

STATE OF THE ART AND FUTURE PROSPECTS OF METAPHOR RESEARCH

The present paper deals with metaphor, which is a major player in human cognition and communication. The study first provides an overview of contemporary metaphor theories. Then it describes metaphor identification and processing procedures that are widely used in modern investigations. The next part concerns the research of metaphor in various types of discourse. Finally, we offer some concluding remarks and suggestions for further studies.

Key words: metaphor, conceptual metaphor theory, metaphor identification procedure, discourse, scientific discourse.

У статті розглянуто метафору, яка є важливим складником пізнавальної та комунікативної діяльності людини. У роботі наведено огляд сучасних теорій метафори. Крім цього, автор описує методи ідентифікації та обробки метафори, які широко використовуються в новітніх дослідженнях. Подальша частина стосується вивчення метафори в різних типах дискурсу. У кінці статті автор пропонує заключні зауваження та окреслює перспективи подальших досліджень.

Ключові слова: метафора, теорія концептуальної метафори, метод ідентифікації метафори, дискурс, науковий дискурс.

В статье рассмотрена метафора, которая является важной составляющей познавательной и коммуникативной деятельности человека. В работе приведен обзор современных теорий метафоры. Кроме этого, автор описывает методы идентификации и обработки метафоры, которые широко используются в новейших исследованиях. Далее рассматриваются исследования метафоры в разных типах дискурса. В конце статьи автор предлагает заключительные замечания и определяет перспективы дальнейших исследований.

Ключевые слова: метафора, теория концептуальной метафоры, метод идентификации метафоры, дискурс, научный дискурс.

Introduction

Nowadays, in the time of rapid social and technological development, metaphor is no longer viewed as a solely rhetorical device. It is widely used in a whole number of discourses, such as politics, law, science, information technologies, medicine, sports, art as well as an ordinary conversation, etc. An outstanding cognitive linguist Steven Pinker suggests that almost any passage includes five or six metaphors. It does not depend on whether «the speaker is trying to be poetic, it is just that this is the way language works» (Pinker, 2008).

There is a considerable amount of literature on linguistic metaphor. The first investigations were made in ancient times by Aristotle, who considered metaphor as an ornamental figure of speech that though had some persuasive effect. He added that «the greatest thing by far is to be a master of metaphor; it is the one thing that cannot be learnt from others; and it is also a sign of genius since a good metaphor implies an intuitive perception of the similarity in the dissimilar» (Aristotle, 2016).

George Lakoff and Mark Johnson (1980) initiated a modern theory of conceptual metaphor in their seminal study «Metaphors We Live by». It is based on

the idea that metaphor is pervasive in our everyday life. They also suggest that our conceptual system, in terms of which we both think and act, is metaphorical in nature. It should be noted that this assertion has its proponents (Geary, 2012; Gibbs, 2008; Kövecses, 2010) as well as opponents (Pinker, 2008). For instance, Pinker (2008) disagrees with the idea that metaphor is the mechanism of thought and claims that metaphor makes the content of thought process. Nevertheless, researchers agree as to the essence of metaphor, which lies in «understanding and experiencing one kind of thing in terms of another» (Lakoff & Johnson, 1980, p. 5).

More details on this topic may be found in relevant literature, such as «Metaphor and Thought» edited by Andrew Ortony (1993), «Collins Cobuild English Guides 7: Metaphor» compiled by Alice Deignan (1995), «The Cambridge Handbook of Metaphor and Thought» edited by Raymond Gibbs (2008), «Metaphor: A Practical Introduction» by Zoltán Kövecses (2010), «The Routledge Handbook of Metaphor and Language» edited by Elena Semino and Zsófia Demjén (2017), etc. These collections provide essays in multidisciplinary metaphor study and contain some rival views to the cognitive linguistic ones. The highly dynamic nature of metaphor causes the appearance of an interdisciplinary field called a metaphorology. The present paper aims to make a comprehensive survey of the existing theories and approaches to metaphor study and to outline its future prospects.

This article is organized as follows. Section 1 provides an overview of contemporary metaphor theories. Section 2 describes metaphor identification and processing procedures that are widely used in modern investigations. Section 3 concerns the research of metaphor in various types of discourse. Finally, we offer some concluding remarks and suggestions for further studies.

1. Overview of contemporary metaphor theories

According to George Lakoff and Mark Johnson (1980), the *standard conceptual metaphor theory* is an experientialist approach to metaphor research and understanding. The authors maintain the idea that personal experience is the only or the principal basis of knowledge. They treat metaphor as a systematic correspondence or mapping between two conceptual domains: the concrete, more structured source domain and the abstract, less structured target domain. For example, in conceptual metaphor LIFE IS A JOURNEY, the former is the target domain while the latter is the source domain. Thus, life is understood in terms of a journey with its departures and arrivals, joys and obstacles, etc. This conceptual metaphor is manifested in metaphorical linguistic expressions, as in the examples below,

It's been a very difficult year, but I'm happy to say there now seems to be some light at the end of tunnel.

Our partnership didn't last. In the end, we agreed to go our separate ways.

Harry's father is a doctor and it's obvious he is going to follow in his father's footsteps. (Wright, 2002).

Scientists (Semino & Demjén, 2017) propose a universal hierarchy of concepts, which includes the following: God, complex systems (universe, society, life, mind,

theories, company, friendship, etc.), humans, animals, plants, complex physical objects, and inanimate objects. In this hierarchy, God is at the highest level while inanimate objects are at the lowest level. Therefore, the things on a particular level are conceptualized as things on another level. It should be noted that this can happen in both directions, e. g. PEOPLE ARE ANIMALS and ANIMALS ARE PEOPLE.

Professor Kövecses (2017) claims that studying conceptual metaphor at different levels solves the scientific debate regarding metaphor schematicity. He considers the level of image schemas, the level of domains, the level of frames, and the level of mental spaces. The first three levels comprise the conceptual content of language, i. e. encyclopedic knowledge. On the other hand, the level of mental spaces deals with the language in real communicative situations (Ibid., p. 341).

Researchers argue that conceptual metaphor theory may answer a range of questions, such as: (1) the reason of using language from one domain to talk about another domain; (2) the explanation of universality and cultural variability of some conceptual metaphors; (3) the explanation of sharing some conceptual metaphors in a variety of discourses and different modes of expression (verbal and nonverbal); (4) the process and reason of novel metaphors emergence (Kövecses, 2010; Semino & Demjén, 2017).

The conceptual metaphor theory is attracting the attention of many scholars from various disciplines who have suggested alternative views and produced new and important results in the study of metaphor. The neural theory of metaphor (Lakoff, 2008), the conceptual blending theory (Fauconnier & Turner, 2003), and the relevance theory (Gibbs, 2008, p.84–105) have gained the most popularity among a great number of proposed investigations.

The neural theory of metaphor is the extended version of the conceptual metaphor theory offered by George Lakoff (2008). It is based on the assumption that the links between brain and body are central to understanding the nature of thought in general and metaphor in particular. In the course of our lives, groups of neurons get connected in the brain by means of neural circuitry. As a result of connecting two groups of neurons by a mapping circuit, we deal with conceptual metaphors.

The conceptual blending theory was suggested by Gilles Fauconnier and Mark Turner (2003). It uses the notion of mental spaces, i. e. small conceptual packets constructed in the process of our functioning, for purposes of local understanding and action. The theory consists in establishing a partial match between two input mental spaces. The selected parts are projected from those inputs into a new «blended» mental space, which then develops an emergent structure. Zoltán Kövecses (2011) states that conceptual blending is crucial for the construction of meaning in everyday communication as well as in the humanities and social sciences.

The relevance theory is based on the research of Dan Sperber and Deirdre Wilson (Gibbs, 2008, p.84–105). Unlike the above-mentioned studies, the relevance theory does not concentrate on metaphor processing. Metaphorical speech is considered a «loose talk» that often is the best way to achieve optimal relevance. Even though metaphors do not present a direct and accurate account of the situation, the listeners/readers are able to infer the appropriate contextual meanings of metaphors by creating corresponding concepts using the principle of optimal relevance.

Some other approaches to metaphor study include but are not limited to the theory of metaphor as categorization by Sam Glucksberg and Boaz Keysar (Ortony, 1993, p. 401–424), the conceptual metaphor theory as based on the idea of main meaning focus (Kövecses, 2010, p. 317–320; Kövecses, 2011), etc.

2. Metaphor identification and processing procedure

One of the first questions that arise in the beginning of metaphor study is determining the technique for its recognition in the discourse. To this end, Pragglejaz group (Peter Crisp, Ray Gibbs, Alan Cienki, Graham Low, Gerard Steen, Lynne Cameron, Elena Semino, Joe Grady, Alice Deignan, Zoltan Kövecses) worked out a *metaphor identification procedure*. It follows a number of steps: (1) to read a discourse and to get its general understanding; (2) to distinguish lexical units in the discourse; (3a) to establish the contextual meaning for each lexical unit in the discourse; (3b) to determine whether each lexical unit has a more basic contemporary meaning in other contexts. A basic meaning may be more concrete, related to bodily action, more precise, or historically older; (3c) if the lexical unit has a more basic contemporary meaning in other contexts than the given one, decide whether the contextual meaning contrasts with the basic meaning and can be understood in comparison with it; (4) if yes, the lexical unit should be marked as metaphorical (Pragglejaz Group, 2007).

Notwithstanding the fact that such metaphor identification procedure is elaborate enough, scholars often question the reliability and generality of individual analyses of metaphor (Gibbs, 2008; Semino & Demjén, 2017). That is why, computational methods of metaphor identification and processing are gaining popularity among linguists as well as the researchers from leading IT companies.

The scientists from Microsoft and Google R&D departments together with their colleague from Shanghai university (Li, Zhu, & Wang, 2013) have worked on data-driven metaphor recognition and explanation. In their study, they have used the best practices of context-oriented and knowledge-driven methods. The context-oriented methods are based on the idea that the meaning of an expression is restricted by its context, and violations of the restriction imply metaphor. However, knowledge-driven methods employ human-curated metaphor knowledge bases, such as MIDAS, ATT-Meta, WordNet, FrameNet, etc. Their procedure mostly consists in checking if a sentence contains an expression that can be explained by a more general metaphor in a certain metaphor knowledge base (Ibid.).

A prominent cognitive scientist Walter Kintsch (Gibbs, 2008) offers a latent semantic analysis based on a corpus of 11 million words. It investigates word meanings in terms of their co-occurrence, irrespective of their symbolic relationships. Within this framework, a word sense is not fixed but emerges from both the context-free space and the context in which a word is used.

Metaphor is also considered through the prism of artificial intelligence. John Barnden argues that computational processing may help to study metaphorical mappings, to distinguish their objects, to explain the effects they achieve and to avoid the unwanted side effects (Gibbs, 2008).

3. Metaphor in discourse

Many scholars agree that metaphors gain their full value when they occur in real, authentic discourse (Gibbs, 2008; Guo, 2013; Kövecses, 2017). In fact, the developers of the conceptual metaphor theory are often criticized for not paying enough attention to social and pragmatic functions of metaphorical expressions in discourse. In addition, the critical discourse analysis discovers an ideological function of metaphor since it can provide a particular perspective of viewing the reality (Guo, 2013). This results in integrating both of the above-mentioned approaches into a new research field – the critical metaphor analysis.

The issue of the use of metaphors in various types of discourse is still topical. First, many investigations prove that in contrast to written discourse, we find fewer metaphors in face-to-face conversations (Gibbs, 2008; Kövecses, 2010; Ortony, 1993). Here we should particularly refer to literary metaphors. The writers gain a special effect by different transformations, i. e. extending, elaboration, questioning, and combining ordinary metaphors (Kövecses, 2010; Myroniuk, 2017). Second, there is a widespread opinion that scientific discourse cannot contain a number of metaphors due to its logical, objective, specific features (Aristotle, 2016; Ortony, 1993). Contemporary research eliminates this stereotype and proves that humanities, social and behavioural sciences contain a great variety of metaphors. Even such areas as legal science, medicine, information technologies, physics and mathematics, are not devoid of metaphors (Meyer, Zaluski, & Mackintosh, 1997). Moreover, Ingrid Meyer (1997) and her colleagues admit the significance of metaphors in terminology:

...this phenomenon is bound to become increasingly frequent and important [...] as we evolve into a «knowledge society», more and more laypeople are required to understand and use technical terminology. Realizing this, the creators of technical terms may well increasingly prefer metaphorical terms for the conceptual clarity they provide to non-domain experts (Ibid.).

Conclusions

In this article, we have presented a comprehensive survey of the existing theories and approaches to metaphor study and outlined its future prospects. Our critical overview leads us to believe that the state of the art of metaphor investigation is a mosaic of theories and ideas that successfully complement each other. Almost all contemporary studies are centred around conceptual metaphor and its linguistic manifestation. It should be noted that metaphor identification and processing procedures are likely to gain even greater interest in the future.

The research suggests that metaphors are essential in all spheres of our lives. On the one hand, it is still an effective rhetorical device that is used both in spoken and written language in a wide range of discourses, starting from fiction and ending in science. On the other hand, conceptual metaphor may perform social, pragmatic, and ideological functions when used, for instance, in media and political discourses. Thus, our future work will focus on studying metaphors, especially conceptual metaphors, in various types of discourse.

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