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## COGNITIVE LINGUISTICS AND ITS TOOLS IN STUDYING CONCEPTUAL METAPHOR: RESEARCH AND PRACTICE IN ESP

### ABSTRACT

The purpose of the study is to show how the insights of cognitive linguistics can be applied in teaching/learning figurative expressions and develop an invariant model of communicative-oriented ESP teaching process. The research goal is associated with solving the tasks of theoretical and practical plans, such as studying a conceptual metaphor from the standpoint of cognitive linguistics and the theory of communicative foreign language teaching. Three practical tasks have been fulfilled: a sample of metaphorical expressions from authentic sources has been made and analyzed, and a sequence of the learning process stages and appropriate sources of information for use as a means of studying metaphor has been determined. A complex of research methods was applied, including linguistic analysis as well as linguodidactic methods of modelling, experimental teaching and questioning surveying. As a result of the study, a model of communicative-oriented teaching / learning of conceptual metaphor within ESP process has been elaborated.

**Key words:** cognitive linguistics, metaphor, economic discourse, integrated language skills development, materials design

## ABSTRAKT

**LINGWISTYKA KOGNITYWNA I JEJ NARZĘDZIA W NAUCZANIU KONCEPTUALNEJ METAFORY:  
BADANIE I PRAKTYKA W ANGIELSKIM JĘZYKU SPECJALISTYCZNYM**

Celem artykułu jest ukazanie, w jaki sposób ustalenia językoznawstwa kognitywnego mogą znaleźć zastosowanie w nauczaniu i uczeniu się wyrażeń figuratywnych oraz w opracowaniu zorientowanego na komunikację modelu nauczania angielskiego języka specjalistycznego. Rozważania teoretyczne i praktyczne zastosowania dotyczą metafory konceptualnej, naświetlonej z punktu widzenia językoznawstwa kognitywnego oraz teorii komunikacyjnego nauczania języków obcych. W artykule przedstawiono analizę wyrażeń metaforycznych pochodzących z autentycznych źródeł, określono sekwencję etapów procesu nauczania oraz wskazano odpowiednie źródła informacji do wykorzystania w badaniu metafory. Tym samym zastosowano kilka metod badawczych, między innymi analizę lingwistyczną oraz metody dydaktyczne: modelowania, nauczania eksperymentalnego i ankietyzacji. W wyniku przeprowadzonych badań opracowano model zorientowanego na komunikację nauczania i uczenia się metafory konceptualnej w procesie nauczania angielskiego języka specjalistycznego.

**Słowa kluczowe:** lingwistyka kognitywna, metafora, język ekonomii, zintegrowany rozwój umiejętności językowych, preparowanie materiałów dydaktycznych

## 1. Approaches related to metaphor

The traditional approach tends to address metaphor at the level of individual utterance. Metaphor is considered an anomaly or aberration, where the meaning of the utterance is something other than the logical literal "truth" of the utterance. The process of understanding a metaphorical meaning is one of substitution or of comparison, depending on viewpoint.

However, this account has changed with time. Cognitive linguists (Langacker R., Richards L.R., Black M., Wierzbicka A., Gibbs R., Kövecses Z., etc.) have suggested that metaphors do not possess fixed meanings, but they are cognitively important as well. G. Lakoff and M. Johnson have proposed the Conceptual Metaphor Theory (CMT), which makes it easy to understand the way in which metaphors are created. They argue that metaphors are pervasive in everyday life; not just in language, but also in thought and action<sup>1</sup>.

The cognitive approach offered by G. Lakoff and M. Johnson addresses metaphor in terms of systems, considering it a phenomenon at a high and abstract level of thought, where whole experiential areas are conceptualized metaphorically and have coherent realizations at the level of words and id-

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<sup>1</sup> G. Lakoff, M. Johnson, *Metaphors We Live By*, Chicago–London 2003, p. 3.

ioms. The essential point here is that metaphor is a universal phenomenon with culture specific realizations, and operates concept-to-concept, rather than utterance-to-utterance. At the heart of a conceptual metaphor is a comparison, where elements and semantic features are in one concept area – the source domain can be mapped onto another concept area – the target domain<sup>2</sup>.

The authors give several examples of daily metaphors, such as: argument is war, the mind is a machine, time is money, etc.<sup>3</sup>

The English language has plenty of metaphors exemplifying the Conceptual Metaphor Theory by G. Lakoff and M. Johnson. Specialized economic publications offer rich metaphorical material for study. For example, a review of an article devoted to Goldman Sachs, one of the leading banks in the USA, reveals that metaphors are as numerous as in any other type of discourse<sup>4</sup>. The text contains metaphors with reference to the domains of, for instance, war: “Then there’s *the rising threat* from the so-called fintech industry, ...that are using the Internet *to disintermediate the work ...*”; gambling: “For much of 2016, it was *Wall Street’s favorite parlor game...*”; sport: “We have the opportunity to build a higher-margin lending business because *we’re not competing in the league tables* where people already have \$2 trillion worth of loans on their books.”; water: “If Goldman’s *“toe dip” into the waters of consumer lending* works out well... the firm will do more of it.”; animals: “One way *to goose Goldman’s ROE* (return on equity) ...would be to reduce the capital that big banks are required to have”.

## 2. Applications of the conceptual metaphor theory

According to CMT, we understand economic processes through a variety of metaphors, which allows us to comprehend one aspect of the concept in terms of another, thus necessarily hiding other aspects of a concept. Therefore, metaphors can be exploited for reasons of persuasion. For example, the metaphorical expression: *profits could stay high because the balance of power had moved in favour of capital* points to capital-driven companies which get favours from those in power through taxes lowering, various rulings and regulations, and government assistance. In this case, it may leave the impression that these are under control and quite predictable, which eventually leads to more significant profits.

<sup>2</sup> G. Lakoff, *Women, Fire, and Dangerous Things*, Chicago 1987, p. 276.

<sup>3</sup> G. Lakoff, M. Johnson, *Metaphors We Live By...*, pp. 7–9.

<sup>4</sup> W.D. Cohan, *Is Goldman Sachs still №.1 On Wall Street?*, “Fortune Five Hundred” 2017, June 15, pp. 185–191.

The cognitive approach to metaphor has received considerable attention from linguists, ESL practitioners, sociolinguists, psychologists, etc. There are several studies which have drawn attention to various conceptualizations of money from a cognitive linguistic perspective. For instance, applying the cognitive approach, K.T. O'Connor<sup>5</sup> has revealed that the source domain of money in Spanish is frequently conceived in terms of three states of matter: round sum (solid), flow of capital (liquid), and inflation (gas). Accordingly, they are associated with long-term security; liquid, with transferability and instance of access; and gas, with unpredictability and loss, etc.

Working with the conceptual metaphor theory, Z. Kövecses<sup>6</sup> deals with the force metaphors that describe the power of money, like “cash is king” or “money is power”, and the way we view our relationship to money and see the role of money in our life in society.

The first part of the present paper focuses on how money-related expressions acquire metaphorical meaning and explores some of the potential benefits of such metaphors, both for specialized discourse and ESP teaching/learning. The material for the study was derived from economic and financial texts from *Fortune Five Hundred* and *The Economist*.

As mentioned above, a large number of key economic concepts are expressed in metaphors. The most striking metaphors used in specialized financial and economic texts are perhaps the conceptual metaphors which describe “money” as “a liquid”. According to the definition in *Webster's New World Dictionary*, money designates: *any substance or any article used as a medium of exchange, measure of wealth, or means of payment, as checks, bank notes, etc.*<sup>7</sup> Hence, this metaphor allows for the conceptualization of money as an abstract substance (liquid) which is partly mapped by the concept of water, i.e. in terms of water metaphors. The notion of “water” invokes such properties as, “to flow”, “to move”, etc. Therefore, the conceptualization of money in terms of water refers to the process of flowing or moving smoothly, gently, or easily in the manner characteristic of a liquid. This process might be compared to a pipe or water system which “is considered to be the place where flows, money or goods circulate”<sup>8</sup>. This can be seen in the following example: *M&A banking, where the pipeline of deals looks less than inspiring, leveraged loans and a few other corners of fixed income may do badly.*

<sup>5</sup> K.T. O'Connor, *Money and Finance as Solid, Liquid, and Gas in Spanish*, “Metaphor & Symbol” 1998, nr 13(2), pp. 141–157.

<sup>6</sup> Z. Kövecses, *The Power (and Problem) of Money*, “Society and Economy” 2018, nr 40(3), pp. 365–376.

<sup>7</sup> *Webster's New World Dictionary of American English*, V.E. Neufeldt (ed.), Cleveland–New York 1988.

<sup>8</sup> R. Alejo, *Where does the money go? An analysis of the container metaphor in economics: The market and the economy*, “Journal of Pragmatics” 2010, nr 42(4), p. 1148.

An unbroken continuous flow or movement on the surface of the water implies a steady, stable income (a large amount of money becomes available for spending): *money that was pouring into the credit markets is now being invested in shares; The French economy has been kept afloat by consumer spending*. The metaphorical expressions are associated with the economy's boom or bust: the buyer's demand for property determines market prices and quantities. As incomes rise, the demand for property increases at all prices. Buyers expect that they will have a job for many years to come; they purchase homes that require payments over a long period of time. Metaphorically, it denotes a rising property market, when large purchases encourage price rise. The metaphors may also persuade us that it is the time to sell property at a higher price.

Another implication of the water metaphors is that "money" may stop flowing for some reasons, i.e. it may "drift" or "float" and even "sink." Drifting (floating) refers to the act or instance of being driven by current water which involves gradual shifting in the position and velocity (movement) of something<sup>9</sup>. For instance, *House-price inflation has dipped in France, Spain and Italy; its (PetroChina) shares have dropped in value by a third; Plenty of international evidence suggests that the depth of the financial markets does indeed depend on the strength of creditor rights; Economists are nervous about who or what might sink into America's property swamp*. The metaphors describe the situation when the demand for housing is in decline for any reason: if buyers fear losing their jobs, they demand fewer expensive goods (homes), requiring long-terms payments. The expressions refer to a falling property market and other similar concepts, such as a reduction of employment rate, low purchasing capacity, and may lead us to buy property at a lower price.

Money, understood in terms of water, can "evaporate", "dry up" or "be squeezed" (in order to extract liquid), which leads to "a drought", the disappearance or loss of liquidity. In the following examples the metaphors imply a growing dependence of financial markets on the volume of liquidity: *If the after-listing market for shares dries up..., the primary market may evaporate as well; facing huge losses that can not only wipe out the premiums earned in good times, but also cut into its capital as well; the recent evaporation of credit may make it harder for firms to escape; The shares of investment banks, pummelled by the mortgage mess and a drought in the buy-out market, posted the biggest daily gains in over a year; Whereas the world's two main central banks... sought at once to relieve the liquidity drought by injecting extra cash into the money markets; How much the weaker trend across Europe owes to the credit squeeze is not clear*.

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<sup>9</sup> Webster's New World...

In the economic context, with regard to savings in accounts, securities, funds or investments, this means that cash is temporarily not available for circulation, for example, due to an ill-conceived financial strategy. The real price of money is steadily decreasing, and people/companies do not have enough trust in cash transactions anymore. Therefore, the metaphors relate to an unstable financial period which brings about less cash and/or valid money on the market. A situation like this may persuade people to convert cash into goods or services as soon as possible. Subsequently, it leads us to expect worse times ahead, e.g. inflation.

The loss of liquidity metaphorically refers to the process of “freezing”. Being applied to money, funds, assets or credits, etc., this means that these financial services are temporarily not available to the owners. Money is “frozen”, it cannot “flow” because it has stopped being a liquid. For instance, *Both the credit and money undermine the global economy, by prompting a broader tightening of credit conditions markets became frozen; When the money markets froze, it faced instant problems, since exacerbated by a loss of confidence amongst its depositors; by the time state officials stepped in to freeze withdrawals; others ought to have their loans modified, probably by freezing the introductory interest rates for a period.*

Various conceptualizations of money are commonly used in English specialized texts. Their aim is to present the concepts pertaining to the economy and finance in a concise and memorable manner that uses well-known vocabulary (e.g., to pour, to float, to wipe out, to sink, to evaporate, to dry up, to freeze, a drought) and establishes a comparison with a domain that is easy to relate to.

### **3. Working with metaphors within an integrated model of FLT**

One of the crucial points in foreign language teaching at the tertiary level today is finding adequate ways to develop students’ communicative competence while working with metaphors in the target language. It can be incorporated in general English practice, mass media, or business English classes aimed at integrated communicative skills development. For building ESP students’ communicative competence while working with conceptual metaphors it seems appropriate to provide conditions for integrated receptive and productive skills development. Therefore, our model of organizing the teaching and learning process is structured to cover the development of both receptive and productive skills in the target language and includes such stages as activating, input and production. The aim of the first one is to determine the students’ background knowledge on the topic under analysis. In business English classes a topic may include a metaphor in itself, for example, “Corporate culture”. “Lit-

erally this means the shared beliefs, ways of thinking and ways of behaving one finds in a corporation. Businesses can't think or behave in a certain way, however, because businesses are not people. This metaphor emphasizes the similar qualities between members of societies that do have distinct cultures and how individual organizations tend to 'behave' in general"<sup>10</sup>.

At the activating stage, students are asked to recollect, based on their experience, and share with a partner what they know about the notion of corporate culture, to figure out the meaning of the metaphor in the title of the topic. For example, we suggest that students cooperate in pairs or small groups using the following questions as prompts: "What do you usually think of when you come across the notion of corporate culture? Why are people getting more and more interested in it? When do people usually become concerned with the issue? How can a company's culture be expressed? What is the role of an individual in creating corporate culture? How can one learn about the corporate culture of a company?" While working on this list of questions students interact. They may brainstorm, make mind maps, and discuss various aspects of the metaphor's meaning.

The second stage in the integrated model, i.e. input, is introduced to help students do extra reading, listening or video viewing activities through which they get additional information needed to conceptualize the metaphor, to understand its meaning in detail. One of the activities, which we use in class at this stage, is based on the technique of deep processing. We give students a photo of a group of people representing a certain company and ask students to come up with ideas about this company's corporate culture, which they might deduce by just looking at the photo. Traditionally, the teaching and learning process aimed at communicative competence development in reading comprehension, listening comprehension or video viewing is structured to cover three consecutive stages of students' activity with resource materials: 1) pre-reading (pre-listening or pre-viewing), 2) while reading (while listening or while viewing), and 3) follow-up. As our experience shows, tasks with metaphors can be included in a series of exercises at all stages of working with resource texts, audio or video material in the process of mastering a student's receptive skills.

In the first stage, students are given an assignment to anticipate the content by a heading which contains a conceptual metaphor. For example: "Read the title of the text containing a metaphor and predict its topic, jot down your variant and then check your prediction while reading the text". If the teacher is not sure that students can independently guess the meaning of the metaphor,

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<sup>10</sup> 26 *Business English Metaphors to Get You "Up to Speed"*, [online], [fluentu.com/blog/business-english/business-metaphor/](https://www.fluentu.com/blog/business-english/business-metaphor/), [access: 26.06.2020].

they may be asked to consult a dictionary and then derive the meaning of the metaphor.

In the main stage we give students the following tasks: "Find the words or phrases in the text that are used metaphorically. Then match them to their literal meaning". Students usually have no problem identifying the appropriate metaphorical expressions and their meanings. The advantage of this approach lies in the fact that it allows students to identify not only differences in the use of metaphors in languages, but also culturally determined differences. For example: "Look at the expressions often used to describe the metaphoric concept related to weather (or is related in some way to liquid, war, gambling, or sport, etc.). Do you have the same expressions in your native language? Does your native language have many similar expressions? Do you think that the metaphor... is universal? Is the metaphor... more productive in your native language or in the English language?"

In the final, follow-up, stage of working with a resource text, audio or video material students may be asked to comment on those parts of it that contain metaphors; to suggest situations from the context of the native culture, which can be illustrated by the metaphors given in the text in English; to determine the main communicative function of the metaphors used in the text, interpreting their contextual meaning in an extended intercultural context.

Conceptual metaphors are an effective means of motivating and actualizing the communicative activity of students in mastering English. Working with metaphors allows diversifying the teaching and learning process, mastering the English language as a means of professional communication in close connection with the cultural aspect of its functioning.

While working with resource texts, and audio and video materials on corporate culture students complete the following mind map. Mind mapping technology implemented into the learning process at this stage can help students to map the source domain concept area – culture in general – onto the target concept area – the corporate culture of a company. Therefore, by activating the knowledge of culture as a phenomenon, students figure out elements, ways of expression of corporate culture, as well as ways of learning about it.

This work is aimed at a detailed understanding of "corporate culture". Drawing up mental maps contributes to the integrated development of such cognitive skills of students as information-retrieval, information-analytical, as well as information-generalizing ones.

The third stage in the integrated model is that of production. It is aimed at developing the communicative competence of students in oral and written production. One of the activities which can be used at this stage is getting ready for an oral presentation on a business topic and then role playing a business

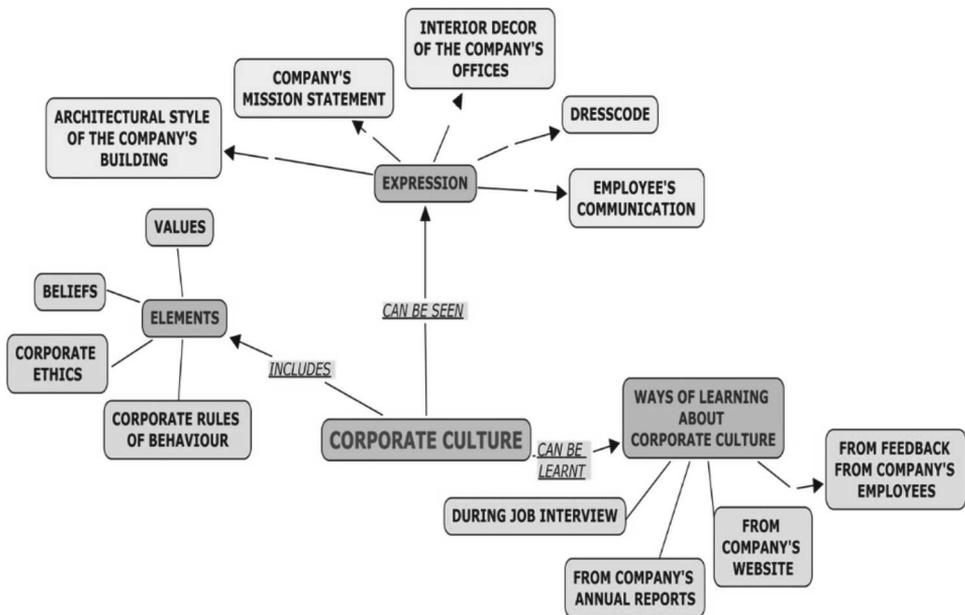


Figure 1. Aspects of “corporate culture” (compiled by the Authors)

presentation. It is an authentic format of business communication, which is useful to master as far as explaining an idea to a big audience. Getting one’s message across to recipients is one of the key competencies of a professional in any sphere in contemporary social interaction settings. At the same time, it can be considered a good model of an interactive activity in class for practicing the usage of concept metaphors. Using metaphors in presentations can be an effective means to explain and get the message across to the auditorium. According to Ch. J. Anderson, for the explanation to be exhaustive and fascinating, it should use unusual facts associated with a person’s model of the world. Metaphors and analogies are key vehicles. They help shape the explanation until all the parts are finally in place<sup>11</sup>. Metaphors are widely used by professional presenters as they can simplify complex ideas. Other functions of metaphors in business presentations, meetings or written communication can be those of capturing the recipient’s attention, creating connections, and stirring up emotion and imagination. The same functions are relevant to the context of foreign language acquisition and teaching, which makes it appropriate to implement the work with concept metaphors in class at any stage.

<sup>11</sup> К. Андерсон, *TED Talks. Слова меняют мир: первое официальное руководство по публичным выступлениям*, Т.О. Новикова (перев.), Москва 2017, с. 95.

#### 4. Survey results overview

One of the challenges in curriculum design is related to identifying suitable sources of information and learning tools. The openness of educational systems in a globalized world presupposes working with authentic texts, and audio and video learning materials borrowed from authentic sources. Since the function of such texts is not just conveying a message but providing a certain impact on the recipient that comes to the fore, it is logical to use metaphorical expressions in them that affect the emotional sphere of the reader and contribute to a more accurate, complete and deep understanding of the content. We should bear in mind that authentic materials are aimed at a potential native user of the target language. At the same time, we cannot deny the fact that there is a gap between the concept spheres of a native speaker on the one hand and of a non-native speaker on the other hand. Therefore, when it comes to the interpretation of the meaning of metaphors in relation to a concrete context, this work should be logically organized with due regard for the principles of communicative methodology<sup>12</sup>.

Thus, to work with metaphors in class we use authentic texts, audio and video materials from various e-newspapers and magazines, as well as from video content of FT, CNN and other news programmes. Dictionaries are also a good source of metaphors for study and analysis in the English language class. On the other hand, it is advisable to take into account the character of the media sphere of students when designing materials.

For materials to be selected with due regard for students' needs we carried out a survey which covered 295 students of a philology faculty majoring in English as a foreign language. The survey revealed a positive attitude of philology students to various types of materials. Thus, 68.4% of respondents admitted that they prefer printed materials, and at the same time 48.6% mentioned they like reading texts that contain visuals. It is notable that 72.1% of students who participated in the survey prefer video materials and 47.6% chose audio materials as preferable sources of information in learning a foreign language. According to the results of the survey, the most popular internet resource of learning materials is YouTube (90.5%). The second most popular among those interviewed are internet platforms specially designed for educational needs (61.4%), followed by social media (38.6%) and news sites (23.7%).

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<sup>12</sup> R.R. Jordan, *Principles of communicative methodology*, [in:] *English for academic purposes: a guide and resource book for teachers*, R.R. Jordan (ed.), Cambridge 2012, p. 111.

## Conclusions

Having analyzed the research results, we have concluded that metaphors are supposed to facilitate and enhance understanding. Hence, they can be used as a didactic tool to simplify what would otherwise be complex for students to understand. Students are ready to work with various types of materials in a foreign language to master their communicative skills in the target language, which can be considered favourable for incorporating work with concept metaphors in the learning process. Organizing this process within an interactive model with due regard for the principles of communicative, blended learning aimed at integrated receptive and productive communicative skills development may help both better understanding and appropriate usage of metaphor in contemporary cross-cultural professional discourse.

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