

# Language means realizing the prototypical situation of expressing basic emotions in English

Tatiana Gorbunova

*Irkutsk National Research Technical University,  
Department No. 1 for Engineering Fields of Study  
Irkutsk, Russia  
tanya.mironchuk@hotmail.com,  
http://orcid.org/0000-0002-3059-3180*

Elena Poskachina

*North-Eastern Federal University,  
Institute of Foreign Philology and Regional Studies, Department of English Philology  
Yakutsk, Russia  
poskachina.26@mail.ru  
http://orcid.org/0000-0003-0303-089X*

Lena Zamorshchikova

*North-Eastern Federal University,  
Institute of Foreign Philology and Regional Studies, Department of English Philology  
Yakutsk, Russia  
lenazam@mail.ru  
http://orcid.org/0000-0002-8341-8773*

**Abstract** — This article is devoted to research on the semantics of four basic emotions (joy, surprise, sadness, anger) being verbalized in the context of the prototype theory and conceptual integration theory. A prototypical situation of expressing emotions can be distinguished which further makes it possible to determine both prototypical and non-prototypical means to verbalize this prototypical situation. Predicates which can indicate emotions in their semantics (to surprise, to be happy, to be angry/to hate, to be sad) are considered to be prototypical means verbalizing emotions. Non-prototypical means are those lexemes and grammatical constructions which, in their semantics, inherently do not have meanings to convey emotions. The article also deals with the non-prototypical constructions – blends which can both categorize the basic human emotions and combine the elements of constructions specific to other situations reflecting the real world. In blends all the parts of the sentence make an equal contribution to its meaning and, consequently, jointly categorize the situation, which is indicative of a holistic approach to the subject under consideration.

**Keywords** — *semantics; prototypical situation; basic emotions; prototypical means; non-prototypical constructions; blend.*

## I. INTRODUCTION

Due to the shift in the scientific paradigm of language study from structural to anthropocentric, linguists' attention was drawn to the question of how emotions and emotional states can be verbalized, and subsequently to an understanding of how important a person's attitude to the reality might be with respect to the choice of language means. Thus, a verbal expression of emotions is connected with the world not directly, but in the context of human consciousness. It means that any manifestations of emotions through sentences in speech designate situations from the extralinguistic reality which are interpreted and elaborated by a speaker's consciousness. Consequently, there are two semantics: the first one directly correlates meaning with designated reality and reflects an objective formalized situation in the world, while the second one correlates meaning with the world through consciousness and therefore reflects the world which is seen and perceived by language speakers. According to Jackendoff R., one is about

the way the world is, while the other is about the way we grasp the world [1].

This article attempts to research on the semantics of the four basic emotions amongst the seven (joy, surprise, sadness, anger, disgust, contempt, fear) identified by Ekman P. [2] and to clarify the role of the prototypical situation in determining both prototypical and non-prototypical constructions to verbalize it.

## II. PROTOTYPICAL SITUATION OF EXPRESSING BASIC EMOTIONS

A prototypical situation is recognized by Lakoff G. and Johnson M. as an idealized abstract scheme which exists in potentia [3]. It is considered to be an abstract construct, a category in the consciousness of a generalized average language speaker, or idealized perception of an extralinguistic situation, a thought about this situation. The construct is supposed to have some definite properties or associations a speaker might have in his thoughts when he imagines or encounters the situation in his everyday life. Since the prototypical situation is delineated by scientists as an ideal representative of all similar extralinguistic situations, it might possess properties of all kinds associated with it. Obviously, not all the properties of the prototypical situation can be represented on the surface. It appears that some properties can often go to the background and be only implied. In this connection, those constructions which categorize the most properties of a certain prototypical situation avoiding those of other prototypical situations can be recognized as prototypical. It seems reasonable to research how emotions can be expressed through prototype as the most "ideal" representative of a particular category in order to fully describe the constructions fit to categorize a prototypical situation most accurately, and in this way, to determine basic language means of representing emotions. Furthermore, the onomasiological approach, which moves from the meaning on to the form, encourages a researcher to elucidate the linguoculturological aspect among others in order to discover how the emotional factor can be represented in the collective consciousness of contemporary English language speakers.

Verbalization of emotions is connected with the world not directly, but through human consciousness, i.e. situations from extralinguistic reality are categorized only after being processed by a speaker's consciousness. Hence, it is a prototypical situation that is a common mental constructor for both language representation and real situation of manifestation of emotions.

To delineate the prototypical situation common to all of the basic emotions we have turned to the definitional analysis. In Oxford Advanced Learner's Dictionary the basic emotions are defined as the following [4]:

“surprise – a feeling caused by something happening suddenly or unexpectedly”;

“anger – the strong feeling that you have when something has happened that you think is bad and unfair”;

“fear – the bad feeling that you have when you are in danger, when something bad might happen, or when a particular thing frightens you”;

“happiness – the state of feeling or showing pleasure; the state of being satisfied that something is good or right”;

“sadness – the feeling of being sad”.

A certain situation which triggers emotions is mentioned practically in every dictionary definition above. It might be deduced then that any emotion is caused by an event or some information and, therefore, one of the criteria should be occurrence of a sudden situation / new information and existence of an observer tending to be affected by this event / information and feeling an emotion. The criteria of a sudden situation / new information expect a required presence of doers who act and a speaker who conveys unknown information. These criteria can be seen in diagrams 1 and 2 (fig. 1) below.

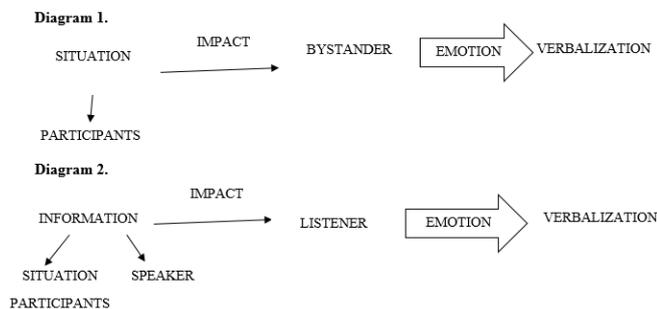


Fig. 1. Prototypical situations of expressing emotions

Evidently, the features stated above cannot be marked all together in one sentence, and no construction can correspond strictly to the given situation. Thereby, in the process of verbalization, some constructions (or language means) can categorize the prototypical situation better than others. Prototypical constructions (or language means) can categorize the prototypical situation most accurately and without any other additional features. A speaking person uses such a construction as a gestalt to verbalize the prototypical situation [3]. For example, the agentive construction used most often to designate causative relations is considered by Lakoff G. and Johnson M. as a prototypical construction applicable to categorize a causative situation in the English language. It could be explained by the fact that

the uniqueness of an event presupposes additionally marked conceptual blocks which are often nonverbal in the sentence structure [5].

### III. PROTOTYPICAL MEANS TO VERBALIZE THE PROTOTYPICAL SITUATION EXPRESSING BASIC EMOTIONS

There are special lexical means of modern English which are used to verbalize prototypical situations of expressing basic emotions. These means are referred to as specific markers which signal about semantics, they convey regardless of the syntactic construction they are used in. Based on performance frequency we assume that specific markers are prototypical means which represent situations of expressing the basic emotions that exist in the extralinguistic reality, and are unequivocal, i.e. are understood identically both by a speaker and a listener.

According to the prototype theory, not all means can represent one and the same prototypical situation equally properly and unequivocally. Then, out of the corpus of lexical means which hypothetically can verbalize one and the same situation in the world, some are more prominent prototypically and will be used more often in speech than the others – less prominent ones. For example, the noun and predicate *surprise* (4962), and their synonyms *wonder* (6188), *shock* (4163), *disbelief* (594), *astonishment* (505), *amazement* (471), *bewilderment* (230) are supposed to be used more often than to *stagger* (127), to *amaze* (95), to *stun* (83), to *startle* (64), to *astound* (18), to *astonish* (25), to *shock* [6]. They are considered to be prototypical means and specific markers to verbalize the prototypical situation of expressing surprise, because all together they make a high percentage of performance. If we consider them separately, the predicate *wonder* should be recognized as the most prominent prototypical means, based on its frequency of use. However, its frequency might depend on the range of its meanings: *wonder* notes the idea of “being filled with amazement” as well as it can be used in the meanings of “to think or speculate” and “to be curious to know”. This taken into account, the predicate *surprise* should be considered as a more prominent prototypical means. In the following example, the prototypical situation expressing emotions is verbalized through the lexeme *surprise*:

(1) *Then it was time for the Club cabaret. The international team, who are coaches and hosts by day, don their entertainer hats and launch into shows and competitions put together by the staff and holidaymakers, who would surprise themselves and us with their undiscovered talent. The outdoor performance would finish with the audience and stars of the show attempting the speciality club dances. If you hadn't met anybody by this time you certainly would now* [7].

The fragment illustrates the situation of surprise where during *the outdoor performance, undiscovered talent* is being demonstrated unexpectedly for the participants and *the international team, us* watching the performance. The author of the fragment is observing the situation and categorizes it as the situation of surprise for the international team and viewers.

Such lexemes as *happy* (11166), *pleasure* (4969), *lovely* (6000), *wonderful* (4626), *cool* (3744), *glad* (3730), *brilliant* (3332), *joy* (2821), *delight* (1892), *happiness* (1603),

*fantastic* (1113), *miracle* (1019), *terrific* (618), *euphoria* (241), *fabulous* (663), *felicity* (370), *awesome* (366), *exaltation* (56), *marvelous* (6) and others can verbalize the emotion of happiness [6]. The frequency of use shows that the most prominent prototypical means which verbalizes the prototypical situation of happiness is a lexeme *happy*, e.g.

(2) *I'm happy to meet your radiant person. All of us Kishocha have heard of your bravery* [8].

Evidently, the example reflects the prototypical situation of expressing emotions: the situation which causes happiness (*meet your radiant person*), the participants (the author and speaker in one *I*, and his interlocutor *radiant person*), and the viewer (the author of the statement and the text correspondingly).

Verbalization of anger in English is connected with the predicates *be angry* (3945), *hate* (2910), *rage* (1197), *dislike* (944), *groan* (302), and the following lexemes and their derivatives: *anger* (3638), *fierce* (1513), *resentment* (976), *irritation* (639), *outrage* (632), *indignation* (401), *wrath* (341), *exasperation* (295), *displeasure* (186), *bate* (53) [6]. *Angry* appears to be the most frequently used lexeme hence the most prominent prototypical means to verbalize the situation of anger:

(3) *Of course, they don't really hate their hair or Maths. But they do have a sense of hating something, even if they can't quite put their finger on it... says he hates thinking about the boys who bullied him. Kelly hates her dance teacher who's told her to lose weight. Bud's view of the world is coloured by the extreme dyslexia which means he must sit through hour after hour of school, week after week, without making much progress. He hates school. Sarah hates having to do all the worst jobs in the hair salon where she works. James can't accept the fact that Kimberley doesn't love him anymore and really is going out with someone else. He hates himself, he says* [9].

Every sentence with the predicate *hate* contributes to the representation of the prototypical situation marked for the basic emotions. Thus, the situation involves the object of anger / hate (*hair or Maths, dance teacher, school, all the worst job, himself*), which becomes like this because of some annoying reason or situation (*dance teacher who's told her to lose weight, school - by the extreme dyslexia, etc*), while the author of the text is both the viewer and the speaker.

The emotion of sadness can be verbalized by a lexeme denoting this emotion or its synonyms and derivatives: *sad* (3241), *depression* (2224), *misery* (1213), *sadness* (747), *sorrow* (532), *unhappiness* (316), *despondency* (84), *gloominess* (12), *melancholy* (12) etc. [6]. The lexeme *sad* (as part of a compound predicate as well) is evidently the most widely used and, therefore, is the most prominent prototypically:

(4) *Adds Aaron Shelton, «When he sang one of those sad songs you knew he was sad, or had been mighty recently»* [10].

In example (4) the following features of the prototypical situation are realized: the situation which evokes sadness (*when he sang one of those sad songs*), the speaker, and the object *he* whom the situation makes feel sad.

In contrast to example (4), the following example does not realize the whole set of features characteristic of the prototypical situation – there is only a speaker who at the same time feels sadness:

(5) *When I feel sad and lonely, I write poems or I play the guitar. I play only when I feel sorrow* [11].

It should be noted that there are two lexical items in one situation which belong to one synonymic chain but reveal different grades of prototypicality, and, based on its performance frequency, *sad* appears to be more prominent prototypical means than *sorrow*.

Similarly, the emotion of fear can be expressed by the key word *fear* (8883) denoting this emotion or by its synonyms and derivatives *be afraid* (5490), *scare* (1799), *terror* (1397), *be terrified* (1029), *dread* (551), *fearfulness* (13) etc. [6]:

(6) *The child was scared of everything. She was scared of being left alone but scared of baby-sitters, especially the young ones who wore black eyeliner* [12].

The above example shows the situation when fear is verbalized through the prototypical situation expressing this emotion (*was scared of everything; was scared to be alone; was scared of baby-sitters*).

#### IV. NON-PROTOTYPICAL MEANS TO VERBALIZE THE PROTOTYPICAL SITUATION EXPRESSING BASIC EMOTIONS

Along with the prototypical language means which express the prototypical situation in the most complete and thorough way, there can be non-prototypical language means represented by undivided constructions, not lexical items.

Non-prototypical constructions which verbalize the prototypical situation of expressing the basic emotions can denominate situations where elements of two or more prototypical situations are integrated, in which case not all of the features of the original prototypical situation might be necessarily represented at the surface level. This is because in the process of speaking and thinking the speaker's attention can be simultaneously drawn to different situations and their features. As a result, different mental spaces overlap in the speaker's mind, which directly impacts both on their meanings and the meaning of the grammatical structure: the constructions become diffusive and take on the "here and now" emergent meaning [13], [14], [15].

Mental spaces are defined by Fauconnier as conceptual domains constructed and modified as thought and discourse unfold, for purposes of local understanding and action [15]. Mental spaces can be characterized by the following features: (1) they contain certain elements and are structured by cognitive models and frames; (2) they occur every time when a particular thought and discourse unfold; (3) as mental spaces are set up dynamically throughout an ongoing discourse, they constantly change and are modified in the process of a discourse; (4) they relate to each other [16].

Mental spaces are extralinguistic entities in a person's mind linked to each other and verbalized through grammatical constructions. These constructions are like step-by-step instructions which illustrate how one or another

situation can be categorized, i.e. a construction gives concise information sufficient to find spaces and principles for each conceptualized situation [16]. Moreover, whenever a new conceptualization of the situation occurs, it is impossible without referring to the previous already structured basic experience.

According to Fauconnier and Turner, conceptual integration is a basic cognitive activity that makes a new meaning and leads to the global insight, conceptual compression, and manipulation of diffuse ranges of meaning. It is essential that when mental spaces interact, an absolutely new mental space, the blend, is created, with its own features [15].

Blends are dynamic due to the fact they occur and are structured “hic et nunc”, as we think and talk. Blends are established as long as personal thinking is like a creative process which involves active mental action by the speaker to combine and choose language means.

The notion of blend is closely connected with emergence: while inheriting the features of the input spaces partially and selectively, semantically, the blend is not equivalent to either of them but integrates their features. Only those meanings of mental spaces that are relevant for the speaker in a new entity can be subject to integration, while the others are ignored. [14], [17], [18]. As an example by Fauconnier, “*He is the Immanuel Kant of modern philosophy*” is considered to be the blend where two input mental spaces have been projected (“*a modern philosopher*” and “*Immanuel Kant*”), and the meaning is conveyed that this philosopher is exceptionally competent. While neither of the input spaces has the feature of “competency”, it appears only in the blend [14], [17].

Emergence of the blend makes itself evident in the fact that in the input space of perception there is no information about the person’s thoughts, whereas the space of understanding has no information that it is based on perception. The integrated space can boast of these features. In addition, the agent of the blend can be both the subject of perception and the subject of understanding, hence the construction categorizes the situation of “perception – understanding”.

Similar emergent situations can occur when it comes to realization of basic emotions in the language. Before making an analysis of the blend constructions, we modeled the prototypical situation where the basic emotions could be illustrated. It was done in the light of a research on the philosophical and psychological aspects of the issue [19], [20] and an analysis of definitions of basic emotions (surprise, fear, anger, happiness, sadness) given in English dictionaries [4] which, in our view, provide insight into vernacular, mental perception of these categories. As diagrams 1 and 2 above show, the prototypical situation where the basic human emotions are expressed demonstrates the following features:

1. an unexpected situation (new information);
2. an observing speaker who is exposed to this situation/information (it should be noted that in the prototypical situation of expressing basic emotions, the agent who feels emotions is meant to observe, to feel and to communicate at the same time);

3. an impact of the unexpected situation (information) on the observer;
4. the observer’s emotion (emotional state);
5. the expression of these emotions (verbal or nonverbal).

In the following examples of the prototypical situation where the basic emotions are expressed, we will try to examine how the features of the prototypical situation are verbalized, and the features of which prototypical situations blend in during representation. In other words, we will see how emergence of the situation appears and emergent meaning develops.

(7) “*Hi there, Professor Barker,*” Billy said, grinning.

“*What are you so happy about?*” Barker said.

“*I just watched the Celts beat Lakers,*” he said. “*Great game*” [21].

In example (7), the observer and speaker (the one who noticed and categorized the observer’s emotions) are different agents. The situations categorized by means of these constructions are represented in the speaker’s mind as follows:

Mental space 1: The observer of an unexpected situation greets the speaker with a cheerful expression on his face.

Mental space 2: The speaker sees that the observer’s emotions are expressed nonverbally.

Mental space 3: The speaker realizes that the observer is feeling the emotions of happiness and admiration.

In this example, there is no explicit mentioning that one of the participants of the dialogue is happy: he does not state about his emotions. This semantics is concluded from the situation, hence it is obvious that one element drops out of the prototypical situation – the one when the speaker himself expresses emotions in this situation through lexical markers from the synonymic chain. Admiration and happiness which one of the communicants is feeling after the game are verbalized in his greeting (*Hi there*), the lexical unit to grin в in the form of Participle I borrowed from the prototypical situation that categorizes visual perception, and the communicants’ words (*happy, great*) which indicate that speaker realizes the observer’s emotional state.

Thus, mental spaces 1 and 3 are categorized lexically at the surface level, while mental space 2 is categorized grammatically. Certainly, there are fixed language constructions to categorize visual perception, understanding and basic emotions, but a speaking person’s consciousness is arranged so that it constantly tends to compress information, which results in economy of language means and concise expression of thoughts.

In example (8), two different mental spaces of joy and surprise blend in one sense: «*I’m happy to meet you too*», *Gaia wondered* [22].

The situation may be represented in the following fragments:

Mental space 1: The observer expresses her joy caused by the perceived situation (meeting the agent).

Mental space 2: The speaker takes notice of surprise.

Evidently, the example illustrates discrepancy between the verbal and non-verbal behaviour of the observer, which is noticed and categorized by the speaker (it should be noted that the speaker and observer are different agents, just as it was in the previous example). At first thought, all the features of the prototypical situation seem to be represented by the observer. However, either her voice or the expression of her face makes the speaker notice and verbalize a completely different emotion which was not represented by the observer. So, in order to characterize the observer's emotional state, the speaker takes a lexical item that denotes the emotion of surprise. Thus, the mental space of joy is verbalized with the help of the predicate *to be happy*, while the lexeme *wondered* is used to verbalize the mental space of surprise. There are no borrowed grammatical forms in this example since, in order to prototypically categorize the emotions, the corresponding lexical markers (borrowed from the constructions which categorize different prototypical situations of joy and surprise) are used. What is more, the emergence of this blend becomes apparent due to the fact the input mental space "joy" does not give information that joy is based on surprise, while the new mental space (blend) contains both these elements.

#### V. CONCLUSION

With a view to verbalizing basic emotions in a prototypical situation where an observer (being a speaker at the same time) is caused to feel a certain emotion as a result of a certain situation, seven basic emotions were delineated, and for their expression, the prototypical means were distinguished which can either be derivatives or set up a synonymic chain. Some distinguished prototypical lexical means turned out to verbalize the situation of expressing emotions more prominently than others, but despite this fact, they are all considered prototypical. The most prominent prototypical means which can verbalize the prototypical situation in the most complete and thorough way are the means used by speakers more often than the others. It is not unlikely that the prototypical means verbalizing emotions are not limited to lexical means and can also be represented at the syntactical level.

Furthermore, apart from prototypical means, non-prototypical constructions (blend constructions) can be distinguished as well. They are not frequent as are established "hic et nunc" and, as a consequence, it is difficult to trace the consistent patterns. Besides, it is typical that completely different mental spaces can contract or blend. This quality depends on what conceptual blocks a speaker takes notice of in a particular situation. On the one hand, there are a great number of such situations in the world around us. On the other hand, there is a limited number of constructions in any language. This is why forms and lexemes are borrowed instinctively from various prototypical situations in order to categorize one or another emergent situation, which results in blend constructions.

In summary, a prototypical situation is evidently crucial in order to identify some abstract ideal model of a situation that exists in the extralinguistic reality which will be

subsequently verbalized with the use of a set of language means and constructions. Such a model affords to determine what language means and grammatical constructions are expected in the agent's speech when he verbalizes one or another situation of expressing emotions.

#### REFERENCES

- [1] R. Jackendoff, "Semantic Structures," Cambridge, Mass.: MIT, 1993, p. 12.
- [2] P. Ekman, "Psychology of Emotions [Emotions Revealed: Recognizing Faces and Feelings to Improve Communication and Emotional Life]," translated from English, St. Petersburg: Piter, 2010. (in Russian)
- [3] G. Lakoff, and M. Johnson, "Metaphors We Live by," Chicago: The University of Chicago Press, 1980, pp.70-72.
- [4] "Oxford Advanced Learner's Dictionary," Oxford: Oxford University Press, 2010.
- [5] L.A. Furs, "Cognitive Category's Distinctive Features in Syntax", in multi-authored monograph "Cognitive Categories in Syntax," Irkutsk, IGLU, 2009. (in Russian)
- [6] "Oxford Dictionary of Synonyms and Antonyms," Oxford: Oxford University Press, 2007.
- [7] "British National Corpus." URL: <http://corpus.byu.edu/bnc/>, 06.02.2018.
- [8] N. Kimberling, "Happy Snack," Samhain Publishing, 2009.
- [9] N. Luxmoore, "Young People in Love and in Hate," Jessica Kingsley Publishers: London, UK, 2010.
- [10] R.M. Williams, "Sing a Sad Song: The Life of Hank Williams," Urbana and Chicago: University of Illinois Press, 1981.
- [11] J.M. Freeman, "Hearts of Sorrow: Vietnamese-American Lives," Stanford: Stanford University Press, 1989.
- [12] W. Brenner, "Large Animals in Everyday Life: Stories," Athens: University of Georgia Press, 2009.
- [13] G. Fauconnier, and M. Turner, "Blending as a central process of grammar," in Conceptual Structure, Discourse, and Language, Ed. by Adele Goldberg, Stanford: CSLI Publications, pp. 113-129, 1996.
- [14] G. Fauconnier, and M. Turner, "Conceptual Integration Networks," in Cognitive Science, Vol. 22, No. 2, pp. 133-187, 1998.
- [15] G. Fauconnier, and M. Turner, "Compression and global insight," in Cognitive linguistics, Vol. 11, pp. 283-304, 2000.
- [16] G. Fauconnier, "Mental spaces," Cambridge: University Press, 1985.
- [17] G. Fauconnier, "Compression and Emergent Structure," in Language and Linguistics, Vol. 6, No. 4, pp. 523-538, 2005.
- [18] M. Turner, "Compression and Representation", in Language and Literature, Vol. 15 (1), P. 17-27, 2006.
- [19] J.D. Boucher, "Culture and Emotion. Perspectives on Cross cultural psychology," New York - San Francisco - London, 1979.
- [20] I. Kant, "Anthropologie in pragmatischer Hinsicht," Stuttgart: Reclam, 1983.
- [21] A. Bernays, "Professor Romeo," N.Y.: Penguin Books, 1997, p. 48.
- [22] N. Kimberling, "Happy Snack," Samhain Publishing, 2009, 309 p.