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War Lessons or How Social and Personal Back-Ground Shapes Our Perception

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Abstract: It is well-known that cognitive metaphor can reflect the process of conceptualization of the surrounding world in the human mind. The metaphorical transfer of the source domain's conceptual features to the target domain shows the essence of the reality perception in the consciousness. This study is focused on the intracultural variation of cognitive metaphors, particularly the phenomenon of the implicit-explicit dispersion in metaphors, dependence of their perception on the occupation, gender, and age of members of a culture, and type of metaphors. Based on conceptual metaphors, associated with the target domain WAR in the Russian culture, the researchers elaborate a novel approach to the analysis of conceptual metaphors, providing full-fledged scrutiny of the reflection of the surrounding realm in the minds of native speakers. The study involved 124 people, some of whom have direct professional experience in the military sphere. The obtained differences in the perception of simulated metaphorical models allow us to talk about intracultural variation of the WAR cognitive metaphor and the significant influence of personal experience on the perception of reality.

Keywords: cognitive metaphor, metaphor perception, metaphor dispersion, conceptual mapping, metaphorical modeling.

Introduction

The concept of WAR is one of the closest to the Russian culture, as the whole history of Russia is permeated with wars, both defensive and offensive in nature. It is not fortuitous that German Chancellor Otto von Bismarck said, "Join alliances with anyone, unleash any war, but never touch the Russians."

In this regard, it seems relevant to delve into a more detailed study of the WAR concept in the Russian culture, use achievements of modern linguistics and conceptual metaphorology for a deeper analysis of the substance of the conceptual sphere WAR in the Russian mentality.

It's worth mentioning that a remarkable amount of research is devoted to the WAR metaphor in public political discourse (Flusberg, Matlock and Thibodeau, 2018; Logachev, 2014; Budiman, 2019), some analyze the implementation of WAR metaphor regarding to economics, trade, medicine and other spheres (Hu and Xu, 2017; Mavleev and Fomin, 2019). Studying metaphor models of the Armed Forces is also quite popular (Izdebska, 2016; Kalinin, 2018).

In modern cognitive linguistics it is considered reasonable that specific manifestations of conceptual metaphors depend on certain cultural features of native speakers in different language systems. Prof. Z. Kövecses says, "Metaphors can also be variable, and they vary along two major dimensions: the cross-cultural and the within-culture dimension." (Kövecses, 2005: 13).

The former, denoting differences in the conceptualization and categorization of the social realm by representatives of various social cultures, has been studied for a while. Among numerous studies accumulated in the world the focus has been made mostly on differences in cognitive models within one phenomenon (Boroditsky, 2001; Charteris-Black, 2003; Kimmel, 2004).

In line with this comes an experiment by Musolff, who outlined the results in his paper Cross-Cultural Variation in Deliberate Metaphor Interpretation (Musolff, 2016). The idea was to quiz respondents from 10 different countries, belonging to various language cultures, to explain the conceptual metaphor NATION is a HUMAN BODY. To this end the researcher asked to elaborate the metaphorical expression NATION is BODY POLOTIC based on the assumptions of a specific culture. This yielded a diversity of interpretations, none of them being obvious within the scope of the classical theory of conceptual metaphor.

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On the contrary, many of the participants, paying attention to the metaphorical nature of the saying, tried to extrapolate their cultural and historical back-ground to it to emphasize the pragmatic impact. Thus, Chinese mostly referred to the country's geography, while Europeans based their deliberations on the state structure. The source domain of Americans turned out to be their national diversity ([Musolf, 2016: 212](#)).

Not least interesting is L. Boroditsky's research, focused on the time concept 上个月 (Chinese and English). She demonstrated that words denoting spacial characteristics along a vertical axis in Chinese (Chinese for previous month, literally top month) shapes a specific approach to the perception of time in this social culture, i.e. along a vertical axis, as opposed to the horizontal practice in the Western culture (for example, before the weekend) ([Boroditsky, 2001](#)).

The within-culture dimension has been in the focus of various studies as well. There is a trend for various metaphorical models to have different realizations within one language community, either polycultural, like in the U.S., or monocultural, one finds in Japan. However, metaphorical models are subject to diachronic changes, i.e. they can evolve over time. ([Hiraga, 1991](#); [Kövecses, 1995](#); [Micholajczuk, 1998](#)). Z. Kövecses says, this dimension, influenced by a number of factors, can be broken down into social, religious, subcultural, ethnic, etc ([Kövecses, 2005: 89](#)). There are scores of examples of the metaphorical variation within a culture; unaware of the fact we face them time and again: men of various social background tend to have different metaphorical approaches in describing their relation with the opposite gender, people belonging to different subcultures have different attitudes to such notions as honor, dignity, and morality. This phenomenon is attributed to the difference in experience, accumulated in a lifetime.

Besides, there is another aspect of the within-culture dimension, namely interpersonal, governing the use of a specific set of metaphorical models prompted by one's personal experience. Supporting this is a piece in the Time magazine, noted by Kövecses in his monography. It dwells on sports metaphors, which are of a similar type, though different in terms of their realization, in the rhetoric of U.S. presidential candidates in 1996. B. Clinton, being an enthusiastic golfer, referred to golf as a source domain, while Al. Gore, who used to lead a high school rugby team, compared the presidential race to a dash on the pitch ([Kövecses, 2005: 183](#)).

Meanwhile, the focus of metaphorology shifted to the study of the dependence of the realm conceptualization in languages on various cultural and social factors. However, there are still unanswered questions, posed by Kövecses as to the reasons behind the interand intracultural variations of metaphors. ([Kövecses, 2005; 2016](#)).

A major role in the cultural and cognitive conceptualization is attributed to experience and language preferences. "In other words, the suggestion is that, on the one hand, many of our metaphors vary because our experiences as human beings also vary. And, on the other hand, our metaphors vary because the cognitive preferences and styles we put to use for the creation of abstract thought also vary ([Kövecses, 2005: 231](#))." The former encompasses both social and personal experience, which falling under the human factor category, while the latter is dictated by a communicative situation, i.e. personal and social context existing at a given moment.

True to the division set up by Z. Kövecses in his *Metaphor in Culture*, this research will dwell on social and personal experience of representatives of the Russian social culture, checking the conceptualization of war and its variations among respondents, possessing a various degree of involvement into the military realm.

Another crucial issue, which have been picked to look into, is the perception of metaphors in the conscience of a social culture member. Obviously, when facing standard patterns, e.g. LIFE is an ADVENTURE, the comprehension by natives can be fathomed, since the pattern offers a ready cognitive solution. However, the approach will hardly be applicable to Grady's primary metaphors, e.g. SUCCESS is TOP ([Grady, 2005](#)). Forms of implementation of metaphors in sentences can be analyzed as well. What is suggested is an approach, which can be referred to as "level or implicit/explicit driven perception of conceptual metaphors." The level approach stipulates that verbalized metaphors (explicit) and their meaning in specific sentences (implicit) may or may not coincide in terms of their perception by natives.

Based on the provisions of cognitive linguistics on the close connection between language and thinking and, by implication conceptualization of thinking in language through cognitive metaphors, as well as linguistic culturology on the relationship of language and culture, it is assumed that segmented professional-oriented study of the perception of cognitive metaphors in the context of personal and social background, and research of the plane of expression of conceptual metaphors will allow us to make a small contribution to the further development of the Conceptual Metaphor Theory.

Materials and methods

The study is based on two source hypotheses:

1. Conceptual understanding of the phenomena of social and political life, manifested in the formation of cognitive metaphorical models, depends on the professional, cultural and life experience of a particular social culture member and may differ within a single linguistic group.

2. Explicit and implicit planes of conceptual metaphors do not always coincide.

Thus, in this study was made an attempt to further deepen the understanding of conceptualization processes in objective reality with due consideration of the dependence of the process on the occupation and background, as well as the analysis of the reality conceptualization, both extraneous and profound.

The object of the research is conceptual metaphors in the target domain WAR in the minds of speakers of the Russian culture, while the subject is the adoption of specific linguistic forms of conceptual metaphors in the target domain WAR and various source domains.

Based on one methodology, the research pursues two multidirectional, but equivalent goals:

1. to establish the dependence of the degree of acceptance of conceptual metaphors by culture members on their professional characteristics,

2. to identify the degree of dependence of the acceptance of explicit and implicit planes of the expression of conceptual metaphors.

This study is undoubtedly based on the basic tenets of the Theory of Conceptual Metaphors set forth in writings of J. Lakoff and M. Johnson (Thorne, 1983; Lakoff, 2008; Wagner, 1990).

For the sake of better understanding, it needs briefly recall that the theory says the backbone of metaphorization is the process of interaction between knowledge structures, a.k.a. frames according to Lakoff & Johnson, of two conceptual domains, i.e. source and target. That is, the source domain meaning is projected to the target domain, where, under the influence of various cognitive and social factors, it acquires a new meaning, which becomes a metaphor.

In other words, what takes place is a unidirectional metaphorical mapping from the source to the target domain, both shaped by human interaction with the surrounding realm.

Thus, based on the postulates of the classical theory, the opposite conclusion can be drawn that if a metaphor is the result of human interaction with the surrounding realm, then by analysing the metaphor this interaction can be understood. At the same time, one can assume that different social groups have different interactions, so their perception of the content of conceptual metaphors will be different.

To confirm the assumptions, the study of the perception of conceptual metaphors of the target domain WAR in the Russian culture was conducted. To this end K. Ahrens's Conceptual Mapping Model was adopted (Ahrens, 2010).

The methodology breaks down in several reciprocal stages:

1. Selection of source domains for the WAR domain,

2. Development of a verbal matrix of speech realization of each metaphor,

3. Interview of respondents divided into three groups: Civilians – people who never served in the military and did not participate in armed conflicts (Civ), Military – people who have logged at least three years in the military, but did not take part in armed conflicts (Mil), Veterans – people who participated in armed conflicts (Vet). In the latter it was allocated a subgroup of people, namely Professionals (Pro), who saw hostilities in the toughest places, e.g. Chechnya, Afghanistan, Georgia, etc., and whose combat experience lasted at least a year. These are professional service members, whose ultimate role is in taking part in battles.

4. Summarizing and data analysis.

Each stage includes several steps. For selection of source domains, K. Ahrens's Conceptual Mapping Model was adopted (Ahrens, 2010). This was done by specialists in the field of linguistics, cognizant of the conceptual metaphor phenomenon and possessing considerable language skills and knowledge. The expert group consisted of a doctor of pedagogy (specialized in linguistics), two linguists holding a PhD degree in philology and a PhD student pursuing a degree in linguistics.

This stage encompassed:

1) Brainstorming, during which each expert came up with the maximum number of viable, but explainable and existing as well, source domains for one target domain.

2) Grouping of the shortlisted domains based on the semantic principle and their plausibility study (checked are their adequacy and the plausibility of being part of the language system). The recognition of a specific source domain as a possibility is by a majority of the experts, in our case it had to be at least 3 to 4.

Six most relevant source domains for the WAR target domain were identified: WAR is a GAME (D1),

WAR is a THEATER (D2), WAR is a COMPETITION (D3), WAR a GAMBLE (D4), WAR is a LESSON (D5), and WAR is DEATH (D6).

It is noteworthy that the first four domains in general terms coincide with the data provided by researchers of the conceptual metaphor WAR in other languages (Logachev, 2014). While the other two, included in the list by the collective decision of the expert group, can be considered relevant to the Russian culture.

The development of the verbal matrix also largely relied on the expert group, which was to clarify specific linguistic content of the selected source domains to generate a verbal matrix for the research. The main steps of this stage are as follows:

1) Clarification of the connection of the source domains with the surrounding realm by brainstorming questions: "What are real manifestations of the shortlisted domains?", "What qualities are inherent in the domains?", "What can the domain do/what is it used for?"

2) Generation of specific sentences on the basis of the target domain and suggested source domains. For each source domain, compiled were four sentences, two of which can be attributed to conventional metaphors (CM), and the other two to new, anomalous metaphors (NM).

This ratio was essential for achieving two goals, that of this paper and confirmation of the K. Ahrens hypothesis about the connection of the language norm with the perception of speech manifestations of conceptual metaphors (Ahrens, 2010).

3) Clarification of the relationship of metaphorical modelling with the surrounding realm. Here the same questions were directed at the target domain: "What are real manifestations of the target domain in the source domain?", "What qualities, inherent in the source domain, are related to the target domain?", "Which of the uses of the source domains can manifest themselves in the target domain?"

4) Correlation of results and clarification of the content of the verbal matrix.
Below is the verbal matrix confirmed for an experiment:

Table 1
Verbal matrix for a linguocognitive experiment

Sentence	Source domain / Metaphor Type
1) We lost this battle, but won the war.	D1 / CM
2) This battle went down a wrong scenario.	D2 / CM
3) We managed just to win the arms race.	D3 / CM
4) We grew so used to battles, we could not stop, the war attracted us as the best casino.	D4 / AM
5) The enemy gave us difficult homework.	D5 / AM
6) The war has become a mass grave for the whole of our generation.	D6 / AM
7) The use of chemical weapons is not a fair game.	D1 / CM
8) The theatre of war covered whole Europe.	D2 / CM
9) We managed to prevail in this battle by fighting intensely.	D3 / CM
10) We hit the jackpot, seizing enemy's warehouses full of weapons.	D4 / AM
11) This fight proved to be the best teacher for young fighters.	D5 / AM
12) After the battle, we looked at each other as if we were dead men walking.	D6 / AM
13) The troops moved around the battlefield as if they were playing Cowboys and Indians.	D1 / AM
14) In this fight, we were forced to play the role of the proverbial pug that barks at the elephant.	D2 / AM
15) There was a feeling in the battle that we were running a race against the enemy, trying to be the first to take the height.	D3 / NM
16) Stakes in this battle were too high.	D4 / CM
17) Heavy losses in yesterday's battle taught us to better prepare for the offensive.	D5 / CM
18) Our deadly weapon hit the enemy like a ton of bricks.	D6 / CM
19) The generals moved regiments and battalions as chess pieces.	D1 / AM
20) During the war, mothers were left not much choice by to be spectators of the cruel play starring their children.	D2 / AM
21) The captured village passed from hand to hand like a ball in volleyball.	D3 / AM
22) In this battle, we are all put in the line of fire.	D4 / CM
23) We needed to solve a difficult task in this battle.	D5 / CM
24) A deadly silence reigned on the battlefield.	D6 / CM

The third stage consisted of an interview of respondents, divided into several categories based on the principle described above. A total of 124 people took part in the survey.

Table 2
Distribution of respondents through groups

Group	Civilian	Military	Veterans	Professionals
Number of people	70	27	27	15, veterans included

The respondents were also broken down by age and those in the Civilian group by gender, which added substance to the research. The former breakdown resulting in 32 people in a 17-25 age group, 56 in a 26-39 age group and 35 in an age group of 40 and older, generally reflects the age stratification of the Russian society. The civilians included 31 men and 39 women, which also correlates with the gender composition of the Russian society.

The composition of the group of respondents proved to be instrumental in carrying out a multi-dimensional study of the conceptual metaphor WAR in the Russian culture, encompassing several aspects:

A. Dependence of the perception of metaphors on the form of realization, i.e. conventional and new metaphors,

B. Dependence of the metaphorical perception on the occupation and background,

C. Dependence of the metaphorical perception on gender and age,

D. Difference in the explicit and implicit metaphorical perception.

Interviews of respondents were conducted through questionnaires on-line via Google.Forms and off-line. The e-questionnaire and its hard copy were completely identical, providing equivalent results.

The questionnaire contained two tasks:

1 – fathoms the perception by the participants of specific language forms of realisation of different source domains for the target domain WAR. The recipients had to measure the adequacy of the suggested sentences on a scale of 1 to 10 based on their linguistic background. The wording of the task read: "Please rate from 1 to 10 the likelihood of your using such a sentence, where 1 is the least likely scenario and 10 will account for the use of the saying or at least a similar one."

2 – analyses the perception of the explicit aspect of a conceptual metaphor, i.e. the participants had to express their agreement or disagreement with a saying consistent with WAR IS GAME / THEATER / DEATH, etc. on a scale of 1 to 5, where the extremes stand for complete disagreement and agreement respectively.

Results and discussions

Above, it was indicated that this study, focused on a range of theoretical and utilitarian goals, had also to check a number of basic and additional hypotheses. Here the results for each of them will be described.

Dependence on the form of realization

K. Ahrens has already analysed differences between conventional and anomalous metaphors (Ahrens, 2010). The researcher analysed perception of metaphors, shrouded in language forms, and empirically proved that the classic Theory of Conceptual Metaphors allows insufficient attention to the conventional or novel nature of metaphorical expressions, thereby refuted the Theory of Primary Metaphors, suggesting that the choice of the source domain for a target domain is dictated by a variety of social and cultural factors. Due to the great variability in the realization of anomalous metaphors, K. Ahrens believes that when analysing conceptual metaphors, it is impossible to claim a universal nature of conceptual linguistic understanding, while the metaphorization process, considered as a reflection of cognitive abilities of a person, depends on the cultural environment and context to a large extent (Ahrens, 2010: 201).

In general, the research confirms the results of K. Ahrens. Further analysis shows that conventional metaphors are unequivocally perceived more adequately than new ones, regardless of the source domain and occupation of the participants:

Table 3

Distribution of the results of the CM & AM reception broken down by source domains and groups of recipients

Group	D1 (CM/ AM)	D2 (CM/ AM)	D3 (CM/ AM)	D4 (CM/ AM)	D5 (CM/ AM)	D6 (CM/ AM)	Total (CM/ AM)
Civ	7.3/5.2	6.2/4.9	6/4.7	7.3/3.8	7/4.1	6.6/5.7	6.7/4.7
Mil	6.6/3.7	5.8/3.1	6/3.3	6.1/3.5	7/3.3	5.9/4.2	6.2/3.5
Vet	6.4/4.4	5/4, 4	5.2/4.8	6.1/3.6	6.2/4.3	4.8/5	5.6/4.4
Pro	5.9/4.4	5.3/4.5	5.3/5.3	5.8/3.5	6.6/5.6	4.2/5	5.5/4.7
TOTAL	6.9/4.7	5.9/4.4	5.8/4.4	6.8/3.7	6.8/3.9	6.1/5.2	6.4/4.4

The chart suggests that in almost all cases CM (conventional metaphors) are perceived more adequately than AM (anomalous metaphors). The total difference in perception of the two types of metaphors ranges from 0.9 for D6 (WAR is DEATH) to 3.1 in D4 (WAR is a GAMBLE). This indicates that the source domain DEATH for the conceptual metaphor WAR in the Russian culture is more universal and less dependent on the form of realization in the speech.

However, a variation in the CM/AM difference between the groups of respondents was registered. For example, in the source domain GAMBLING, the CM/AM difference in the group Civilians is 3.5, while the Military group clocked in at 2.6, followed by 2.5 registered in the Veterans group. The lowest indicator belongs to the Professionals, who showed a difference of 2.3. The difference in the domain DEATH for the Civilians, Veterans and Professionals turned out to be 0.9, 0.2 and 0.8 respectively.

The dependence is very clear: the deeper the metaphor gets into the WAR domain, the smaller the difference in the perception of conventional and anomalous metaphors. This confirms the thesis about the connection between the perception of metaphors and the background of representatives of a specific culture.

Occupation and background dependence

Readers will remember that the main hypothesis of the study is the thesis that perception, i.e. mental perception, pertaining consent of a culture member to one or another form of conceptual understanding of objective reality, expressed through a conceptual metaphor, depends on the occupation and background the recipient.

It is to this end that all experiment participants were divided into four groups according to their occupation. The results of the experiment are as follows:

Table 4

Perception of conceptual metaphors depending on the occupation and background of the recipients

Group	D1 (CM/AM)	D2 (CM/AM)	D3 (CM/AM)	D4 (CM/AM)	D5 (CM/AM)	D6 (CM/AM)
Civ	6.2	5.6	5.3	5.5	5.5	6.1
Mil	5.1	4.5	4.6	4.7	5.1	5
Vet	5.4	4.7	5	4.9	5.2	4.9
Pro	5.1	4.9	5.3	4.6	6	4.6
TOTAL	5.3	4.6	4.8	4.8	5.2	4.9

The table confirms the hypothesis but only partially. Of course, there are differences in the data, but these gives no firm ground to claim any reasonable regularity.

In general, the level of perception of conceptual metaphors among the Civilians is somewhat higher than in the others. Among the most interesting conclusions made in this block are the more obvious differences between the Civilians and Professionals, whose backgrounds are poles apart. The former have nothing to do with the military and war, while the latter on the contrary are almost entirely devoted to combat operations. It is noteworthy that the Civilians are more susceptible to metaphors based on the source domains GAME, DEATH, and GAMBLE, and the Professionals – to metaphors deriving from the LESSON domain. After all, there is a certain dependence of conceptual mapping on the background. People, who fight for a living, more clearly understand that a war can teach a lesson, they made their own

conclusions and gained their share of experience. At the same time, they are less perceptive to the war as a “game” or “gambling” for that matter.

Thus, the observation warrants a conclusion that the background has a greater impact on the process of perception of conceptual metaphors, and by implication the comprehension of objective reality, than professional affiliation.

Gender and age dependence

The approach to the selection of participants provides for an analyse of the impact of gender and age on the metaphorical perception. Though, initially there was no such a goal, the conditions turn out to be right for this. Given the fact, it makes no sense to avoid the opportunity. Here what the research provides:

Table 5
Perception conditioned by age

Age group	D1 (CM/AM)	D2 (CM/AM)	D3 (CM/AM)	D4 (CM/AM)	D5 (CM/AM)	D6 (CM/AM)
17-25	7.3	6.9	6.7	6.5	5.6	7.2
26-39	5.7	5.2	5.1	5.5	5.5	6.2
Over 40	6.1	4.9	4.5	4.6	5.6	5.3

Table 6
Perception conditioned by gender

Gender group	D1 (CM/AM)	D2 (CM/AM)	D3 (CM/AM)	D4 (CM/AM)	D5 (CM/AM)	D6 (CM/AM)
M	5.8	5.4	5.5	5.8	5.7	6.2
F	6.5	5.7	5.2	5.3	5.4	6.2

The comparison based on gender demonstrates no obvious differences: some source domains are better perceived by women, others by men, and there are several in between them. Thus, it is impossible to draw any meaningful conclusions.

However, the degree of perception of language expressions of conceptual meta-phors conditioned by age demonstrate that younger participants in the experiment are prone to a higher level of metaphorization, although their background is less profound and obviously less likely to encompass an objective reality of war. One can assume that this result is accounted for by an objective psychological attitude, attributed to a higher level of emotionality, hence the desire for better apprehension and awareness among the younger generation. We believe that a similar situation will arise in the analysis of other source and target domains of conceptual metaphors, should any be attempted. However, this assumption requires more detailed empirical verification.

Difference in explicit & implicit perception

This research logic implies further efforts to fathom the dependence in the perception of explicit and implicit planes of conceptual metaphors.

To this end the questionnaire included two section. One comprised sentences, concealing conventional and anomalous metaphors, based on conceptual metaphors focused on the target domain WAR. By implication, these constituted an implicit potential. The other part of the questionnaire included verbalized forms of conceptual metaphors based on the pattern “WAR is X”, where X was the source domain in question. These essentially had a profound explicit distinction.

Having compared the results of perception of both forms of conceptual metaphors by the respondents, it was established so called “dispersion” between implicit and explicit planes, expressed in a percentage of the numerical values of both planes. For example, in D1 (WAR is a GAME), the perception of implicit meanings (sentences) clocked in at 5.3, while that of the explicit plane (pattern) turned out to be 2.25. Here what it generally says: 5.3 (53 percent of the maximum value of 10) – 2.25 (45 percent of the maximum value of 5) = 8 percent, i.e. the dispersion value is 8 percent.

Since such an analysis has either not been carried out, or its results are not widely known and have not been discovered by us, any exact conclusion as to which value of the dispersion will be normal

and which is anomalous cannot be drawn. One thing is obvious – the greater the value, the wider the gap between the planes of expression in people’s minds, which indicates at least instability of a certain conceptual metaphor in people’s minds or dissonance and problematic perception of objective reality by members of a culture in the extreme.

Table 7
Explicit and implicit expression of conceptual metaphors

Group	D1 (CM/AM)	D2 (CM/AM)	D3 (CM/AM)	D4 (CM/AM)	D5 (CM/AM)	D6 (CM/AM)
Civ – Imp	6.22	5.57	5.32	5.5	5.52	6.17
Civ – Ex	2.51	2.18	2.92	2.04	3.66	4.79
Civ – Dispersion, %	11.9	11.9	-5.18	14.13	-17.94	-34.18
Mil – Imp	5.17	4.48	4.65	4.77	5.16	5.05
Mil – Ex	2.32	2.26	2.58	2.05	3.57	4.588
Mil – Dispersion, %	5.35	-0.44	-5.08	6.63	-20.00	-41.11
Vet – Imp	5.40	4.69	5.02	4.88	5.24	4.88
Vet – Ex	2.185	1.78	2.37	2.26	3.92	4.59
Vet – Dispersion, %	10.36	11.37	2.84	3.62	-26.06	-43.06
TOTAL – Imp	5.28	4.58	4.83	4.82	5.20	4.96
TOTAL – Ex	2.25	2.02	2.47	2.15	3.75	4.58
TOTAL – Dispersion, %	7.85	5.46	-1.12	5.12	-23.03	-42.09

Here in the table are some peculiar patterns. For one thing, in D1-D4 the dispersion is insignificant, basically it is well within the range from -10 percent to 10 percent. What it implies for future studies is that we believe that this dispersion is normal, i.e. there is no statistically significant difference between explicit and implicit planes. In other words, if the dispersion in D3 (COMPETITION) is -1.12 percent, then it can be assumed that the respondents perceive the speech expression of the conceptual metaphor and its verbalized pattern the same way. This testifies to the normal perception of the object of reality, conceptualized through the metaphor and the stable nature of the cognitive metaphor in the conceptual domain in question.

There is also an obvious difference in the dispersion of the implicit and explicit planes between the groups of respondents: in more professional groups, the value is slightly lower throughout more source domains, which indicates a more adequate perception of the realities of war.

And the most striking and illustrative result is a high level of dispersion in D5 (LESSON) – 23 percent and D6 (DEATH) – 42 percent. A detailed analysis of these results suggests that the values of perception of the implicit plane, i.e. specific language realisations of conceptual metaphors, are about the same as in the other sources domains. However, their explicit perception is significantly higher than in the other domains, attesting to such a high value of dispersion.

Translating these into more utilitarian results, one can argue that members of the Russian culture obviously agree that WAR is a LESSON, and WAR is DEATH, but this metaphorical meaning has not yet been fixed in their consciousness. In other words, they understand that war is “a lesson that one must learn” and that “war most certainly leads to death”, but they are not aware of this to a certain extent. Each of the respondents a priori agreed with the patterns, but their language implementation lags far behind from the perception point of view, both with conventional and anomalous metaphors. This attests to that the pattern is not fixed in consciousness yet, an obvious discord in the Russian mentality.

Statistics verification (Student’s T-test)

To verify the statistical value of the results, a decision was made to run the hypothesis of the personal and social background impact on the perception of metaphors and by implication the cognitive system of actors within a specific culture through a statistical test.

To this end, one of the most common methods, namely Student’s T-test was picked, a 2-sample comparison of median values.

The test was ran twice:

- 1) for the interviews of the Civilian and Military groups,
- 2) for the interviews of the Civilian and Veteran groups.

The t-value has been calculated for each source domain.

It would not be out of place to revise the test principle. It is about boiling down a set of numbers to a t-value by the use of the formula:

$$t = \frac{M_1 - M_2}{\sqrt{m_1^2 + m_2^2}}$$

where M1 and M are the median values of the first and second sets of numbers respectively, and m1 and m2 are mean errors of the first and second simple means. Then the degree of freedom f was calculated, which is based on the number of participants in each group. In our case the number of respondents was multiplied by four, since one set covered all four sentences related to one source domain.

After getting t and p we ran them through critical value tables available on-line to establish a confidence level. For humanitarian sciences it stands at 5 percent, which, projected to the research, sets the threshold at 1.969. Everything that scores above it in this study will be considered statistically significant.

Below are results of the statistical verification:

Table 8
Distribution of t-values through samples

	D1	D2	D3	D4	D5	D6
Civ/Mil	2.975438, 663	3.1847922 24	2.0113547 6	2.0792587 33	0.9900186 52	3.254099, 854
Civ/Vet	2.164334, 686	2.3380113 05	2.3380113 05	1.6736656 73	0.7355909 95	3.400722, 994

The table suggests that nine out of 12 t-values are above the threshold, confirming that the critical error is less than 5 percent. Though far from being ideal, the results are still statistically significant.

Discussion

1. The conceptual sphere WAR and its implementation in the minds of members of the Russian culture through conceptual metaphors is a complex, multilevel system, shaped by specific historical and cultural characteristics of the peoples inhabiting Russia.

2. The respondents in the group Professionals, i.e. military professionals, are more susceptible to metaphorical models WAR is a LESSON and WAR is DEATH.

3. All subjects showed approximately the same level of difference in the perception of CM (conventional) and AM (anomalous) metaphors, nevertheless the respondents, whose background has more to do with the military, demonstrated a smaller level of difference.

4. Throughout all groups, there is a dependence on age in the degree of perception of metaphors: younger respondents are more susceptible to metaphors than their older colleagues. This said, there was no dependence on gender.

5. Unlike the Civilians, those in the groups Military and Veterans demonstrated a smaller implicit-explicit dispersion in the domains GAME, COMPETITION, THEATER, and GAMBLE, and the opposite trend in the remaining two domains, namely LESSON and DEATH.

6. The high level of the explicit-implicit dispersion of conceptual metaphors in the LESSON and DEATH sources domains demonstrates instability of these metaphors, their incomplete or fragmentary, or even superficial understanding by members of the culture.

Conclusions

1. The proposed method provides for a multilevel analysis of conceptual metaphors in the minds of members of a particular culture.
2. The perception of linguistic realisations of conceptual metaphors depends on the form, conventional or anomalous.
3. The perception of linguistic realizations of conceptual metaphors depends more on the background and age rather than occupation and gender.
4. The quantitative estimation of the explicit-implicit dispersion of conceptual metaphors demonstrates:
 - a) a normal value of -10 percent to 10 percent,
 - b) the fact that a high level of dispersion may be attributed to the instability of a conceptual metaphorical model.

Research outlook

This study is open to any kind of criticism and elaboration. Sharing the belief that the proposed methodology for comparing the perception of conceptual metaphors in different cultures can deepen the understanding of the mentality of different peoples, we will welcome further attempts to take up the thread of the study in a comparative historical manner.

Besides, we believe that for better and more accurate conclusions needed is further research on the comparability of the explicit and implicit planes of conceptual metaphors based on advanced neuropsycholinguistic equipment.

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Conflict of interests

The authors declare no conflict of interest.

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