Research Article

Image Analysis as the Means of Cultural Representation Study in a Worldview

Ekaterina S. Balandina✉, Tatiana Yu. Peredrienko

South Ural State University (National Research University),
76, пр. Ленина, г. Челябинск, 454080, Russian Federation
✉ ebalandinaes@susu.ru

Abstract. The purpose of the article is to present the methodology of image analysis as the means of cultural representation study in a worldview on the example of the image "work". The research is based on the idea that any phenomena of reality perceived by a person in the process of activity and communication are revealed in his mind through images. These images record not only causal and spatial relationships of phenomena and emotions in the process of perception, but also can be characterized by a certain social and ethno-cultural peculiarities, dynamism and variability. The images connected with real-world objects are studied through the mixed methods research including the associative experiment and gradual scaling. Associative fields constructed in the course of the experiment allow analyzing images from linguistic and psycholinguistic points of view according to the formal-grammatical features of the received responses, contiguity — similarity classification, and semantic field grouping. The experiment was organised between the equal number of Russian, Chinese and Arabic students of 20—25 years old. The interest to study this age group is explained by the fact that it is young people who form the future of any country and society in general. To study the perception of the image "work" the respondents were asked to fulfill the questionnaires in their native languages where they were to write the first association that came to their mind when they saw the word-stimulus. All responses presented in the article were translated into the English language. In conclusion, the authors summarise the received results, describe the complex structure of various associative pairs, and identify differences and similarities in the perception of the studied image in worldviews of various culture representatives.

Key words: worldview, associative experiment, associative fields, reactions

ЯЗЫКОВАЯ СИСТЕМА

Анализ образа мира как средство изучения репрезентации культурных особенностей

Е.С. Баландина✉, **Т.Ю. Передриенко**

Южно-Уральский государственный университет
(Национальный исследовательский университет),
Российская Федерация, 454080, Челябинск, пр. Ленина, 76
✉ ebalandinaes@susu.ru

Аннотация. Описана методология исследования образов, сложившихся в языковом сознании, на примере анализа образа «работа». Основой данного исследования послужило положение о том, что все воспринимаемые человеком образы обладают определенной этнокультурной обусловленностью и вариативностью. Материал для проведения исследования был получен в ходе свободного ассоциативного эксперимента. Детальное изучение ассоциативных полей, сформированных на основе полученных результатов, позволило провести сравнительно-сопоставительный анализ образа «работа» в языковом сознании носителей русской, китайской и арабской культур. Реакции, выделенные респондентами, были классифицированы по смежности и сходству, а также в соответствии с формально-грамматическими признаками и семантическими особенностями. Сделан вывод об эффективности предложенной методологии анализа ассоциативных полей, раскрыта специфика образа «работа», сложившегося в языковом сознании носителей трех разных культур, а также выделены ключевые сходства и различия восприятия анализируемого образа.

Ключевые слова: образ мира, ассоциативный эксперимент, ассоциативное поле, реакции

Introduction

Any person is a representative of a certain culture that reflects in his mind [1]. It means that his consciousness is seen as the subjective awareness of any momentary experience placed in a personal memory [2]. Various images and representations are formed in the worldview under the influence of a given culture thus constructing the cultural worldview that is understood as a belief system about one's culture [3]. Differences in national consciousness are the main causes of misunderstanding in intercultural communication as any dialogue takes place only in the consciousness of a particular culture representative and reflects the particular images existing in it [4]. Moreover, different lingua cultures have different realizations of the world [5].

A person perceives the world through different images that are constructed under the influence of subjective tendencies, ideals and interests [6]. All images existing in the

worldview are combined through different associative connections in human consciousness. The set of images develops a unified worldview reflected in the consciousness in the form of a complete multilevel system of person's ideas about the world [7]. A worldview verbalizes the practical involvement of a person in the world and is connected with the real conditions of his social and individual life [8].

A relevant trend in the psycholinguistic application is the creation of the Associative dictionaries [9], Russian Associative Dictionary [10] which can be treated as the unique research tools helping to describe the ordinary consciousness of native speakers.

Nowadays it is becoming clear that humanity is developing along the path of expanding interconnections between different countries, people and cultures. The expansion of such interaction makes the issue of national identity, cultural differences and similarities especially urgent [11]. In this regard, scientists start to relate their studies to the research of ethnic worldview and in particular individual images, based on which one can trace the dynamics of life values.

The youth is a group, distinguished by its age between childhood and adulthood and special social status. The interest to study this group of society is explained by the fact that it is young people who form the future of any country and society in general. Therefore, while analyzing life values among the youth it is possible to highlight the real hierarchy of value orientations and identify, the degree of their adaptation to social conditions and innovative potential [12]. Moreover, the problems of reality reflection and ways of its representation in linguistic consciousness seem to be important in the sphere of linguistic fundamental research.

Material and Methods

The material for our research was gathered by means of the questionnaires that were organised simultaneously among the equal number of Arabic, Chinese and Russian male and female students. The equal number of male and female participants is considered to be the most important aspect of the experiment organization to exclude gender influence. These nationalities were chosen according to the educational environment of the region where the experiments were organised. At the moment Russia, China and Iraq have strong and close collaboration in many spheres including the educational one. Today many students from China and Iraq get higher education in Russian universities. Thus, the analysis of differences and similarities of the worldviews is important to build strong relations not only in the field of education but also in business, technology, etc.

In the first stage of our research, the main task was to get the general picture of value orientations among students of three chosen cultures. Twenty students from each group (10 male and 10 female students) were asked to choose from the given list of words five most important values and place them according to the order where '1' is the most important and '5' is the least important value from their point of view. Therefore, we applied the method of gradual scaling by asking the participants to identify alternative semantic spaces by assigning words of one semantic group to numbers [13]. The application of this method helped us to assess the position of the chosen image among important life values.

On the next stage, we used the associative experiment, which is considered to be one of the most effective means of collecting information about the language and consciousness [14—18]. From the point of view of I.G. Beskorovainaya, it allows to analyze the worldview and cultural specificity of images existing in it and to reveal the mental lexicon, verbal memory, cultural stereotypes of any person [19]. Moreover, the associative experiment is considered to be the most developed technique of psycholinguistic analysis of speech semantics [20].

The experiment was organised between the equal number of Russian, Chinese and Iraqi students of 20—25 years old. The respondents were given approximately 15 minutes to fulfill the list of 100 words written in their native languages. The time limit allows getting the unconscious reactions as the time interval between stimulus and reaction was minimized. So the interviewees could not think of what to say and how the concept of association excludes the idea of answer-selection. We also asked students to point their age, sex and nationality to exclude the respondents that don't meet the criteria of the chosen youth group. As a result, we managed to construct three associative fields of 100 reactions.

Results

The participants of the gradual scaling experiment mentioned "work" in their Social Value Lists. Table 1 Social Value List presents the received data (the percentage is ≥80).

Table 1

Social value list

Arabic students	Chinese students	Russian students
Motherland	Motherland	Family
Respect	Family	Independence
Family	Nature	Money
Money	Work	Work
Work	Career	Health

It is seen that work is included in a group of important life values. Therefore, the methodology of image analysis can allow studying the perception of work and its role in the life of young people. As a result, we constructed three associative fields consisting of approximately 100 reactions. The figure in round brackets shows the number of respondents who gave the same association. Among the received answers we can distinguish frequent (nuclear) reactions that comprise nearly 46—49% of all responses, and less frequent ones which can help to generalize the perception of the studied image.

The analysis of the image "work" in the worldview of arabic students

Work *job* (18), *money* (14), *life* (10), *hard* (7), *future* (6), *do* (5), *responsibility* (4), *much* (4), *duty* (4), *independence* (2), *many* (2), *success* (2), *important*, *weekday*, *everything*, *tired*, *die*, *trying hard*, *computer*, *good*, *innovation*, *effort*, *necessary*, *doctor*, *position*, *earning*, *continue life*, *boundaries*, *getting money*, *pain*, *saving your life*, *tiredness*, *respect*, *work* (1).

The presented associative field consists of 100 answers, with 34 different responses, where the diversity coefficient (Kp) equals to 0,34 (Kp was calculated according to the formula: Kp = B÷A, where A is the number of reactions, B is the number of different reactions).

The characteristic of reactions implies the analysis of their formal-grammatical features. In the given associative field, four main types of reactions can be selected. The first one is the verbal reaction *do* (5). The second type is the reactions in the form of word-combinations *continue hard, trying hard, getting money, saving your life* (1). The third type combines word-forms that are adjectives *much* (4), *many* (2), *important, necessary, good* (1). Finally comes the most numerous group of answers — nominative reactions *job* (18), *money* (14), *life* (10), *future* (6), *responsibility* (4), *duty* (4), *independence* (2), *success* (2).

On the next step, all the reactions can be classified according to contiguity and similarity. Contiguity reactions are the associative pairs that do not have common essential features in content. A variety of these associations comprises the so-called thematic associations: reaction of result *money* (14), working day reaction *weekday*, the importance of working process *everything*, metaphorical hardship *die*, elements of work *computer, innovation*, positions *doctor, position*, borders *boundaries* (1).

The similarity associations imply common lexical meanings. These answers are subdivided into determination and classification groups. The determination group includes reactions of difficulty *hard* (7), amount *much* (4), *many* (2); necessity *important, necessary* (1), personal attitude *good* (1) and a verbal reaction *do* (5). Classification reactions are the pairs that have at least one common essential feature in their contents (a process of working): *job* (18), *duty* (4), *earning, trying hard, work, getting money* (1).

In addition to the mentioned types of reactions, the mediated answers are distinguished in which the response has no direct connection with the analysed image. The relationship with the stimulus can be viewed only through a third, usually not formally expressed, member. Schematically, it can be represented as S [X] — R: work (through the third member — human being) *life* (10), *future* (6), *responsibility* (4), *independence* (2), *success* (2), *pain, tiredness, respect, effort, continue life, saving your life, tired* (1).

The most frequent reactions from the Arabic students that comprise the base for the image "work" are the relative synonym *job* (18), the result of the work *money* (14), the reflection of necessity *life* (10) and reflection of difficulty *hard* (7). The received data let us select several semantic groups to enlarge our knowledge concerning the perception of the analysed image. The calculations were carried out according to the formula $x = (A{\times}B)/100$, where A is the total number of reactions, and B is the number of received reactions in any semantic group.

— Semantic group of reactions based on relative and contextual synonyms (21%): *job* (18), *getting money, earning, work* (1);

— Semantic group of difficulty (20%): *hard* (7), *much* (4), *many* (2), *tired, die, trying hard, effort, pain, boundaries, tiredness* (1);

— Semantic group of necessity (20%): *life* (10), *future* (6), *necessary, continue life, everything, saving your life* (1);

— Semantic group of work results (19%): *money* (14), *independence* (2), *success* (2), *respect* (1);

— Semantic group of responsibility (8%): *responsibility* (4), *duty* (4);

— Semantic group of every-day associations (8%): *do* (5), *weekday*, *innovation*, *computer* (1);

— Semantic group of position reactions (2%): *doctor*, *position* (1);

— Semantic group of attributive reactions (2%): *good*, *important* (1).

The results presented above show that the most significant semantic groups include the group of reactions based on relative and contextual synonyms, the group of work results and the groups of difficulty and necessity. The given semantic groups illustrate that for Arabic students the image "work" is associated with money that they have to earn to provide their future and save a life. "Work" takes much effort and can be rather tiring and difficult. The general connotation of the studied image is neutral and sometimes negative. It is explained by the fact that at the moment of organising the experiment all the respondents were students who had no opportunity for their full realization in work and have strong confidence that doing it is not an easy thing. Nevertheless, they understand that work can bring not only money but also independence, success and respect. However, it should be noticed that the financial side of this process prevails over the emotionally valuable one that is proved by the number of positive attributive reactions.

The analysis of the image "work" in the worldview of Chinese students

Work *hard* (23), *job* (9), *tired* (7), *worker* (7), *homework* (4), *boring* (4), *busy* (3), *money* (3), *work hard* (3), *working* (2), *weekend* (2), *study* (2), *go*, *paper*, *salary*, *hardworking*, *together*, *rest*, *harder*, *weekday*, *get money*, *remarkable*, *devoted*, *exhausted*, *careful*, *write*, *not very happy*, *do*, *difficult*, *relax*, *workers*, *wage*, *colleague*, *doctor*, *time*, *learn*, *no panic*, *vocation*, *I don't like*, *more money without work*, *studying*, *much*, *cautious*, *earnest*, *tiring* (1).

The associative field of the image "work" consists of 102 answers, with 47 different responses, where the diversity coefficient (Kp) equals to 0,46.

The formal-grammatical division is illustrated by the verbs *do learn*, *write*, *go* (1), the adjectives *boring* (4), *busy* (3), *hardworking*, *remarkable*, *careful*, *cautious*, *much*, *earnest*, *tiring*, *tired*, *exhausted*, *devoted* (1), the adverb *together* (1), the nominative group *job* (9), *worker* (7), *homework* (7), *money* (3), *weekend* (2), *paper*, *salary*, *rest*, as well as the word combinations *work hard* (3), *get money*, *not very happy*, *more money without work* (1) and the reaction in the form of the sentence *I don't like* (1).

Determination group of similarity reactions can be presented by the adverb *together*, the adjectives of difficulty *hard* (23), *boring* (4), *difficult*, *careful*, *tiring*, *much* (1) and the adjectives of importance *remarkable* (1), the verbal reactions *do*, *go*, *learn*, *write* and the word combination *to work hard* (3). Classification reactions include relative and contextual synonyms *job* (9), *get money* (1) and a thematic group of reactions joined together by common contextual associations within the sphere of education *homework* (4), *study* (2). Contiguity reactions are illustrated by the work participants *worker* (7), *workers*, *colleague*, reactions of result *money* (3), *salary*, *wage*, time reactions *weekend* (2), *weekday*, *time*, reactions of activity *rest*, *vocation*, *relax* (1). Mediated answers include characteristics of a working person *tired* (7), *busy* (3) *hardworking*, *devoted*, *exhausted*, *cautious*, *earnest*, *not very happy*; reaction related to money *paper* and personal answers *no panic*, *I don't like*, *more money without work*.

The nuclear base of the associative field consists of the attributive reactions *hard (23)*, *tired* (7) and the nominative reactions *job* (9), *worker* (7) that indicate the general perception of the studied image. Semantic distribution of the answers can be illustrated by the following groups:

— Semantic group of attributive reactions characterising the analysed image (31%): *hard* (23), *boring* (4), *difficult*, *careful*, *tiring*, *harder*, *much* (1);

— Semantic group of attributive reactions characterising a person related to the image (16%): *tired* (7), *busy* (3), *hardworking*, *devoted*, *exhausted*, *cautious*, *earnest*, *not very happy* (1);

— Semantic group of the participants (10%): *worker* (7), *workers*, *colleague*, *doctor* (1);

— Semantic group of reactions based on relative and contextual synonyms (9%): *job* (9);

— Semantic group of thematic reactions joined together by common contextual associations within the sphere of education (9%): *homework* (4), *study* (2), *studying*, *learn*, *write* (1);

— Semantic group of action reactions (8%): *work hard* (3), *working* (2), *do*, *to go*, *get money* (1);

— Semantic group of work results (5%): *money* (3), *salary*, *wage* (1);

— Semantic group of time reactions (4%): *weekend* (2), *weekday*, *time* (1);

— Semantic group of personal reactions (4%): *no panic*, *not very happy*, *I don't like*, *more money without work* (1);

— Semantic group of activity reactions (3%): *rest*, *vocation*, *relax* (1);

— Semantic group of cooperation (1%): *together* (1).

The most numerous groups of attributive reactions of both types demonstrate not only the principal of general perception but also the attitude and the connotation of the studied image. Chinese students perceive "work" as something hard, tiring and difficult. Therefore, they gave a lot of personal answers that show the emotional spectrum of a worker *tired*, *busy*, *hardworking*, *exhausted*, *not very happy*, *I don't like*. These reactions can be characterised as negative in contrast to the minority groups of positive-neutral answers *devoted*, *cautious*, *earnest* and *no panic*. At the same time we can indicate that "work" is associated not only with a job and professional activities e.g. *doctor*, but is also related to the process of education *homework*, *study*, *studying*, *learn*, *write*.

The analysis of the image "work" in the worldview of Russian students

Work *money* (13), *job* (12), *favourite* (7), *salary* (7), *hard* (4), *interesting* (4), *house* (4), *not a wolf* (4), *boring* (2), *goal* (2), *routine* (2), *study* (2), *fatigue* (2), *duties* (2), *difficulties* (2), *no* (2), *life*, *interest*, *education*, *income*, *schedule*, *difficult*, *plant*, *hobby*, *joy*, *black*, *self-development*, *well-paid*, *perspective*, *task*, *fear*, *importance*, *constant*, *difficult*, *but necessary; happiness*, *activity*, *necessity*, *sadness*, *search*, *pleasure*, *responsibility*, *despondency*, *rest*, *earning*, *dreams* (1).

The associative field of the image "work" consists of 100 answers, with 45 different responses, where the diversity coefficient (Kp) equals to 0,45.

According to formal-grammatical classification, the distribution of answers can be presented in the following way. The first group is the reactions in the form of word-combinations *not a wolf* (4), *difficult*, *but necessary* (1). The second is the interjection *no* (2). Then come adjectives that characterise the word stimulus *favourite* (7), *hard* (4),

interesting (4), *boring* (2), *constant*, *difficult*, *black*, *well-paid*, *perspective* (1) and finally the nominative reactions *money* (13), *job* (12), *salary* (7), *house* (4), *goal* (2), *fatigue* (2), *routine* (2), *study* (2), *duties* (2), *difficulties* (2), *life*, *interest*, *education*, *income*, *schedule*, *difficult*, *plant*, *hobby*, *joy*, etc.

Classification reactions are presented by the most frequent reactions *job* (12), *earning* and answers *study* (2), *education* (1). Determination reactions are subdivided into attributive answers possessing the direct description of the analysed image from the position of interest *favourite* (7), *interesting* (4), *well-paid*, *perspective*, *constant* (1) and difficulty *hard* (4), *boring* (2), *difficult*, *black* (1). Contiguity answers are reactions of result *money* (13), *salary* (7), *income;* daily routine *routine* (2), *goal* (2), *duties* (2), *activity*, *schedule*, *search*, *task* (1); responsibilities and necessity *responsibility*, *importance*, *but necessary; necessity* (1); place *house* (4), *plant* (1); difficulty *difficulties* (2), *fatigue* (2), *fear*, *despondency* (1); activity *rest* and the element of a phraseological unit *not a wolf* (4). Mediated nominative answers related to the studied image by means of the third element (human being) can be illustrated by the following list: *no* (2), *life*, *hobby*, *joy*, *self-development*, *happiness*, *sadness*, *pleasure*, *dreams* (1).

The most popular reactions include the responses of result *money* (13), *salary* (7), the relative synonym *job* (12), and the positive attributive answer *favourite* (7). All the frequent reactions recorded in the associative field present the general perception of the image "work" that is verified by the selected semantic groups:

— Semantic group of work results (21%): *money* (13), *salary* (7), *income* (1);
— Semantic group of attributive reactions characterising the analysed image (22%):
positive (14%): *favourite* (7), *interesting* (4), *well-paid*, *perspective*, *constant* (1);
negative (8%): *hard* (4), *boring* (2), *difficult*, *black* (1);
— Semantic group of reactions based on the relative and contextual synonyms (13%): *job* (12), *earning* (1);
— Semantic group of daily routine (10%): *routine* (2), *goal* (2), *duties* (2), *activity*, *schedule*, *search*, *task* (1);
— Semantic group of difficulty (6%): *difficulties* (2), *fatigue* (2), *fear*, *despondency* (1);
— Semantic group of personal reactions (5%): *no* (2), *hobby*, *self-development*, *dreams* (1);
— Semantic group of feelings (5%): *joy*, *happiness*, *sadness*, *pleasure*, *interest* (1);
— Semantic group of place (5%): *house* (4), *plant* (1);
— Semantic group of necessity (4%): *importance*, *life*, *difficult*, *but necessary*; *necessity* (1);
— Semantic group of phraseological units (4%): *not a wolf* (4);
— Semantic group of reactions based on the thematic reactions joined together by common contextual associations within the sphere of education (3%): *study* (2), *education* (1);
— Semantic group of activity (1%): *rest* (1);
— Semantic group of responsibility (1%): *responsibility* (1).

The most important aspect of "work" for Russian students is its result *money, salary*. This allows to conclude that they are more concentrated on what they get then on the responsibilities and duties that they have to fulfill. Therefore, the respondents treat 'work' as an *interesting, well-paid, perspective* job or as a difficult necessity for *self-development*. Anyway, the general description of "work" is positive that can be proved by the distribution

of emotionally positive and negative answers. At the same time, the percentage of students, comparing work and study is relatively small. Thus, we can state, that Russian respondents associate "work" with their dream job, which can bring *joy, happiness, pleasure*, and of course *money*.

Conclusions

The given analysis shows the differences and similarities in the perception of the studied image. The general types of reactions from the formal-grammatical classification can be presented in Table 2 General types of reactions.

Table 2

General types of reactions (%)

Types of reaction	Work (Arabic students)	Work (Chinese students)	Work (Russian students)
Sentence reactions	–	0,9	–
Word combinations	4	4,8	5
Verbal reactions	5	5,6	–
Adjectives	9	44,5	22
Adverbs	–	0,9	–
Nouns	82	43,3	71
Interjections	–	–	2

The majority of responses refer to the inanimate models of speech synthesised in the experimental conditions where nomination and determination are considered to be the most typical types of answers. At the same time, the reaction strategies of Chinese students are characterised by more variability and diversity than other students' replies.

Placement of responses according to the level of relations among the elements can be illustrated by Table 3 Placement of responses according to the level of relations. The formula x = (A×B)/100, where A is the total number of reactions, and B is the number of received reactions in any group helped to reveal the percentage distribution of the reactions.

Placement of reactions is largely determined by the lexical and grammatical properties of the word-stimulus. Chinese students tend to use more associations based on the determination, which together with the classification reactions comprise the largest type of similarity responses. Russian interviewees describe the image mainly through the contiguity reactions, while Arabic students gave approximately equal number of answers that are included in various groups.

Table 3

Placement of responses according to the level of relations (%)

Level of relations	Work (Arabic students)	Work (Chinese students)	Work (Russian students)
Contiguity reactions	22	21	51
Similarity reactions (determination)	21	40	16
Similarity reactions (classification)	26	19	23
Mediated answers	31	20	10

In the last stage of the experiment, the main trends in the perception of the studied image were compared. Chinese and Arabic students associate "work" with a hard and difficult process that demands efforts. It should be mentioned that Chinese respondents describe the image not only in a direct way typical for Arabic interviewees but they also do it through the group of attributive reactions characterising the person who is related to the image. At the same time, they relate "work" not only to the process of earning money but also to the process of education. Arabic students treat "work" as a necessity without which they won't be able to live. They are more concentrated on responsibilities because the result of their work is not only money but also independence, success, respect. Russian students are more interested in the financial side and the benefits that they can get from work, rather than the opportunities for self-development and independence. Thus, the constructed associative field based on their answers is more positive in comparison to the Arabic and Chinese ones.

Summarizing, we can say that psycholinguistic analysis of image comparative study can allow scientists to open the hidden parts of consciousness of various culture representatives.

References

1. Zittoun, T., & Gillespie, A. 2015. Internalization: How culture becomes mind. *Culture & Psychology*, 21(4), P. 477—491. doi.org/10.1177/1354067X15615809
2. Johnson, K. 2008. *Quantitative methods in linguistics*. Wiley-Blackwell Publishing.
3. Matsumoto, D. 2006. Culture and Cultural Worldviews: Do Verbal Descriptions about Culture Reflect Anything Other Than Verbal Descriptions of Culture? *Culture & Psychology*, 12 (1), P. 33—62. doi.org/10.1177/1354067X06061592
4. Ufimtseva, N.V. Etnopsikholingvistika: vchera i segodnya [Ethnopsycholinguistics: yesterday and today]. *Voprosy psikholingvistiki [Questions of psycholinguistics]*. 2006. 4. S. 92—100. (In Russian).
5. Dicks, I. D. 2018. Language capacity is not enough: Be intentional about growing culture and worldview understanding. *Missiology. An International Review*, 46 (3), P. 268—282. doi.org/10.1177/0091829618769903
6. Arutyunova N.D. *Yazyk i mir cheloveka [Language and the world of a person]*. Moscow: Yazyki russkoy kul'tury, 1999. 896 s. (In Russian).
7. Smirnov S.D. *Obraz mira [Worldview]*. Moscow: PER SE, 2005, 153 s. (In Russian).
8. Tarasov E.F., & Ufimtseva N.V. Problemy izucheniya yazykovogo soznaniya [Problems of studying linguistic consciousness]. *Voprosy psikholingvistiki [Questions of psycholinguistics]*. 2009. 10. S. 18—25. (In Russian).
9. Kiss, G., Armsthong, C., Milroy, R. 1972. *The Associative Thesaurus of English*. Edinburgh. doi.org/10.1371/journal.pone.0032809
10. Russian Associative Dictionary Russ From the stimulus to the reaction. Open Company "Publishing house Astrel", Moscow, 2002, 984 s. (In Russian).
11. Alekberova I.E. Mezhkul'turnoe vzaimodeystvie kak tsentral'naya dominanta turistskogo biznes [Intercultural interaction as the central dominant of the tourist business]. *Yazyk i mezhkul'turnaya kommunikatsiya [Proceedings of the Language and Intercultural Communication]*. 2011. S. 122—125. (In Russian).
12. Featherstone, M. 2011. Societal value formation and the value of life. *Current Sociology*, 59 (2), P. 119—134. doi.org/10.1177/0011392110391129
13. Dun-Runkin, P., Gerald, A. 2012. *Scaling methods*. New York: Psychology press.
14. Ushakova, T.N. Lingvisticheskoe soznanie i printsipy ego issledovaniya [Linguistic consciousness and the principles of its research]. *Yazykovoe soznanie i obraz mira [Proceedings of Linguistic consciousness and the worldview]*. 2000. S. 13—23. (In Russian).

15. Frumkina R.M. *Psikholingvistika [Psycholinguistics].* Moscow: Academy, 2001. 320 s. (In Russian).

16. Zalevskaya, A.A. *Psikholingvisticheskie issledovaniya. Slovo. Tekst [Psycholinguistic research. Word. Text].* Gnosis, Moscow, 2005, 543 s. (In Russian).

17. Sorokin Yu.A. *Etnicheskaya konfliktologiya (teoreticheskie i eksperimental'nye fragmenty) [Ethnic conflictology (theoretical and experimental fragments].* Institute for Problems of Risk, Moscow, 2007, 120 s. (In Russian).

18. Roberts, L. 2012. Psycholinguistic techniques and resources in second language acquisition research. *Second Language Research*, 28 (1), P. 113—127. doi.org/10.1177/0267658311418416

19. Beskorovainaya I.G. Assotsiativnyy eksperiment kak sposob rekonstruktsii fragmentov yazykovogo soznaniya [Associative experiment as a way of reconstructing fragments of linguistic consciousness]. *Voprosy psikholingvistiki [Questions of psycholinguistics].* 2004. 2. 73—77. (In Russian).

20. Arsenyeva, I.A., Antonova, N.A., Ivanova, A.S., Yakushev, V.V., Timashova, L.V. 2018. Visualization of the emotional vocabulary of the Chinese language as exemplified in the associative experiment. *XLinguae*, 11 (1), P. 251—268. doi: 10.18355/XL.2018.11.01.21

Bio Notes:
Ekaterina Sergeevna Balandina ia a Associate Professor, Candidate of Philology, Associate Professor of the Department of Foreign Languages of the Institute of Linguistics and International Communications of the South Ural State University (National Research University). E-mail: balandinaes@susu.ru

Tatyana Yurievna Peredrienko is a Associate Professor, PhD in Philology, Associate Professor of the Department of Foreign Languages of the Institute of Linguistics and International Communications of the South Ural State University (National Research University). E-mail: peredrienkoti@susu.ru

Сведения об авторах:
Баландина Екатерина Сергеевна — доцент, кандидат филологических наук, доцент кафедры иностранных языков Института лингвистики и международных коммуникаций Южно-Уральского государственного университета (Национальный исследовательский университет). E-mail: balandinaes@susu.ru

Передриенко Татьяна Юрьевна — доцент, кандидат филологических наук, доцент кафедры иностранных языков Института лингвистики и международных коммуникаций Южно-Уральского государственного университета (Национальный исследовательский университет). E-mail: peredrienkoti@susu.ru