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LEXICAL SEMANTIC MODELLING IN CROSS-LINGUISTIC PERSPECTIVE

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Abstract

The paper focuses on model of situation concept – a representation that is thought to constitute the basis for comparison (tertium comparationis) of lexical semantics in related and non-related languages. The model is considered to represent the content of a lexical item through a sampling of a multidimensional concept. The relevance of the model being a representation of multidimensional semantic space is verified based on the results of the subjective scaling experiment. The concept of situation is considered as a configuration of semantic linguistic dimensions – the characteristics that encode information on how a situation is construed by the semantics of a lexical item. It has been ascertained that the lexical items' semantics of contrasted languages (English, German, Polish, and Ukrainian) encode and distribute information within four semantic linguistic dimensions: representational, sentential, constructional, and epidigmatic. It is posited that the representational semantic dimension encodes information on the gnoseological values of situation participants, the sentential one – on a set and relations of situation participants, the constructional one – on the degree of positional activities or salience of situation participants, the epidigmatic one – on the semantic associations of situation participants. In order to ascertain the content of a situation concept and to establish the ways the information is encoded and distributed in the semantics of lexical items, a directed associative experiment has been used. In reproducing the specificity of the worldview, the expediency of further psycholinguistic research of lexical semantic models is claimed.

Keywords: semantic models, semantic dimensions, model of situation, concept of situation, participant, tertium comparationis, method of subjective scaling, directed associative experiment.

1. Introduction.

Linguistic semantics posited and to some extent still posits the idea of a non-alternative worldview – a generalized one-dimensional construal of the world that does not provide for the inter-complementary and inter-contradictory procedures of its interpretation. Such an approach conformed to the methodology of linguistic theory of meaning, which speaking figuratively became a hostage of a strict disjunction relation, brought to the “either... or...” principle. The information about the world, encoded in the semantics of linguistic items was considered to reflect a discreet interpretation of the reality, basing on the assumption that objects reveal their properties in relation to other objects. However, the situation starts changing, proceeding from

the assumption that the world, surrounding us is not monadic, as it manifests itself in various aspects of human cognition. Such an approach gives evidence of numerous alternatives in the ways the world of discourse (a certain situation or its fragment) is construed in the semantics of linguistic items.

Modern linguistic semantics advocates the priority of a dynamic approach towards the study of linguistic items' semantics (Pustejovsky 1996; Paducheva 2004; Dekker 2012; Iriskhanova 2014; Koptjevskaja-Tamm 2016; Skarabela et al. 2017, etc.). Positing the idea of dynamic conceptualization of the world of discourse, such approaches declare a new conception of semantics modeling, resulting in the elaboration of dynamic semantic models (Lewandowka-Tomaszczyk 1985; Nerlich, Clark 1988; Radden, Kövecses 1999; Traugott, Dasher 2005; Mitchell, Lapata 2010; Millrood 2014; Mukhtarullina et al. 2015; Nisnevich et al. 2015; Eger, Mehler 2016, etc.). In cross-linguistic comparisons, such models are thought to reveal the ways the semantics of linguistic items encode and distribute information on a certain state of affairs in related and non-related languages (Cross-Linguistic Semantics 2008; Narrog 2012; Brycheń, Konopik 2015, etc.).

The topicality of the subject is determined by the general anthropocentric trends of modern linguistic theories, by tendencies to profound studies of the ways the semantics of linguistic items encodes information on how a person comprehends and interprets the reality. The informational approach towards the study of linguistic items' semantics provides for the elaboration of the model of meaning that is supposed to mark the conceptual entity, verbalized in a language sign.

The attempts to make a model that might reveal the connections of conceptual categories with the semantics of linguistic items are inseparable from the search of universal properties of language. The history of linguistics provides for numerous attempts to make an "ideal" language. Formerly, it was considered the "alphabet of human thought" (Leibnitz 1999: 270), or "lingua mentalis" with semantic primes underlying it (Wierzbicka 1980). The elaboration of primes gave rise to new conceptions and approaches that aimed at creating a universal language, among those being: (a) Logic (Philosophic) Language (Martin of Dacia, Siger of Courtrai, Thomas of Erfurt) with modes of being (*modi essendi*), modes of understanding (*modi intelligendi*), and modes of signifying (*modi significandi*) underlying it (Roos 1952; Godfrey 1960; Pinborg 1977); (b) Port-Royal Grammar, positing universal mental structures to underlie the language structures (Arnauld, Lancelot 1966); (c) Natural Grammar, upholding the idea of universal language to be derived from the nature of things (Dalgarno 1661; Wilkins 1668; Elliott 1957).

Of paramount importance at present is the issue of combining methodologically contiguous approaches that deal with semantics modeling within a group of languages or within human language as itself. We admit that semantics modeling acquires significance for cross-linguistic (either contrastive or typological) studies, as it offers methods to decipher the peculiar manners in which the semantics of a linguistic item encodes and distributes information on a certain state of affairs in both related and non-related languages. This may provide for natural and universal notions that are supposed to be found in many (if not in all) languages of the world, irrespective of their genetic and cultural differences (Wierzbicka 1992). Another point, which is crucial for cross-linguistic investigations, is the use of metalanguage as tertium comparationis (*t.c.*). "Metalanguage is to be sufficient to record all features (common and peculiar) of the contrasted systems" (Rahilina 2002: 372).

The purpose of the paper is to characterize the model of situation as basis for comparison of lexical semantics. The purpose is fourfold: to substantiate lexical semantics modeling from a cross-linguistic perspective; to characterize the model of situation as basis for comparison of lexical semantics of related and non-related languages; to elaborate a model of situation; to determine the prospects of semantics modeling. The languages for comparison would be English, German, Polish, and Ukrainian.

2. Model of Situation as Tertium Comparationis.

We claim the MODEL OF SITUATION to be the basis for comparison (*t.c.*) of a linguistic items' semantics. As a metalanguage construct, the MODEL OF SITUATION reveals the features of a polycentric model (Taylor 1995: 99) that represents the meaning of a linguistic item as a set of alternative, hierarchically established semantic dimensions. This agrees with the assumptions about the multidimensional nature of cognition modeling (Multidimensional models 1992), as well as with the theoretical premises on how multidimensional situations are modeled (Therriault, Rinck 2007). It is expedient to use this type of model, reasoning from the hypothesis that language semantics reflects the results of situation conceptualization as "conception of something which can be the case in some world" (Dik 1997: 105), cf. one of the Case Grammar slogans: *meanings are relativized to scenes* (Fillmore 1977: 59). From this perspective, the MODEL OF SITUATION is considered as a standard that represents the content of a linguistic item through a sampling of a multidimensional concept that encodes information on how a situation is construed by the semantics of a lexical item. It is worth noting that what is meant here is by no means a real-world situation:

It is a state of affairs strictly as it is portrayed by the language L and as it is reflected in the possible uses of L. It is a linguistic situation, not a psychologically, logically or pragmatically defined one. It is a complex fact – a set of facts and entities linked by semantic dependency relations into a unified structure that is denoted by the predicate 'L' (Mel'čuk 2015: 12).

It is posited that a situation is construed based on the conceptualization strategies a designator resorts to in his / her "elaborating" (identifying, estimating, associating, etc.) the situation (the participants and their relations). Each strategy determines the resultant configuration of a situation concept, revealing various aspects (characteristics) of the participants.

A situation concept is configured as a set of *semantic dimensions*, they being the characteristics that encode information on a certain aspect of a situation or its fragment. The semantic dimensions of contrasted linguistic items represent a certain aspect of situation conceptualization by parameters that determine relations and (cognitive or communicative) characteristics of situation participants. Within cross-linguistic comparison, those parameters determine the domains of semantic equivalence of contrasted linguistic items. The parameters establish similarities and differences in the role, communicative (pragmatic), ontological (categorical), referential or deictic (positional) characteristics of participants. The indicated parameters determine not only the semantic extents of linguistic items, but also the semantic correspondences of these items in the contrasted languages. In this regard, the model of situation represents the content of a linguistic unit in the perspective of characteristics and relations the participants reveal within a certain situation.

3. Types of Semantic Dimensions.

We posit that the contrasted linguistic items' semantics encode and distribute information on the dynamics of situation conceptualization within four alternative, hierarchically established semantic dimensions: representative (encoding information on the gnoseological values of situation participants), sentential (encoding information on the relationships of situation participants), constructional (encoding information on the positional activities of situation participants) and epidigmatic (encoding information on the semantic associations established between the situation participants).

3.1. Subjective Scaling Experiment.

In order to establish the relevance of the model of situation as basis for comparison of lexical semantics and the ways the information is encoded and distributed in the semantics of lexical items we will apply to the method of subjective scaling. The experiment provided for the evaluation of stimuli (lexical items that designate the concept of situation "state of cold") within a five-grade scale. The scope of the concept of situation "state of cold" is as wide as possible and includes such semantic zones: (a) potential physiological state (*It is cold*); (b) general

physiological state (*I have a feeling of cold*); (c) actual physiological state (*I am shivering with cold*); (d) emotional state (*I am living a sad and cold life*). Based on the obtained results, a primary group matrix table was made (see Table 1). The matrix shows the priorities of the respondents (25 students-philologists) in selecting lexical items that correlate with a certain semantic dimension.

Table 1

**Primary group matrix of subjective scaling results
(linguistic units that designate the concept of situation “state of cold”)**

Stimulus \ Value	1	2	3	4	5
<i>It is cold</i>	1	3	4	5	12
<i>I have a feeling of cold</i>	2	6	9	7	1
<i>I am shivering with cold</i>	3	2	2	10	8
<i>I am living a sad and cold life</i>	12	3	5	3	2

The experiment demonstrated the relevance of modeling a concept of situation through a sampling of a multidimensional concept, as the students responded to all stimuli. The evaluation of stimuli responses reveals equal distributions of the semantic strategies with a tendency towards the representative and relational dimensions. The average group grade for the stimulus “It is cold” amounts to 3,96, for the stimulus “I have a feeling of cold” – 2,96, for the stimulus “I am shivering with cold” – 3,72, for the stimulus “I am living a sad and cold life” – 2,2.

Further, we will characterize the model of situation concept within the semantic dimensions of lexical items in related and non-related languages.

3.2. Representative Semantic Dimension.

The **representative** semantic dimension encodes information on the gnoseological values of situation participants. Having the status of incorporated actants (cf. *implicit arguments* in (Jackendoff 1992: 45) or *shadow arguments* in (Pustejovsky 1998: 68)), such participants reveal their values in the semantics of words, lexical word-combinations and phraseological units. Such an approach provides for an “actant-based” orientation of the representative semantic dimension what conforms to the principle of medieval logicians: *objectum specificat actum* (Arutjunova 1976: 125). The gnoseological values of participants are determined by their relation to a certain conceptual domain: perceptual, evaluative, taxonomic, etc. Any of these domains determines the way a participant – either a subject-actant or an object-actant – is interpreted (conceptualized). It determines the cognitive (either perceptual or axiological) perspective of a participant, identifying it within a set of elementary thematic relations (elementary semantic roles). Such an approach conforms to one of the Lexical-Functional Grammar assertions: thematic relations are “descriptions of certain aspects of cognitive conceptualization” (Falk 2001: 99). In this regard, elementary semantic roles are assigned to participants not due to the actantial positions they take in the predicate structure, but relative to a conceptual domain. Cf.: “A semantic role characterizes a participant from the viewpoint of its place in a cognitive structure” (Paducheva 2004: 93).

For instance, the contrasted languages reveal coincidence (similarities) in conceptualizing the ethical evaluative characteristics of participants, encoded in the semantics of the adjective *black* and its cross-linguistic equivalents, cf.: Eng. *black* “evil; wicked”: *black-hearted*; Ger. *schwarz* “böse, niederträchtig”: *eine schwarze Seele haben*; Pol. *czarny* “zły, niegodziwy, nieżyczliwy”: *czarna dusza*; Ukr. *чорний* “властивий злісній, низькій, підступній людині”: *чорна душа*. To represent the ethical evaluative characteristics of participants, the contrasted languages may apply to the designations of different modi of perception, cf.: Eng. (a) *blue* “characterized by indecency or obscenity”: *a blue language*; (b) *dirty* “morally unclean or

impure; ‘smutty’”: *a dirty joke*; Ger. *gesalzen* “grob, derb”: *ein gesalzener Witz*; Pol. (a) *ostry* “uszczypliwy, złośliwy”: *ostry dowcip*; (b) *slony* “nieprzyzwoity, ordynarny, prostacki”: *slony żart*; (c) *thusty* “nieprzyzwoity”: *thusty kawal*; Ukr. (a) *масний* “непристойний, цинічний”: *масні анекдоти*; (b) *сальний* “непристойний, грубо-цинічний; соромітний”: *сальний анекдот*; (c) *солоний* “дотепний, але грубий; непристойний”: *солоні дотепи*.

3.3. Constructional Semantic Dimension.

The **constructional** semantic dimension encodes information on the positional activities of participants. The function of the constructional semantic dimension is reduced to the identification of participants’ syntactical relations within an *argument structure construction* (Goldberg 1995: 3). The syntactical relations are defined as a medium that relates nominal arguments of the predicate to various syntactical positions, hierarchically arranged according to a degree of their syntactical activity or significance (Kibrik 2005: 134). Argument structure constructions set (specify) the semantic pattern of a situation (e.g. “someone causing something to move”, “someone experiencing something”, “something moving”, etc.) and the way this pattern correlates with the arrangement of syntactical elements in a sentence. The semantic patterns are considered as arguments patterns, which functionally are oriented more on certain types of predicates, rather than on the description of a specific head verb. Cf.: “Constructions – form-meaning correspondences that exist independently of particular verbs” (Goldberg 1995: 1).

The explanatory effect of the constructional semantic dimension is reduced to the establishment of positional (morphological and/or syntactical) characteristics of participants. For example, a logical calculus of the semantic roles of Experiencer and Stimulus encoding positions in underlying diatheses of the contrasted languages looks that way (notation of positions: A – canonical encoding by Agent; P – canonical encoding by Patient; PH – peripheral encoding; EXP – the living entity that experiences the action or event denoted by the predicate; ST – entity that prompts sensory or emotional feeling – not deliberately): A (EXP) / P (ST), cf.: *Ja słyszę głosy*; A (EXP) / PH (ST), cf.: *Er zittert vor Kälte*; P (ST) / PH (EXP), cf.: *З вікна мені видно гору*; A (ST) / PH (EXP), cf.: *Увесь час їй вмижались дракони*; PH (EXP / ST), cf.: *Мені жарко від спекотного сонця*; A (ST) / P (EXP), por.: *The sun warms me*; P (EXP) / PH (ST), cf.: *Ona posiniała ze złości*.

3.4. Sentential Semantic Dimension.

The **sentential** semantic dimension encodes information on the relations of participants within the predicate-actantial structure of a head verb that belongs to a certain thematic class – a group of words with a common semantic component (Paducheva 2004: 42). The dimension determines relational characteristics of participants within a set of basic semantic roles. The roles perform the functions of tokens of those participants, which one may conventionally correlate with the notions of “subject” and “object” correspondingly. From this perspective, the sentential semantic dimension characterizes participants as “non-specific” actants, whose semantic roles are set not by the definition itself, but by the predicate, that “imposes” such roles on them. Thus, we may posit the correlation of the sentential and constructional semantic dimensions that provide for two different facets of a situation representation. Such a correlation is considered in terms of the right and left parts of a definition: a definition “inlet” and definition itself, e.g.: *X shows Y to Z* (definition ‘inlet’) ≈ ‘X causes Y to be seen by Z’ (definition itself) (Boguslavskij 1985: 118). The pattern requires that all elements of the situation should be identical. The condition of the definition correctness consists in the identical set of variables of the right and left parts: all variables necessary for the semantic description which are used in the right part should also be in the “inlet” definition (Plungjan, Rahilina 1998: 109).

In the perspective of cross-linguistic analysis, the sentential semantic dimension is considered to establish the equivalence of lexical items in the aspect of diathetic alternations, resulting in a taxonomic category or taxonomic class change. For example, the English *sound*-thematic intransitive verb *resound* may realize two sentential configurations: Agent-Subject Form, cf.: *Music resounded in the hall*, and Location-Subject Form, cf.: *The hall resounded with*

music (Dowty 2001: 171). The same situation is observed in German and Polish, cf.: Ger. **Das Gelächter tönte durch den Saal (agent) vs. Der Saal tönte vom Gelächter** (location); Pol. **Śmiech rozbrzmiewał w sali (agent) vs. Sala rozbrzmiała śmiechem (location)**. The observed diathetic shift is the case of the dynamic texture hypothesis realization: L-Subject sentences describe a situation where a kind of event is occurring simultaneously and repetitively throughout all parts of a place or space. Distributed throughout all subregions (surface or space) within a “texture of movement” pattern, the event acquires the features of a dominant phenomenon and, as the result, becomes more salient (Dowty 2001: 176). Cf.: “If, as a result of bringing something into contact with something else, that something else is affected in some complete way that new status of the goal entity is sufficient for its inclusion in the clause’s perspective” (Fillmore 1977: 79).

The diathetic shift described above leads to a change of the role structure configuration. In the aspect of participant’s communicative ranking, it provides for placing the participant *hall* (the semantic role of Place) in the subject position and the participant *sound* (the semantic role of Theme) in the object position. The ranking shift is determined by changes of the source semantic roles: Place → Patient; Theme → Content. In particular, the participant with the semantic role of Place acquires that one of Patient, indicating the change of the hall state (the hall became filled with some sound). From this viewpoint, the closest equivalent of locatives Eng. *resound*, Ger. **tönen**, Pol. *rozbrzmiewać* **in the Ukrainian language will be the verb** *наповнюватися* “ставати заповненим чим-небудь”, cf.: *Зала наповнилася музикою*. It is worth noting that the Ukrainian verb *лунати*, equivalent to those of the Agent-Subject Form construction (cf.: *Музика лунала у залі*), cannot be the case of the Location-Subject Form construction in the meaning “to fill (to cover) space with some sound”. The matter is that it describes the situation of acoustic perception not as a dynamic, but as a static phenomenon, cf.: *Лунає співом ліс* ≈ ‘Ліс є сповнений співом’.

3.5. Epidigmatic Semantic Dimension.

The **epidigmatic** semantic dimension encodes information on the semantic associations of situation participants (a case of semantic derivation). We claim that participants’ semantic associations are realized within four types of semantic derivation: converse, actantial, implicative and categorical.

A *converse* type of derivation makes use of a “shift in focusing” strategy – displacement of focus of attention from one participant onto another in the way of a diathetic shift that promotes one participant in ranking and demotes the other (Paducheva 2004: 158). Confer the way the situation of “identification vs. manifestation of perceptual quality” is represented (colexified in terms of (François 2008: 168)) in English and German: Eng. *I smell the flowers vs. The flowers smell good*; Ger. *Ich rieche die Blumen vs. Die Blumen riechen gut*. The utterances demonstrate the redistribution of focus of attention on the situation participants in the way of promoting one and demoting the other. In Polish and Ukrainian, the situation conceptualization applies to different lexicalizations (designations), cf.: Ukr. *Нюхаю квіти vs. Квіти гарно пахнуть*; Pol. *Wącham kwiaty vs. Kwiaty pięknie pachną*.

An *actantial* type of derivation is reduced to transformations in structure, type or reference of situation participants. Such transformations may provide for: (a) increase or decrease in number of obligatory participants of the source situation. Cf. the case of “external cause participant” omission: Eng. *The thunder frightened me vs. I got frightened*; Ger. *Der Donner erschreckte mich vs. Ich habe mich erschrocken*; Pol. *Grzmot przestraszył mnie vs. Ja się przestraszyłem*; Ukr. *Грім перелякав мене vs. Я перелякався*; (b) change of participant’s type. Cf. the case of “imaginary perception” situation, developing derivation, based on the transformation Percept → Imaginary Percept: Ukr. *Я почув скрипіння підлоги vs. Мені почулося скрипіння підлоги*. As we see, in Ukrainian the situation of “an imaginary perception” is realized by means of case relations, namely by the dative form *мені почулося*, whereas in English, German and Polish the situation is represented by means of the modal predicate

construction with a propositional actant, cf.: Eng. *It seems that I heard the floor creaking*; Ger. *Es scheint, daß ich hörte den Boden knarren*; Pol. *Wydaje mi się, że słyszałem skrzypienie podłogi*. Besides, in English the situation may be represented by a perception verb, used in the form of the Present Continuous Tense, cf.: *I am hearing his voice in my head*; (c) change of participant's referential characteristics. Cf. the cases of reflexive and reciprocal co-references in the contrasted languages. For example, the German reflexive verb *sich sehen* and the Polish one *widzieć się* admit both reflexive and reciprocal co-references, cf.: Ger. (1) *Ich habe mich im Spiegel gesehen* (reflexive co-reference); (2) *Wir sehen uns bald* (reciprocal co-reference); Pol. (1) *Widzieć się w lustrze, szybie, wodzie* (reflexive co-reference); (2) *Nie widzieli się w ciemnościach* (reciprocal co-reference). In English and Ukrainian, the co-references apply to different language forms (dimensions), cf.: Eng. (1) *I saw myself reflected in a mirror*; (2) *We have not seen each other for ages*; (3) *When shall we see again?* (see "to meet one another"); Ukr. (1) *Бачимось з ним щодня* (бачитися "зустрічатися, бувати разом де-небудь"); (2) *Я бачив себе в дзеркалі*.

An *implicative* type of derivation applies to a prototypical situation that serves as a source (supplier) of material for the derived meanings. The derivation provides for the extension based on implications – additional information about the effects of the world changing (Kustova 2004: 39). For instance, the derivational relation in the Ukrainian idiom *світу божого не видно* "1. Зовсім нічого не можна побачити, розрізнити зором; стає або стало темно від сильної зливи, хуртовини, туману, пилу і т. ін." → "2. Когось чи чогось дуже багато" exploits a scenario of "partially confined perception", grounding in the implication "high density – large quantity" (concentration of homogeneous objects is conceptualized as an accumulation of these objects in a considerable quantity). The English equivalent *to be snowed under (with smth.)* "to have so much work that you have problems dealing with it all; to be overwhelmed, esp. with paperwork", represents a case of reversible conceptualization as compared to the Ukrainian one. The derivational relation grounds in the implication "large quantity – high density" (accumulation of objects in a considerable quantity is conceptualized as a concentration of the objects). Foregrounding the idea of an impenetrable obstacle, the idiom gives rise to the situation of "totally confined perception", cf.: *I am absolutely snowed under with work now*. The Polish equivalent *świata bożego nie widzieć* "robiąc coś, koncentrować się tylko na tym, angażować się w to całkowicie, nie zwracając uwagi na to, co dzieje się dookoła" reveals another strategy of conceptualization, representing a case of the so-called "detached perception". It characterizes situation as a condition of mental separation from the world, similar to that one which is associated with a state of detachment from one's surroundings, cf.: *Zaczytał się tak, że o bożym świecie zapomniał*. The derivational relation grounds in the implication "deeper absorbedness – larger detachment" (the more a person gets absorbed into something, the more detached (s)he becomes from something else). The German equivalent *nicht mehr aus den Augen sehen können* "sehr müde, erschöpft, mitgenommen sein" is likely to exploit a scenario of pseudo-, or imaginary perception, grounding in the implication "state of a person – manifestations or symptoms of the state". If a person is very tired, (s)he might suffer from some perceptual disorders that might cause some vision problems (a case of proprioceptive reaction), e.g. making a person see imaginary colours, cf.: Pol. *Komuś pociemniało w oczach* "ktoś ma zaburzenia wzroku spowodowane zmęczeniem"; Ukr. *В очах потемніло у кого* "комусь стає погано, м'ясно від втоми".

A *categorical* type of derivation is reduced to the extension of a situation concept in the way of specification of the participant's taxonomic class (vide supra). It, in its turn, may stipulate changes in either the taxonomic category or thematic class of the verb, cf.: (a) *Snow covered the fields* (event or happening) vs. *Farmers covered potatoes* (action); (b) *Didn't you hear the doorbell?* (perception) vs. *I heard the news on the radio* (information). In cross-linguistic perspective, the categorical shift reveals similarities and differences in the extension of a situation concept in the way of projection mapping from one conceptual domain onto another

(Lakoff, Johnson 1980). One of the cases is the word *soft* that reveals the extension of a concept of tactile situation towards the situation of visual perception. In English, Polish and German, the semantic derivation applies to the evaluative strategy, based on the conceptualization of some gradual attribute of a perceptual object, cf.: Eng. *soft* “gentle, gradual”: *a soft slope, ascent, etc.*; Pol. *miękki* “o kształtach: łagodnie zaokrąglony”: *miękkie faldy*. The German equivalent *weich* “durch das Fehlen von scharfen Konturen, Kontrasten, von Spitzen, Ecken, Kanten gekennzeichnet” exploits perceptual strategies of conceptualization, reducing it to the situation of “contrast perception”, cf.: (a) *Weiche Linien*; (b) *Weiche Körperformen*. The extension of the Ukrainian equivalent *м'який* “який має невиразні, розпливчасті риси, межі чогось” also applies to perceptual strategies, however reduces them to the situation of “vague perception”. The “softness” is conceptualized in the aspect of indistinctly seen or perceived outlines of an object, cf.: *М'які обриси зелених гаїв*.

3.6. Directed Associative Experiment.

In order to reveal the characteristics of the participants and their relations within a situation concept, we will apply to a directed associative experiment. The experiment provided for the evaluation of reactions on the word-stimulus *cold* that encodes information on one of the cardinal participants of the situation. The respondents' reactions were paradigmatic and syntagmatic associations that characterize the participant *cold*: (a) by a certain semantic feature (paradigmatic associations); (b) by an actantial position of the predicate (syntagmatic associations). The paradigmatic associations are intended to reveal the characteristics of encoded and distributed information within the representative and epidigmatic dimensions, whilst the syntagmatic ones – within the sentential and constructional dimensions.

The experiment revealed an irregular distribution and encoding of information on the situation of “cold” in the semantic dimensions. With the representative dimension, the information is distributed within such semantic zones: (a) a low temperature of physical environment (*frost* – 19 respondents); (b) time or season characterized by a low temperature (*autumn, winter, night, etc.* – 19); (c) the physical sensation of cold (*sensation of cold, stiffness, hypothermia, etc.* – 11); (d) a place with a low temperature (*dormitory, room, street, basement, etc.* – 8). The sentential dimension encodes information on the semantic roles of the participant *cold*: (a) Cause (*shiver, tremble, feel cold, turn blue, etc.* – 18); (b) Stimulus (*feel, endure* – 12); (c) Causer (*pierce, irritate, pinch, etc.* – 11); (d) Theme (*blow, approach, spread, etc.* – 10); (e) Counteragent (*warm oneself, dress oneself, fight, win, etc.* – 5); (f) Place (*walk, fish, hunt* – 2); (g) Content (*forecast, understand* – 2). The constructional dimension characterizes a positional activity of the participant *cold* (vide supra): (a) A-coding (*pierce, kill, seize, etc.* – 12); (b) P-coding (*feel, endure, manifest, etc.* – 16); (c) PH-coding (*shiver, feel cold, redden, etc.* – 19). The epidigmatic dimension reveals the semantic shifts of the participant *cold*. The concept of the situation extends to the boundaries of: (a) emotions (*sadness, anger, fear, etc.* – 8); (b) identifications (*icicle, snow, snowflake, wind, rain, ice, etc.* – 15); (c) evaluations (*discomfort, indifference, dislike, etc.* – 7); (d) associations (*death, purity, lack of money, spirits, family, heart, smile, thought, end, blade, desert island, dream, without paternal heartiness, war, weapon, knitted socks, hollowness, disease, tiredness, tartan, etc.* – 15).

4. Conclusions.

The paper claims the model of situation to be the basis for comparison of lexical semantics. The model of situation concept is thought to represent the content of a lexical item as the realization of relations between the basic participants of a given situation. The models represent the semantics of a lexical item through a sampling of alternative, hierarchically arranged semantic dimensions that encode information on the gnoseological values of situation participants (actants), nature of their relationships, degree of their positional activities, and their semantic associations. The information is encoded and distributed within four semantic dimensions: representative, constructional, sentential and epidigmatic. The representative semantic dimension reveals the characteristics of participants by their relating to a certain

conceptual (perceptual, evaluative, taxonomic, etc.) domain. The constructional semantic dimension identifies participants within the scope of an argument structure construction. The sentential semantic dimension determines a relational (realized within a predicate-actantial structure) range of participants. The paradigmatic semantic dimension reveals derivational (based on the extension of a linguistic item semantic paradigm) strategies of participants.

The scope of information, encoded by the contrasted (English, German, Polish and Ukrainian) lexical items in relation to the dimensions is not the same, as it depends on a designator's strategies that determine the priority of a certain mode of encoding. It has been established that languages with a minimized nomenclature of case relations (English, and partly German) typologically tend towards the representative and paradigmatic dimensions. Such dimensions provide for the priority of cognitive (perceptual or axiological) and derivational strategies of a designator, oriented on gnoseological values and regular semantic associations of participants. The languages with a developed system of case relations (such as Polish and Ukrainian) are typologically oriented on the sentential and constructional dimensions. Revealing the priorities of situational and communicative strategies of a designator, such languages focus on the nature of relationships and positional activities of participants.

To ascertain an overall view of the dynamics of lexical items and to establish the way these items distribute information on various types of situations in the semantic spaces of related and non-related languages makes it expedient to carry out further psycholinguistic research into modelling the lexical semantics.

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Анотація

У статті схарактеризовано модель концепту ситуації – репрезентацію, яка є основою зіставлення (*tertium comparationis*) семантики лексики різного ступеня споріднених мов. Сформульовано гіпотезу про те, що модель концепту ситуації відтворює зміст лексичної одиниці за зразком багатовимірного концепту. Релевантність моделі концепту ситуації як репрезентації багатовимірного семантичного простору верифіковано за результатами методики суб'єктивного шкалювання. Концепт ситуації представлено у вигляді конфігурації семантичних мовних вимірів – характеристик плану змісту мовної одиниці, які кодують інформацію про певний аспект концептуалізації ситуації або її фрагмента. З'ясовано, що семантика лексики зіставлюваних мов (англійської, німецької, польської та української) кодує та розподіляє інформацію між чотирма семантичними мовними вимірами: репрезентативним, сентенційним, конструкційним та епідигматичним. Обстоюється ідея, що репрезентативний семантичний вимір кодує інформацію про пізнавальну цінність учасників ситуації, сентенційний – про набір та характер відношень учасників ситуації, конструкційний – про ступінь позиційної активності або важливості учасників ситуації, епідигматичний – про семантичні асоціації учасників ситуації. Для визначення змісту наповнення концепту ситуації та встановлення особливостей кодування і розподілу інформації в семантиці лексики застосовано спрямований асоціативний експеримент. У перспективі відтворення специфіки національно-мовної картини світу визначається доцільність подальших психолінгвістичних досліджень семантичних моделей лексики.

Ключові слова: семантичні моделі, семантичні виміри, модель ситуації, концепт ситуації, учасник, *tertium comparationis*, метод суб'єктивного шкалювання, спрямований асоціативний експеримент.