

## GRAMMATICAL PARAMETERS OF THE NOTIONAL MODUS OF *EMPATHY* CONCEPT LEXICALISED IN MODERN ENGLISH DISCOURSE

Nataliia Tatsenko

Sumy State University, Sumy, Ukraine  
tacnatasha@gmail.com

The article provides a comprehensive consideration of the notional modus frame of EMPATHY concept embodied in modern English discourse. It is aimed at analysing the grammatical parameters of the frame which encode semantic characteristics of EMPATHY concept (lexicalised by literal linguistic means) and their organisation in discourse. The grammatical parameters represent different slots of the frame: *empathy* (n) – INSTRUMENT/AGENT, *empathiser* (n) – AGENT/PATIENT, *empathisee* (occasionalism) (n) – PATIENT/AGENT, *empathise* (v) – ACTION, *empathetic/empathic* (adj), *empathising* (adj) – SUCH, *empathetically/empathically* (adv), *empathisingly* (adv) – SO. These slots speak for the diversity of the ways in which they have fixed the “grounding” of EMPATHY concept on a communicative situation. Applying corpus methodology, the research proves that in the human epistemic space the notional modus of EMPATHY concept exists as an abstract entity or idea about empathy rather than a specific event represented by the verb. Context analysis shows that at present the noun *empathy* has lost its original meaning of the ability to enter into emotional harmony with a certain work of art. The analysis of the British national corpus (BNC) allows making a conclusion that in the frame of the notional modus slots *empathiser* and *empathisee* are mostly irrelevant. In the semantics of the frame slots, there are numerous shifts of the prototype meaning based on extension, narrowing, metaphorical and metonymical transitions. However, they do not lead to the disintegration of the standard norm which is stored in the memory of the individual.

**Keywords:** concept; empathy; frame; notional modus; slot.

---

### Introduction

The concept of “empathy” has provoked the interest of researchers since entering the language of psychology and psychiatry. At present, it is mirrored in the multiplicity of studies in a number of different scientific discourses (Pavey, Greitemeyer, & Sparks, 2012; Banissy, Kanai, Walsh, & Rees, 2012). Its semantic range varies from a cognitive and emotional understanding of another’s experience, resulting in an emotional response that is congruent with a view that others are worthy of compassion and respect and have intrinsic worth (Barnett & Mann, 2013, p. 230) to the capacity to understand and enter into another person’s feelings and emotions or to experience something from the other person’s point of view (Colman, 2009, p. 248). These definitions added a cognitive component to the earlier affective emphasis in the form of “the ability to understand”, and the notion of “identity merger” evolved into a self-other differentiation in which the empathiser temporarily took the role of the empathisee or put himself/herself in the other’s place during empathic process (Tatsenko, 2016a, p. 79).

In pragmatically oriented linguistics EMPATHY is researched as “the point of view” in an anaphoric utterance by which a participant is bound with the event or state that he/she describes in that sentence, or the participant in the reported event whose perspective is taken by the speaker (Kuno, 1987). This concept is also identified with interactive behaviour through empathic listening (Salem, 1982), conversation analysis of social empathic interplay (Heritage, 2005), rejection in negotiation (Martinovski, Traum, & Marsella, 2006) etc. Being ascribed to the domain of pragmatics in most linguistic studies, EMPATHY concept needs to be analysed according to the cognitive nature of its representation. **The relevance** of the article is stipulated by the absence of a comprehensive analysis of EMPATHY concept from the perspective of cognitive linguistics in general and cognitive grammar in particular. In this regard, **the primary objective** of the paper is to define the grammatical parameters of the conceptualisation of empathy lexicalised in modern English discourse.

Frame semantics as one of the important approaches in the conceptual analysis has been found to be a valid source of insight on the nature and functions of empathy as a cognitive-emotional and linguistic phenomenon (Tatsenko, 2016b). The theoretical background of the article involves the fact that the very foundation of an information system is structured by several highly abstract basic frames, where the most fundamental categories of thought are arranged in accordance with the way we perceive things of the experiential world (Zhabotynska, 2010, p. 80). It is argued that frame structuring is provided by grammatical parameters which encode not only semantic (ontological) differences of concepts but also their organisation in discourse.

Therefore, in contrast to lexical meanings, grammatical parameters reflect certain fragments of the world and the structure of these fragments from the speaker’s position. They provide the foundation for conceptual material represented by vocabulary. Depending on how adequately the grammatical foundation is chosen, a

person identifies the “placement” of EMPATHY concept in his/her epistemic space, not only realising which aspects of reality are the objective of conceptualisation but also identifying their epistemic statuses.

### **Method**

In the present study, we used the basic frames (the Thing Frame and the Action Frame) developed by Zhabotynska (2010) which serve as a conceptual foundation of the part-of-speech systems. At the first stage of the research, we built a frame of the notional modus (lexicalised by literal linguistic means rather than figurative ones) of EMPATHY concept. In this frame the conceptualiser’s attention was aimed at its different slots: *empathy* (n) – INSTRUMENT/AGENT, *empathiser* (n) – AGENT/PATIENT, *empathisee* (occasionalism) (n) – PATIENT/AGENT, *empathise* (v) – ACTION, *empathetic/empathic* (adj), *empathising* (adj) – SUCH, *empathetically/empathically* (adv), *empathisingly* (adv) – SO. At the linguistic level (the level of surface structure) these slots are actualised by grammatical parameters (parts of speech) – grammatical cognitive-semasiological interpretation of the semantic properties of the notional modus of EMPATHY concept.

The conceptual analysis was performed with the help of one of the key concepts in cognitive grammar – “grounding”. It is defined as a connection of the essence with its ontological foundations (Harder, 1999, p. 198); the grammaticised specification of the relation between the ground and the profile of a noun phrase or a finite clause in regard to certain fundamental “epistemic” domains, such as time, reality, and coordinated mental reference (Langacker, 2001, p. 166). It is argued that different grammatical forms of the slots *empathy* and *empathise* speak for the diversity of the ways in which they have fixed the “grounding” of EMPATHY concept on a communicative situation.

Corpus methodology was used for analysing each slot of the notional modus frame (we incorporated the British National Corpus (BNC) – a 100-million-word collection of samples of written and spoken language from a wide range of sources, designed to represent a wide cross-section of British English, both spoken and written, from the late twentieth century). Together with corpus linguistics, we applied quantitative and distribution analyses, generalisation and systematisation of the material, and context analysis.

In this paper, not only BNC samples are relied on but also fragments naming notional modus of EMPATHY concept from mass media sources, belles-lettres, and scientific literature.

### **Results and Discussion**

The analysis of BNC has found out that the slot *empathy* (n) is most widely represented (out of 4 048 analysed texts, 98 313 429 words, the number of hits with *empathy* is 269, found in 156 different texts, the frequency: 2.74 instances per million words). The slot *empathise* (v) is much less represented: 71 hits (there are 28 hits of *empathise*, found in 24 different texts, the frequency: 0.28 instances per million words, and 43 hits of *empathise*, found in 37 different texts, frequency: 0.44 instances per million words). Our query for the slot *empathetic/empathic* (adj) returned 47 hits (*empathetic* – 28 hits in 25 different texts, frequency: 0.28 instances per million words, *empathic* – 19 hits in 11 different texts, frequency: 0.19 instances per million words). The slot *empathising* (adj) is found in 9 hits (*empathising* – 3 hits in 3 different texts, frequency: 0.03 instances per million words, *empathising* – 6 hits in 6 different texts, frequency: 0.06 instances per million words). The slot *empathetically/empathically* (adv) is represented in 6 hits (*empathetically* – 3 hits in 3 different texts, frequency: 0.03 instances per million words, *empathically* – 3 hits in 3 different texts, frequency: 0.03 instances per million words). There are no hits for the slots *empathiser* (n), *empathisee* (n), and *empathisingly* (adv).

The results confirm the opinion that in the epistemic space of most British people the notional modus of EMPATHY concept predominantly exists as an abstract entity or idea about empathy being far from a specific event represented by the verb. The slots SUCH and SO are even less important than the slot ACTION. The doers of empathy (*empathiser* and *empathisee*) are mostly irrelevant (though these lexical items are often found in psychological discourse). In this article, we are going to analyse all the slots except the ones which are not represented in BNC.

**The slot *empathy* (INSTRUMENT/AGENT).** It represents the fact or occurrence of empathy. As a general type of the fact *empathy* is used in the singular, usually without an article (1). As a particular event, it coexists mostly with a definite article in the predicative (2) or objective (3) position, or with such modifiers as a pronoun (4) or a noun in possessive case (5).

(1) *Empathy* is a different form of communication from other forms such as verbal, or body language, or smell (BNC, 2013, empathy, 23).

(2) *The man, the man who’s the man in the street and he had the empathy allowed him to...* (BNC, 2013, empathy, 239).

(3) *Her little speech touched Patrick to the core. He felt the empathy between them* (BNC, 2013, empathy, 167).

(4) *But if you prevaricate and say, 'I can't comment on this because I'm an officer of the Council,' then they think, 'Oh, God, you know, what sort of person am I talking to?' and you lose all your empathy and all the sympathy of the listeners, which is what you're after* (BNC, 2013, empathy, 267).

(5) *All show the conductor's empathy with the composer displayed in lyrical lines and incandescent climaxes, poetry and fire nicely balanced* (BNC, 2013, empathy, 35).

The material from BNC has revealed that in 269 hits of *empathy* from different contexts, in 157 instances empathy is shown to people (58.3 %), in 18 instances – to animals (6.7 %), and in 36 instances (13.4 %) the objects of empathy are phenomena associated with human activity (hard luck, racism, difficulties, cultural traditions, nature etc.). In 58 instances (21.6%) there are no definite objects or subjects of empathy in the sentences. This makes it possible to conclude that in modern English-speaking society, empathy is conceptualised primarily as the ability to feel and understand the feelings or emotions of another person, although for the first time the term appeared in the world as the ability to enter into emotional harmony with a certain work of art (Lipps, 1906). Nowadays this semantic aspect has almost completely disappeared since in BNC there are only two contexts in which the objects of empathy are the works of art (6, 7):

(6) *In both, the identification with music that attempts to express any part of this vast area tends to be one of self-deceiving empathy* (BNC, 2013, empathy, 8).

(7) *This act of exposure is typical of a manner of painting that demands engagement by the viewer on the level of empathy* (BNC, 2013, empathy, 209).

**The slot empathise (ACTION).** The examples from BNC have shown that in 71 hits of *empathise* from different contexts, in 41 instances people empathise with other people (57.7 %), in 7 instances – with animals (9.9 %), and in 21 instances (29.6 %) the objects of empathising are phenomena associated with human activity. In 2 instances (2.8 %) there are no definite objects or subjects of empathising in the sentences. The given statistics coincides basically with statistics of the slot *empathy*, namely: the dominant object of empathy in communicative situations is a person. Significant is only the difference between undetermined objects of empathy: in contexts with *empathy* lexeme they make up 21.6 %, and in contexts with *empathise* – only 2.8 %. This percentage confirms the fact that the slot INSTRUMENT/AGENT, representing the conceptual core of the notional modus, is, at the same time, less specific than the slot ACTION. The latter usually has a clearly defined object to which this action is directed.

Let us analyse the ways of “grounding” of EMPATHY concept, given in the grammatical semantics of the verb *empathise*. The use of certain aspectual-temporal forms reflects differences in the conceptualisation of an empathic communicative situation. For example, the verb *empathise* in the form of Present Simple, as a rule, represents EMPATHY concept as a certain abstract state, which gives a qualitative characterisation of the empathiser:

(8) *The ends of design activity are social and not (merely) technical: “the architect empathises with a people and a place in order to give form to that identity ...”* (BNC, 2013, empathises, 3).

Qualitative characterisation of the empathiser also comes to the fore in the case of using the verb *empathise* as a part of the modal predicate:

(9) *Nigel could empathize with that* (BNC, 2013, empathize, 2).

An empathiser or empathisee can be evaluated by behaviour that is not inherent to them in general but in certain situations. In such cases, the verb *empathise* is used in the Present Continuous and acquires the features of dynamism:

(10) *If I am empathizing with your anger – at something or someone else – I too may feel that anger coming over me* (Kenneth, 2016).

Not only an empathiser or empathisee may be in the focus of a conceptualiser’s attention, but also the very fact of a difficult situation, which is typical for clarification or explanation of such a situation, when subordinate attributive or circumstantial clauses of time, place, mode of action, reason etc. turn out to be the key ones:

(11) *In his hour-long Q&A today, Facebook's Mark Zuckerberg said he empathizes with businesses that may lose traffic from Facebook when it changes how News Feed works but that ultimately, the company is making changes it thinks best benefits users* (Sullivan, 2015).

It is worthy of note that we did not reveal the use of the verb *empathise* in Present Perfect Continuous, that is, it never expresses the resulting character of continuous empathy. The effectiveness of a one-time empathic situation comes to the fore in the case of using this verb in Present Perfect:

(12) *Universally many cultures not just minorities have empathized with the Hispanic community and have marched with the best in protest* (Powell, 2010, p. 60).

As a rule, in the form of Past Continuous the statement of fact is a priority, and in this case, an empathic communicative situation is characterised by descriptiveness (13). The Past Simple form usually reflects a specific manifestation of empathy (14). The difference between descriptiveness and a specific manifestation of empathy can be neutralised when the semantics of qualitative characterisation of an empathiser, an empathisee, or the object of empathy comes to the fore (15):

(13) *I was empathizing with it so much more than I would do with other movies but then didn't understand why* (Gopinath, 2014, p. 91).

(14) *Morris empathized with the underdog* (BNC, 2013, empathized, 2).

(15) *She knew the value and cost of education from her own family's sacrifices and empathised with the country's desperate need for more teachers and schools* (BNC, 2013, empathised, 2).

The instances of the verb *empathise* in the paradigm of Imperative Mood indicate the agentive nature of the person who consciously controls his/her condition. The most common form of the verb *empathise* in the Imperative Mood is affirmative (16). This verb may undergo passivisation, resulting in the change of the reference point of conceptualisation (17).

(16) *Let's empathize with our trees* (Sequeira, 2017).

(17) *But the cruellest experiences the victim's pain however great as less than his own enhancement of power however small, so that the suffering of a victim who is being crippled for life may be deliberately empathized by the torturer, but as less than his own titillation, which he may have forgotten by the time he goes home to lunch* (BNC, 2013, empathized, 1).

There are also non-finite forms of the verb which occupy an intermediate position between the noun and the verb: the Infinitive *empathise* and the Gerund *empathising*. We consider them as constituents of the slot ACTION rather than the slot INSTRUMENT/AGENT. The Infinitive *to empathise* names a certain empathic manifestation without correlating it with a particular communicative situation. This can explain the preference given to the Infinitive in cases of designating hypothetical or unreal situations (18). The Infinitive is often used in contexts where another person or a particular situation induces an empathiser to empathise or teaches empathy (19). The Gerund *empathising*, on the contrary, names a certain empathic manifestation correlating it with a particular communicative situation (20). Thus, the main feature that distinguishes the Infinitive from the Gerund in the conceptualisation of empathy is hypothetical situations of the former, contrasted with real situations of the latter:

(18) *A glamorous 20-year-old who spends two hours in front of the mirror each morning is unlikely to empathise with a working mother of three* (BNC, 2013, empathise, 1).

(19) *Hillary Clinton wants us to empathize with our enemies. Even these enemies?* (Rutz, 2014).

(20) *They too, spoke enthusiastically about, for example, the opportunities offered by The Machine Gunners for emotional empathy with the world of the child versus the world of the adult; the emotional pleasure pupils frequently found in empathizing with Billy's relationship with the hawk, and the themes and topics raised by Kes ...* (BNC, 2013, empathizing, 6).

**The slot empathetic/empathic, empathising (SUCH).** British people prefer to use the lexical unit *empathetic* rather than *empathic* when expressing the slot SUCH in the frame of the notional modus (*empathetic* – 28 hits in 25 different texts, *empathic* – 19 hits in 11 different texts). In conceptualising EMPATHY these adjectives perform characterising and evaluative-qualifying functions, and in the sentence, they can be either prepositive attributes (21) or postpositive ones (22).

(21) *Furthermore, it is, I shall argue, no less mistaken to regard experiences, as is sometimes done, as being analogous to "logical states" of certain sophisticated machines; unless such machines are endowed with so many human characteristics (including the capacity of "empathetic imagination") that a comparison becomes trivial, and the word "machine" no longer means what it ordinarily means* (BNC, 2013, empathetic, 18).

(22) *By contrast, says Clarke, the poor and working class within those communities have often been more accepting of those 'who would be outcast by the ruling culture — many times to spite the white man, but mainly because the conditions of our lives have made us empathic'* (BNC, 2013, empathic, 1).

The participle *empathising* keeps the semantics of characterising and evaluative-qualifying functions being adjectivised and serving as an attribute in the sentence:

(23) *I would have the same advice for life. Establish an empathizing relationship. Mostly, with your eyes, so upon meeting someone they will, from the start, catch something in your eyes that indicates there is empathy* (Maysles, 2013).

**The slot empathetically/empathically (SO).** Expressing the slot SO of the EMPATHY concept British people use adverbs *empathetically* and *empathically* equally (*empathetically* – 3 hits in 3 different texts, *empathically* – 3 hits in 3 different texts). These lexical items also perform characterising and evaluative-

qualifying functions in the notional modus of EMPATHY concept serving as adverbial modifiers in the sentence:

(24) *Little is done without reference to the mother, and the mother, for her part, may **empathically** share the child's feelings, and even know telepathically what the child is doing when out of sight* (BNC, 2013, empathically, 2).

(25) *A nurse under stress cannot listen **empathetically** nor respond sensitively* (BNC, empathetically, 2013, 2).

In the semantics of the frame of EMPATHY concept, there are numerous shifts of the prototype meaning based on extension, narrowing, metaphorical and metonymical transitions. The results are semantic modifications in which the information transmitted by lexical items of the notional modus concentrates in other frame slots. For example, as a result of the meaning shift the noun *empathy* may represent the slots ACTION (26), PATIENT (27), SUCH (28) and SO (29), and the semantics of the verb *empathise* – the slots SUCH (30) and INSTRUMENT (31):

(26) *And he was **incapable of empathy!*** (BNC, 2013, empathy, 32).

(27) *He was a pioneer photographer, inventing and selling the first popular exposure meter, and his natural **empathy** with the countryside is **reflected** in his photographs* (BNC, 2013, empathy, 76).

(28) ***Barriers to empathy** are created by some social structures and divisions, such as those of race, religion and class* (BNC, 2013, empathy, 115).

(29) *Rose said it **with such empathy** that all criticism was stopped* (BNC, 2013, empathy, 13).

(30) *Nevertheless, **the ability** of the salesperson **to empathise** with the customer and his problem and to react sympathetically can create considerable goodwill and help foster long-term relationships* (BNC, 2013, empathise, 33).

(31) *He **uses** words like '**empathise**' (because he did the Interactive deal), 'supportive' and 'optimistic' when talking about Novell or the USL deal* (BNC, 2013, empathise, 23).

However, the foregoing semantic shifts, generated in the acts of linguo-cognitive activity, do not lead to the disintegration of the standard norm which is stored in the memory of the individual. This is due to the fact that in cases of minor deviations from the usual state the mechanism of self-regulation or restoration of stability is put into force in the concept. Thanks to reverse causality with the human conceptual system EMPATHY concept recognises and suppresses internal changes in its structure, returning to the previous state of the norm.

### Conclusions

The grammatical parameters of the notional modus of EMPATHY concept reflect the ability of individuals to construct the empathic situation in different ways. The noun *empathy* represents it as an object of comprehension, but the verb *empathise* builds it in the form of a setup scene. The use of certain aspectual-temporal forms of the verb shows differences in the conceptualisation of this scene. The adjective *empathetic/empathic* and the participle *empathising* accentuate the behavioural features of the empathiser while the adverb *empathetically/empathically* provides a description of the empathic situation. In the human epistemic space, the notional modus of EMPATHY concept exists as an abstract entity or idea about empathy rather than a specific event represented by the verb. The noun *empathy* has lost its original meaning of the ability to enter into emotional harmony with a certain work of art. In the frame of the notional modus, the slots *empathiser* and *empathisee* are mostly irrelevant.

The epigrammatic structure of the frame slots reflects different ways of comprehensive perception of a person's ability to identify himself/herself with another person or to understand his/her views. As a result, the function of grammatical parameters embodied in these frame slots of the notional modus of EMPATHY concept consists in systematising the constitutive features of its recognisable entity. Formation and semasiological interpretation of the concept, approaching a scientific definition, is the result of the purposeful linguo-cognitive activity of the subject of perception and reflects his/her generalised socio-cultural experience.

Consequently, the basis of grammatical parameters (the constituents of the notional modus frame) is a complex conceptual scheme characterised by the variation of forms that actualise the ability of communicators to construct a meaningful empathic situation in different ways. The grammatical parameters realise the dominant meaning which draws and structures the meanings around itself, contributing to the holistic perception of EMPATHY concept. The processes of expanding and narrowing the meanings of lexical items, their metaphorical and metonymical transfers diffuse the boundaries between the part-of-speech representatives of EMPATHY concept without leading to internal changes in its structure. The results

will be of use in modelling the figurative and pragmatic modi of empathy lexicalised in modern English discourse.

**References:**

- Banissy, M. J., Kanai, R., Walsh, V., & Rees, G. (2012). Inter-individual differences in empathy are reflected in human brain structure. *NeuroImage*, 62, 2034-2039. <https://doi.org/10.1016/j.neuroimage.2012.05.081>
- Barnett, G., & Mann, R. E. (2013). Empathy deficits and sexual offending: A model of obstacles to empathy. *Aggression and Violent Behavior*, 18, 228-239. <https://doi.org/10.1016/j.avb.2012.11.010>
- BNC. (2013). *British national corpus (CQP-Edition)*. Retrieved 5 December 2017 from <http://bncweb.lancs.ac.uk>
- Colman, A. M. (2009). *A dictionary of psychology*. Oxford: Oxford University Press.
- Gopinath, P. P. (2014). *Being Moon on 31<sup>st</sup> Crossroad*. Mumbai: Frog Books.
- Harder, P. (1999). Partial Autonomy: Ontology and Methodology in Cognitive Linguistics. In Janssen, Th., Redeker, G. (eds.), *Cognitive Linguistics: Foundations, Scope, Methodology* (pp. 195-222). Berlin/New York: Mouton de Gruyter. <https://doi.org/10.1515/9783110803464.195>
- Heritage, J. (2005). *Empathic Moments*. Talk at UCLA: California.
- Kenneth, S. (2016). "You just don't get it": discovering empathy. *An essay on what's missing in too many relationships*. Retrieved 3 May 2017 from <http://www.kennethstewart.com/-you-just-don-t-get-it---discovering-empathy2.html>
- Kuno, S. (1987). *Functional Syntax: Anaphora, Discourse, and Empathy*. Chicago: University of Chicago Press.
- Langacker, R. W. (2001). Discourse in cognitive grammar. *Cognitive Linguistics*, 12 (2), 143-188. <https://doi.org/10.1515/cogl.12.2.143>
- Lipps, T. (1906). Einfühlung und ästhetischer Genuß [Empathy and Aesthetic Enjoyment]. *Die Zukunft*, 16, 100-114.
- Martinovski, B., Traum, D., & Marsella, S. (2006). Rejection of Empathy in Negotiation. *Journal of Group Decision and Negotiation*, 16, (1), 235-261. <https://doi.org/10.1007/s10726-006-9032-z>
- Maysles, A. (2013) *Advice to Doc filmmakers from Albert Maysles: establish an empathizing relationship*. Retrieved 18 November 2015 from Indiewire, <http://www.indiewire.com/2013/12/indiewires-ultimate-guide-to-documentary-filmmaking-advice-31833/>
- Pavey, L., Greitemeyer, T., & Sparks, P. (2012). "I help because I want to, not because you tell me to": Empathy increases autonomously motivated helping. *Personality and Social Psychology Bulletin*, 38 (5), 681-689. <https://doi.org/10.1177/0146167211435940>
- Powell, R. (2010). *What Have We Become. A Blog Book*. Bloomington: AuthorHouse.
- Rutz, D. (2014). *Hillary Clinton wants us to empathize with our enemies. Even these enemies?* Retrieved 9 December 2015 from The Washington Free Beacon, <http://freebeacon.com/national-security/hillary-clinton-wants-us-to-empathize-with-our-enemies-even-these-enemies/>
- Salem, R. (1982). Community Dispute Resolution Through Outside Intervention. *Peace and Change Journal VIII*, 2 (3), 91-104. <https://doi.org/10.1111/j.1468-0130.1982.tb00652.x>
- Sequeira, Ph. (2017). *Let's empathize with our trees*. Retrieved 21 February 2018 from FORCAGOAblog, <http://blog.forcagoa.org/2017/05/27/lets-empathize-with-our-trees/>
- Sullivan, D. (2014, November 7). *Mark Zuckerberg On Facebook Organic Reach: We Optimize For Users Not For Business*. Retrieved 7 November 2015 from <https://plus.google.com/+DannySullivan>
- Tatsenko, N. V. (2016a). Empathy in Discourse: Towards an Embodied Cognitive Semantics. *Filologichni Traktati*, 8 (1), 79-86. Retrieved 25 May 2016 from <http://tractatus.sumdu.edu.ua/ru/tatsenko-n-v-empatiya-v-diskursi-na-shlyahu-do-materializovanoyi-kognitivnoyi-semantiki/>
- Tatsenko, N. V. (2016b). Leksyko-hramatychny profiliuvannya poniatiinoho modusu kontseptu EMPATIIA [Lexical and grammatical shaping of the notional modus of EMPATHY concept]. *Naukovi zapysky Natsionalnoho universytetu "Ostrozka akademiia". Seriya "Filolohichna": zbirnyk naukovykh prats*, 60, 237-239. Retrieved 16 July 2016 from [http://essuir.sumdu.edu.ua/bitstream/123456789/46089/1/Tatsenko\\_concept.pdf](http://essuir.sumdu.edu.ua/bitstream/123456789/46089/1/Tatsenko_concept.pdf)
- Zhabotynska, S. A. (2010). Principles of Building Conceptual Models for Thesaurus Dictionaries. *Cognition, Communication, Discourse*, 1, 75-92. Retrieved August 20, 2016, from <https://sites.google.com/site/cognitiondiscourse/vypusk-no1-2010/zabotinskaa-s-a>

Received: July 13, 2017

Accepted: February 23, 2018