THE ASSOCIATIVE FIELD OF A WORD AS A MULTILINGUAL STRUCTURE
(BASED ON THE MASS FREE ASSOCIATIVE EXPERIMENT
WITH UKRAINIAN SOCIAL AND POLITICAL LEXIS)

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The article deals with the analysis of the associative fields of the Ukrainian social and political lexis in the aspect of the language of the reactions. It is written on the basis of the mass free associative experiment conducted with Ukrainian respondents aged 18 – 22. The experiment was organized in Ukraine in 2013-2016. It involved more than 1000 respondents living in 12 regions of Ukraine (eastern, western, southern and northern parts of the country); the stimuli list contained 100 lexical units. More than 33,000 reactions were analyzed with the help of the special computer programme STIMULUS, which is now developed in the first Ukrainian on-line associative tool STIMULUS. The results proved that associative fields are not monolingual, but multilingual structures. The associative fields of the Ukrainian social and political lexis include the reactions in Ukrainian (major part, 80 % at an average), Russian (4 % – 8 %), English (1 % – 2 %), other languages (Arabic, Japanese, Chinese, Italian; less than 0,5 %), symbols (1 % – 2 %) and refusing to respond (3 % – 41 %). There were cases of sudden Ukrainian reactions made by the Russian-speaking Ukrainians on the stimuli прапор "flag", незалежність "independence", національність "nationality", едність "unity" while other reactions were Russian. The reactions in terms of their language are influenced by the respondents’ mother tongue, government language policy, political situation, politics, intercultural communication. The perception of the word semantics may precede the perception of the word language. The perspective of the research is to study the lexis of other thematic groups in the aspect of the language of the reactions.

Key words: linguistic worldview, on-line associative service STIMULUS, stimulus, reaction, core, language structure

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АСОЦІАТИВНЕ ПОЛЕ СЛОВА ЯК ПОЛІЛІНГВАЛЬНА СТРУКТУРА (НА МАТЕРІАЛІ АСОЦІАТИВНОГО ЕКСПЕРIMENTУ З УКРАЇНСЬКОЮ СУСПІЛЬНО-ПОЛІТИЧНОЮ ЛЕКСИКОЮ)

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Стаття присвячена аналізу асоціативних полів української суспільно-політичної лексики з точки зору мови вираження реакцій. Дослідження виконано на матеріалі масштабного асоціативного експерименту, проведеного в 2013 – 2016 р. р. у 12 регіонах України (північних, південних, східних, західних) з респондентами-українцями віком 18-22 років. У експерименті взяли участь близько 1000 респондентів, стимульний список склав 100 лексичних одиниць, було проаналізовано більше 33 тис. реакцій. Для опрацювання результатів асоціативного експерименту була створена та використана комп'ютерна програма "STIMULUS", на основі якої у 2019 р. був розроблений перший в Україні інструмент для проведення і опрацювання результатів асоціативних експериментів онлайн СТИМУЛУС. Результати аналізу експериментальних даних виявили, що асоціативне поле не є монолінгвальним і може бути розглянутим як полілінгвальна структура. Асоціативні поля української суспільно-політичної лексики містять реакції українською мовою (в середньому 80 % у кожному полі), а також російською (4 % – 8 %), англійською (1 % – 2 %), іншими мовами (арабською, японською, китайською, італійською; менш 0,5 %), символи і знаки (1 % – 2 %) та відмови реагувати (3 % – 41 %). Було зафіксовано випадки раптових українськомовних реакцій від російськомовних респондентів на стимули прапор, незалежність, національність, єдність серед решти російськомовних реакцій. На мову вираження реакцій впливають такі фактори, як рідна мова респондентів, мовна політика уряду, політика і політична ситуація в країні, міжкультурна комунікація. Сприйняття змісту слова ймовірно передує сприйняттю його мовного вираження. Перспективою дослідження є дослідження лексичних груп іншої тематики на предмет мови вираження реакцій.

Ключові слова: мовна картина світу, асоціативний онлайн проект СТИМУЛУС, стимул, реакція, ядро, мовна структура

Introduction. The linguistic worldview of any nation is a very dynamic structure. It is influenced by the linguistic and non-linguistic factors such as people’s personal features and characteristics, their living conditions, cultural, social and political events in the country the people live in, trends in the education system etc. The nation’s linguistic worldview depends also on its linguistic background and the language policy of the area people live in.

Since the Ukrainians live in the conditions of multilingual space (Ukrainian and Russian speakers interact, the tourists from other countries visit Ukraine more often, international businesses are being developed, the youth needs foreign languages for career opportunities etc.) the influence of foreign languages on the Ukrainians’ linguistic worldview may be at a high rate. Another fact is that the multilingual situation in Ukraine is supported by the government policy. Constant move in the direction of European countries with their multilingual atmosphere, laws and strategies supporting English in Ukrainian education system and business caused the necessity to master not only Ukrainian but other languages as well. Strong opposition to Russian and former USSR culture nevertheless cannot eradicate Russian language from the people’s everyday communication.

According to the facts mentioned above it is expedient to study the Ukrainians’ linguistic worldview in the aspect of the language of the reactions given by the respondents, i.e. the reaction language. The question is whether the Ukrainians’ linguistic
worldview is shifting to English and other foreign languages, shows strong Ukrainian trend or still keeps Russian elements.

**The purpose of this research** is to analyze the associative fields of the Ukrainian social and political lexis in the aspect of the reaction language, show the quantity of the reactions presented in different languages, analyze the associative field as a multilingual structure.

**Discussion.** One of the appropriate ways to study the linguistic worldview of any nation is to conduct an associative experiment and study the associative fields of the words given as stimuli. It helps to decide what the language stereotypes are, see their dynamics and notice the traces of any extralinguistic influence. Associative fields are always constructed with the help of associative experiments.

The history of the associative experiment as a method goes back to the researches made by F. Galton, W. Wundt, G.S. Hall, M. Trautscholdt, J. Deese [13], G. Kiss, Kevin J.Y. Lam, D.L. Nelson, J. Newman, W.A. Russel [15] and others. In the XXI century the associative experiments are used by O.I. Goroshko [3], S.V. Martinek [5], D.I. Terekhova [10], N.V. Kutuza [4], O.Ya. Surmach [9], Zh. Marfina, T.Ye. Nedashkivska, L.V. Kushmar, O.V. Denisevich [7] and others to study various linguistic and psycholinguistic phenomena. This method of studying the linguistic worldview is widely used in different areas of linguistics such as semantics (K.V. Taranenko, S.V. Formanova [12]), mass communication theory (N.M. Rudnichenko), cultural linguistics (U.B. Marchuk, T.S. Tolcheieva, O.R. Burdeina, T.V. Bisovetska [2]). The associative experiment was also used for the studying of the Ukrainian worldview fragments dealing with the administrative system of Ukraine (T.Ye. Nedashkivska), economics (L.V. Kushmar) and advertising (O.V. Denisevich) [7]. Modern researches in the field of associative linguistics provide associative experiments on-line. They are being conducted by the Russian research team of N.V. Ufimtseva, G.O. Cherkesova, Yu.M. Karaulov, Yu.M. Filippovych, I.V. Shaposhnikova and others [8]. In Ukraine the first on-line associative project STIMULUS (www.stimulus.tools/uk) moderated by O.F. Zahorodnia was created for on-line associative researches [1].

We define the associative field as a structure which was organized by grouping the lexical units-reactions around the word-stimulus, and these reactions have the similar semantic characteristics to the stimulus (T.V. Bisovetska). This grouping is elicited by the associative experiment when respondents give their associative response to the word-stimulus seen or heard. The reactions may be verbal or non-verbal (signs, symbols, figures etc.), or mixed [2].

In modern linguistics the associative fields were studied mostly in the aspects of the reaction semantics and respondents' gender. Thus, The Ukrainian Associative Dictionary compiled by S.V. Martinek [5] shows the difference in the men's and women's perception of the words in the terms of the word meaning. Nevertheless, there are no researches showing the associative field as a linguistic structure having multilingual features. Besides, there are too few researches of the most dynamic social and political fragment of the Ukrainians' linguistic worldview. That is why the social and political context was chosen as the object for this research.

**Investigation.** This research of the social and political associative fields in the aspect of the reaction language was done on the basis of the experimental data. The thorough mass free associative experiment was organized in Ukraine in 2013 – 2016 with Ukrainian respondents, mostly students aged 18 –
22. It involved 1000 respondents, men and women equally.

The stimuli list contained 100 lexical units in the Ukrainian language and reflected the social and political context. The experiment was held in 12 regions of Ukraine; students from Kyiv, Lviv, Odesa, Pereiaslav-Khmelnitskyi, Rivne, Ivano-Frankivsk, Vinnitsa, Donetsk, Luhansk and other cities participated in it. Most respondents consider Ukrainian to be their native language; some groups of respondents were Russian-speakers but knew the Ukrainian language very well.

The data of the associative experiment was analyzed with the help of the special tool STIMULUS, which provided the analysis of the associative fields in different aspects.

The analysis provided on the basis of the Ukrainian social and political lexis proved that the associative fields of those units are not monolingual. They contain mainly the Ukrainian reactions but there are also reactions in Russian, English, other languages, symbols, and signs. As an example, let us take the associative field of the word багатство ("wealth"). The correlation of the reactions in different languages in the stimulus linguistic structure is shown in the diagram created by the STIMULUS. So, it is easy to notice the multilingual structure of the field as it contains not only the Ukrainian reactions but reactions in other languages as well:

![Figure 1. The linguistic structure of the associative field of the Ukrainian word багатство ("wealth")](image)

The analysis of that associative field shows that it contains 89,21 % of the Ukrainian reactions (coloured in red); 1,17 % of the English reactions (Roshen, Ferrari, rich, gold ("gold") coloured in white); 0,29 % of the Arabic (a thin strip between white and red sector) and 4,96 % of the Russian reactions (достаток ("prosperity"), семья ("family"), плен ("captivity"), цель ("aim"), власть ("power"), вседозволенность ("lack of restraint"), бедность ("poverty"), ценности ("value"), старость ("old age"), умный человек ("clever men"), ум ("cleverness"); coloured in green); 1,46 % reactions which include symbols and pictures (символ посмішки); долары :) "dollars"; мрія 1000-чей, що належить десяткам "unachievable dream for many people" (coloured in blue). There are also 4,66 % of refusals to respond (coloured in yellow) which mean that 4,66 % respondents have left a blank space as a reaction.

One hundred stimuli were analyzed this way, in the aspect of the language in which the reactions in the stimuli associative fields were given, and this analysis was done with the help of the
STIMULUS. The results show that the major part of the reactions in each field is Ukrainian. The share of the Ukrainian reactions in the field is more than 80% (84% – 86% at an average). Only 13 stimuli contain a little less than 80% of the Ukrainian reactions. They are втручання "intervention" (77,33%), доброявідно "good neighbourly relations" (77,74%), домовитись "to come to an agreement" (79,60%), інтеграція "integration" (69,21%), мобільність "mobility" (79,31%), НАТО "NATO" (77,88%), одностайність "unanimity" (72,36%), парламент "parliament" (78,85%), пікетування "picketing" (71,15%), рагізм "racism" (73,44%), соціальний "social" (77,34%), справедливість "justice" (73,76%), устрій "regime" (77,78%). On the other hand, 9 stimuli, the semantics of which is closely connected with the Ukrainian national interests of the period 2013 – 2016 (the Revolution of Dignity in Ukraine against the illegal government’s actions and the Ukrainian-Russian war) contain more than 90% of the Ukrainian reactions. They are держава "state" (92,22%), армія "army" (91,21%), благодійність "charity" (90,67%), боротьба "fighting" (90,28%), захист "defense" (90,78%), країна "country" (91,67%), народ "nation" (93,24%), ресурси "resources" (91,17%), українець "a Ukrainian" (91%). This fact proves a great influence of political strategies on the way of nation’s thinking. People can connect the notions in strong associative links and may not think in a different way. It is easily proved by the fact of sudden Ukrainian reactions (the response was given in Ukrainian) on some particular stimuli in the range of accurate Russian reactions to other stimuli in the questionnaire list. Thus, there are strong Ukrainian links: пріор "flag" – жовто-блакитний (the colour name of the Ukrainian national flag is given in Ukrainian by the Russian-speaking (Russian-thinking) Ukrainians), незалежність "independence" – понад все ("independence is above everything"); this revolutionary slogan had been imposed on the ordinary people in Ukrainian and then was revealed as a fixed idea in their mind due to the associative experiment), національність "nationality" – УКРОП ("UKROP" (= Ukrainian Opposition) is the abbreviated name of the leading political party during the revolution 2014), єдність "unity" – Україна (the country name Ukraine is given by the Russian-speaking Ukrainians in Ukrainian and reflects the necessity to unite at the period of social, economic and political destabilization. This link can be considered as a symbol of the Ukrainians’ patriotism). Thus, the major part of the Ukrainian reactions in the associative fields of the Ukrainian social and political lexis is caused both by the linguistic and the extralinguistic factors. The linguistic factor is the native language of the part of Ukrainians (which is Ukrainian for the Ukrainian-speaking Ukrainians). The extralinguistic factors are political strategy, politicians’ actions and the state language policy imposing Ukrainian as the official language. The official Ukrainian language definitely influenced the Russian-thinking Ukrainians and made them respond in Ukrainian in particular situations.

The Russian reactions were found out in every associative field of the Ukrainian stimuli. It means that in spite of the strong fight with the Russian language and culture there are still Russian-speaking and Russian-thinking Ukrainians. The Russian way of thinking was inherited by the previous generations of the Ukrainians from the former USSR. Contemporary Ukrainians take Russian after their Russian-speaking parents and will easily transfer the Russian language to their children. Those respondents reacted in Russian while perceiving the Ukrainian words. It means that
associative thinking is deeper than linguistic skills and concerns the word meaning more than the language of the word. The share of the Russian reactions in the associative fields of the Ukrainian words is not too large (4% – 8% at an average in each field) but it does exist. Some Ukrainian words have got smaller Russian share 

\[
\text{безпека} \text{ "safety" (3,82 %),} \\
\text{демократія} \text{ "democracy" (3,71 %),} \\
\text{захист} \text{ "defense" (3,72 %),} \\
\text{інтеграція} \text{ "integration" (3,31 %),} \\
\text{конституція} \text{ "constitution" (3,70 %) while others have much bigger one (вбори "election" (8,59 %),} \\
\text{добросусідство} \text{ "good neighbourly relations" (8,78 %),} \\
\text{кредит} \text{ "loan" (8,36 %),} \\
\text{расизм} \text{ "racism" (8,13 %),} \\
\text{умови життя} \text{ "living conditions" (8,05 %),} \\
\text{уряд} \text{ "government" (8,65 %),} \\
\text{ставільність} \text{ "stability" (9,31 %),} \\
\text{конфлікт} \text{ "conflict" (10,53 %),} \\
\text{домовитись} \text{ "to come to an agreement" (11,44 %),} \\
\text{хабар} \text{ "a bribe" (12,62 %)).}
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As a rule, in terms of semantics the Russian reactions do not differ from the Ukrainian ones within the same stimulus. The only difference is the language. It means that semantics is the first thing caught by the respondents, and they react to it with their common everyday language (we consider Russian here). Thus, there were some cases of the Russian response to the stimuli which mean "national", e.g. національний "national" – украинский "Ukrainian"; національність – украинец, украинская, украинка "a Ukrainian"; нація "nation" – только украинская "only Ukrainian"; народ "people, nation" – Украни "of Ukraine", український "Ukrainian". So, the Russian-speaking Ukrainians still think about the Ukrainian (not Russian) culture as their native one and identify themselves with Ukraine but speak about their national culture in their mother tongue (Russian) even while perceiving the Ukrainian context.

The associative fields of the Ukrainian social and political lexis include also the English reactions. A huge influence of English on the Ukrainians” way of thinking can be proved by the fact that 64 of 100 stimuli contain the English reactions in their associative fields. English is not native for the Ukrainians like Russian for the part of the people. This influence is caused only by non-inherited, social, extralinguistic factors such as education, globalization, Ukrainian state policy supporting English by many ways. The English share is at an average 1% – 2% of the total reactions in the associative field: багатство "wealth" (1,17 %), безпека "safety" (1,91 %), влада "power" (0,43 %), гарантія "guarantee" (0,32 %), демократія "democracy" (0,46 %), держава "a state" (0,22 %), Європейський Союз "European Union" (0,91 %), інтеграція "integration" (0,43 %), національність "nationality" (0,47 %), президент "president" (0,96 %) революція "revolution" (0,22 %) співпрацювати "to cooperate" (1,96 %), справедливість "justice" (1,49 %).

Some stimuli have more English reactions: інвестиції "investment" (2,40 %), мобільність "mobility" (2,19 %), обмін "an exchange" (2,38 %), расизм "racism" (2,50 %), інформація "information" (3,26 %). The Ukrainian stimuli which contain the English reactions in their associative fields are of somewhat international semantics. Their semantics can definitely include world-oriented, i.e. not only national, semes. So, the English reactions in these associative fields are caused both by the capability of semantics to be perceived not only very nationally but wider and by the English language skills imposed on the respondents’ mind. On the contrary, the stimuli which were perceived as more national according to their semantic features did not include any English reactions in their associative fields. The stimuli армія "army", бідність "poverty", боротьба "fighting", бюджет "a

В асоціативних областях 7 стимулів відповіді в Арабській, Китайській, Японській і Італійській мовах було виявлено. Великість варіацій в асоціативних областях в залежності від соціальних і політичних лексиконів на якості відповіді не перевищує 0,5 %. В асоціативних областях "wealth" (0,29 %), відданість "devotion" (0,62 %), власть "power" (0,21 %), гуманітарна допомога "humanitarian aid" (0,30 %), право "a right" (0,31 %), умови "living conditions" (0,31 %), ресурси "resources" (0,28 %). Основні асоціативні області в інших мовах (включаючи англійську і російську) відбулися в деяких асоціативних областях інтенсивно, через вплив екстралингвістичних факторів, якщо розглянути відповідь "development" (стимул) від 7,25 % до 41,78 %.
(stimulus пікетування “picketing”) in
the core area and from 3,38 %
(stimulus народ “people, nation”) to
7,47 % (stimulus суспільство
“society”) in the near-core area. The
phenomenon of blanks (refusal to react)
should be thoroughly studied in
psychology. We suggest that refusal to
react is caused by the lack of the
respondents’ knowledge about the
stimuli semantics (i.e. the meaning of
the stimulus пікетування “picketing”
was unknown to some groups of
respondents). It may be also explained
by the respondents’ painful experience
about the real situation noted by the
stimulus and this painful experience
might make them ignore the word given
as a stimulus.

Conclusions and research
prospects. The analysis of 100
associative fields (33 836 reactions) of
the Ukrainian social and political lexis
leads to the following conclusions:
1) the associative fields of the
Ukrainian words with social and
political semantics are not monolingual
and not only Ukrainian;
2) the Ukrainian reactions are the
most frequent elements in the
associative fields of Ukrainian lexis,
their share is 80 % in each field at an
average and can reach 90 % and more
in the fields of the stimuli with clear
national-oriented meaning;
3) the Russian (4 % – 8 %), English
(1 % – 2 %), Italian, Chinese, Japanese,
Arabic reactions (less than 0,5 %) have
also been found out in the associative
fields of the Ukrainian lexis. The
Russian reactions are caused by the
mother tongue (Russian) of the
Russian-speaking respondents. The
reactions in English and other
languages are caused by the
respondents’ education;
4) the associative fields include not
only verbal reactions but the symbolic
and partly symbolic reactions as well.
The share of the reactions-symbols
(together with partly symbolic reactions)
in each associative field is 1 % – 2 %;
5) every associative field contains
the share of blank responses, which
varies enormously (3,38 % – 41,78 %)
and may occur both in the core and the
near-core zones of the associative field.
We suppose that this phenomenon is
caused both by the poor knowledge of
the stimuli semantics and the
respondents’ painful experience about
the real objects noted by some stimuli.

As it has been proved the associative
field of the Ukrainian social and
political lexis is a multilingual
structure. We suppose that this fact
will be true not only for the social and
political fragment of the Ukrainians’
linguistic worldview but for the
fragments of other contexts as well
because any associative field is greatly
influenced by linguistic and
extralinguistic factors. Further studying
of the linguistic structure of the
associative fields, analysis of its
dynamics, implementation of the
approach to the associative fields of
other thematic word groups, etc. are
the perspectives of the research.

СПИСОК ВИКОРИСТАНИХ
ДЖЕРЕЛ ТА ЛІТЕРАТУРИ
1. Асоціативний онлайн сервіс
СТИМУЛУС. URL:
http://www.stimulus.tools/uk (дата
звернення 2.09.2019).
2. Бісовецька Т. В. Номінативні
одиниці на позначення родинних
стосунків в українській, німецькій та
польській мовах (за даними вільного
асоціативного експерименту). Наукові
записки Київського державного
педагогічного університету імені
Володимира Винниченка. Серія
Філологічні науки. 2009. Вип. 81(3).
С. 210–214.
3. Горошко Е. І. Интегративная
модель свободного ассоциативного
4. Кутуз Н. В., Ковалевська Т. Ю.
Короткий асоціативний словник
рекламних слоганів. Одеса, 2011.
80 с.
REFERENCES (TRANSLATED & TRANSLITERATED)


