on their feelings concerning every picture offered and were trying to figure out in what conditions they would feel happier and more comfortable. Among the Russians, instead, there were many people commenting what a useless thing it was to evaluate the pictures that were so similar to each other. Trying to explain the low assessment of the Turkish respondents' might have a look into their landscape which is so different from above mentioned cultures, and the social economic situation in the country. In Turkey there are lots of historical places, scenic beauties and you may come across all seasons. Turkey is a big country as an area so you may find both rocks and mountains with fresh air and seas with sun to warm up. Like other countries people Turkish people also like to visit these wonderful places, however, both poverty and high oil prices are the reasons for taking the lowest rate among the other countries. The interviewers are from a public university and their families are not well-paid. In addition, turkey has the highest gasoline and diesel prices in the world due to the high taxes and profit margins in the country. And the Lithuanians, for example, used to see mostly flat landscape of their country. That is why at least a bit hilly or curvy landscape arouses more positive emotions for them than flat, spacious landscape with no visual dominants in the field of view.

It can be stated that difference in landscape perception is a very psychological thing that also lies in cultural background of the respondents. As we have noticed, the results have revealed that the richer (the more prosperous, well-off, developed) the country (culture) is, the less happy they are with the landscape views. The less prosperous country, the more positive are the respondents. Here we go back to the Russian's greatest authors Griboedov's (1831) words "The Misery of having a Mind". This is the greatest disaster of the developed countries. The more they search for something new and different, the less happier they are. The dissatisfaction comes from the feeling of incompleteness, from being constantly in search of something better, in most cases they don't even know what they are searching, they want to be happy but because they have everything in redundancy and they have a wide range of choice to make, they get lost. The representatives of above mentioned cultures from the richer countries spend too much time thinking, evaluating and choosing which view is better or how it makes them feel, they get annoyed very quickly like those people who want to have the best things but cannot make up their minds what is the best that they want. With poorer countries, the situation is very different. They don't have such issues of making a choice, they watch things on the TV and sincerely believe that a better environment or better opportunities can make a person happy. In such countries people strive for the living, they live a life, today's moment, they don't have security in tomorrow's future, thus, the only thing that is left is to enjoy the moment. So when they see anything beautiful they don't give it a long thought,

they sincerely appreciate it and its beauty. Considering the poor condition in the observed Arab and African countries, it becomes obvious that they would love to have such beautiful landscape and greenery in their countries. Another explanation is the rule of the developing nations that are developing much faster and striving for a more beautiful and luxurious life than the developed ones. The explanation lies in the subconscious understanding of the developing population that since they grow upper in their social status they are so much afraid of being back to the poor life that they use every opportunity to enjoy the moment and strive for surrounding themselves with much better and more beautiful stuff than the developed nations. This can be referred as the “complexes” of the lower class representatives. And obviously, it's clear then that females have a more positive attitude towards the landscape view. They are not that much sophisticated when it comes to the landscape, when females look into the pictures they see and evaluate the beauty of the nature, they are more relaxed than the males. Whereas when the males are looking into the pictures, they imagine driving on this road which correlates with the feeling of responsibility for the lives of people in the car or their beloved, thus they are more tense.

Talking about regression models, they would be more accurate and suitable for prediction if we use more independent variables (bipolar pairs of words) for the linear regression analysis. As an example, I. Matijosaitiene (2014) used fourteen pairs of bipolar groups for the identification of hedonomic road landscape in Lithuania, and she got a different expression of hedonomic roadscape, which was derived as natural, relaxing, and willing to drive. Though, in this research our goal was not to build the detailed and accurate model of hedonomic road landscape, but rather to identify (or not) the differences in landscape perception for the representatives of different cultures. Our built regression models do demonstrate that differences, which might be deeper analysed in the future research.

---

## Conclusions

This study shows that in general people of Lithuanian, Turkish, Armenian, Russian, Arabian and African cultures prefer more natural road landscape instead of landscapes with gnarly form and view of engineering infrastructure objects (such as electric transmission line, their poles etc.). The preference of specific types of landscape in the observed groups of respondents depends on cultural background and traditions, landscape in the origin country of a respondent which he used to see for many years, also the economic situation in the country plays a role (Turkish, Arabic and African cases). Due to these factors (and also to other factors which we did not take into account in this study, and which remain unknown in the regression models) Turkish people give the lowest points to the observed Lithuanian road landscape, and Arabian, African as well as Armenian people give the highest. There are also observed differences in the group of post-Soviet cultures – Lithuanian, Armenian, Russian. Though, comparing them to Turkish, Arabian and especially African perception, differences seem insignificant between each other, and significant comparing to the Turkish, Arabs and Africans. Due to the driving culture in general (that man was the beginner in the driving the car) females of all countries, except Arabs, give lower points than males while assessing roadscape according to the criteria related to driving (i. e. Willing to drive, Arouses, and Relaxing partially except the Armenians). Also due to the traditions of the “patriarchate” in Turkish families Turkish females assess roadscape lower than males according to all analysed criteria. In the same way African males assess roadscape better than females in all six criteria due to the fact that in African cultures males are still dominant.

Herzog T.R., Herbert E.J., Kaplan R., Crooks C.L. 2000. Cultural and developmental comparisons of landscape perceptions and preferences. *Environment and behavior*, 32(3), 323-346.

<http://dx.doi.org/10.1177/0013916500323002>

Griboedov A. 1831. The miery of having a mind. Kiev. IBM SPSS Statistics 20.

Kaplan, R., Kaplan, S. 1989. *The experience of nature: A psychological perspective*. New York, Cambridge University Press.

Kaplan R., Herbert, E.J. 1987. Cultural and sub-cultural comparisons in preferences for natural settings. *Landscape and urban planning*, 14, 281-293. [http://dx.doi.org/10.1016/0169-2046\(87\)90040-5](http://dx.doi.org/10.1016/0169-2046(87)90040-5)

Matijosaitiene I. 2014. *The Principles of Modelling of Hedonomic Road Landscape (Lithuania Case Study)* // *Landscape research*. In press.

Matijosaitiene I. 2011. *The principles of formation of the hedonomic road landscape*. Kaunas, Technologija.

Priego C., Breuste H.-J., Rojas J. 2008. Perception and value of nature in urban landscapes: a comparative analysis of cities in Germany, Chile and Spain. *Landscape online*, 7, 1-22. Available at: [http://www.landscapeonline.de/archive/2008/7/Priego\\_etal\\_LO7\\_2008\\_Animation.pdf](http://www.landscapeonline.de/archive/2008/7/Priego_etal_LO7_2008_Animation.pdf) (accessed 9 May, 2014).

Schenberg T.B. 2008. Differences and similarities in perception of landscape photographs between American-English, Spanish-Catalan and Russian speakers. Ann Arbor, ProQuest. Available at: <http://books.google.lt/books?id=PnQr2pZ4XXwC&printsec=front-cover&hl=lt#v=onepage&q&f=false> (accessed 9 May, 2014).

Yang B., Kaplan R. 1990. The perception of landscape style: a cross-cultural comparison. *Landscape and urban planning*, 19(1990), 251-262.

[http://dx.doi.org/10.1016/0169-2046\(90\)90024-V](http://dx.doi.org/10.1016/0169-2046(90)90024-V)

## References

### **IRINA MATIJOŠAITIENĖ**

#### **Assoc. Prof. Dr.**

Kaunas University of Technology, Faculty of Civil Engineering and Architecture, Department of Architecture and Land Management

#### **Main research area**

Urban and road landscape, space syntax, Kansei engineering, hedonomics, ergonomics, statistics

#### **Address**

Studentu st. 48  
LT-51367 Kaunas, Lithuania  
Tel. +370 37 300 456  
E-mail: irivarl@yahoo.com  
irina.matijosaitiene@ktu.lt  
irina.matijosaitiene@yale.edu

### **OKYAY UCAN**

#### **Assistant Prof. Dr.**

Nigde University  
Faculty of Economics and Administrative Science,  
Department of Economics

#### **Main research area**

Econometrics and Statistics

#### **Address**

Nigde University  
Bor-Nigde Yolu  
Iktisat Bolumu, No:328  
Nigde, Turkey.  
Tel.: +90 532 4732448  
E-mail: okyayu@hotmail.com

### **ARMENUI MINASYAN**

#### **Dr.**

Peoples' Friendship University of Russia, Faculty of Philology, Department of Linguistics

#### **Main research area**

Sociolinguistics, language and national identity, language and cultural studies

#### **Address**

Miklukho-Maklaya st. 6  
117198 Moscow, Russia  
Tel.: +7 967 1199838  
E-Mail: arminae\_minasyan@mail.ru  
dr.a.minasyan@gmail.com

## About the authors