

THE STUDY OF METAPHOR USE IN ESAP L2 WRITING

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Abstract. *This research studies the influence of professional competence of EFL learners on their metaphor production. The task was approached through analyzing metaphors in the English written texts produced by Russian students with different competences in economics – the non-professional and professional competence level. Findings highlight similarities and divergences of metaphor use in L2 writing in terms of learners' professional competence. The results of comparative analysis of specific features in metaphors produced at different professional competence levels reveal the quantitative and qualitative differences of what functions metaphors are used to perform and to what extent they are used accurately. With the shift from the non-professional to the professional competence level learners are able to use metaphors that combine a function of presenting abstract concepts with a discourse organising function in a more balanced way and make much more use of creative metaphors, and their metaphor production tends to be less influenced by L1 background. Practical recommendations suggest an improved research methodology for studying metaphor production in ESAP as well as a deeper understanding of ESP content and its structure.*

Key words: *metaphor, professional competence, English for specific purposes, L2 writing, economics*

1. INTRODUCTION

The study of languages for academic and specific purposes has been the focus of investigation into the ways academic language is acquired and specific knowledge concepts are learnt (Krashen, Brown 2007; Henderson 2000; Velasco Sacristán 2005). To some researchers, academic language proficiency defined in the terms of knowledge of academic language and knowledge of specialised subject matter is regarded as learners' competence that can serve to facilitate the acquisition of both academic language used in education and professional fields and language of academic subjects (Krashen, Brown 2007). Within the discursive framework, language for a specific purpose, "that of transferring knowledge, be it of linguistic, pedagogic or disciplinary nature [...]" (Suomela-Salmi, Dervin 2009, 5) can be equated with professional discourse which "includes written texts produced by professionals and intended for other professionals with the same or different expertise, for semi-professionals, i.e. learners, or for non-professionals, i.e. lay people. It also means talk involving at least one professional" (Gunnarsson 2009, 5). Consequently, levels of learners' competence in academic and professional domains may vary with the degree of professionalization in academic discourse. Researchers argue that language for learning needed to operate in professional or academic settings coupled with language of learning

needed to access discipline specific knowledge must be investigated to thwart linguistic and conceptual challenge faced by the ESAP L2 learners (Katiya, Mtonjeni, Sefalane-Nkohla 2015; Tarnopolsky, Vysselko 2014).

Despite the vast majority of theoretical works in this respect, they do not provide a clear technique to ESAP research. One of the ways in ESP language research is the analysis of metaphor as this has robust identification technique of understanding and explaining language (Bailey 2003; Berendt 2008; Charteris-Black, Ennis 2001; Littlemore, Low 2006a). Based on the majority of the empirical studies, learners' ability to analyse and use metaphor has proven to result in deep processing and increased learning gain (Boers 2013). The role of metaphor in L2 learning has been acclaimed in all areas of communicative competence: metaphoric competence defined as "an individual's ability to understand and produce metaphors" (Littlemore, Low 2006b, 79) contribute to grammatical competence, textual competence, illocutionary competence, sociolinguistic competence, and strategic competence at all stages of learning (Bailey 2003; Littlemore, Low 2006a).

Previous studies have identified the following issues arising in metaphoric competence research in L2 writing. Kathpalia and Carmel (2011) concentrate on metaphorical competence in ESL writing, stating unidiomaticity of second language writers' metaphors due to undeveloped fluency in the target language. Hashemian and Nezhad (2013) investigate metaphoric competence development and metaphorical density to reveal a high degree of literalness. According to Littlemore et al (2012) and Hoang (2013), there tends to be strong correlation between the amount of metaphorically used words in L2 writing and level of L2 learners' proficiency, with the metaphor production rate being an indicator of L2 proficiency. Although these previous studies highlight the importance of metaphor in L2 learning, L2 metaphor production remains under researched.

Most of investigations address metaphor use in English for Specific Purposes (ESP) discourse, particularly the language of economics, pointing out its high metaphoricity (Boers 2000a; Charteris-Black 2000; Charteris-Black, Ennis 2001; Herrera, White 2000; White 2003). In line with the conceptual theory of metaphor (Lakoff, Johnson 2008) recent studies within the field of ESP have analysed the role and functions of metaphor in specialized languages such as Economics. By applying metaphor as a cognitive tool to understand abstract concepts by way of more concrete ones, Charteris-Black and Ennis (2001) contrast a corpus of financial reports in English and Spanish to find some divergent conceptual metaphor models in the cross-cultural perspective. Their studies into metaphor benefit Economics vocabulary teaching. Herrera and White (2000) propose a methodology that focuses on cognitive semantics to teach L2 learners the metaphorical uses of growth. The researchers address the issue of difficulty posed on L2 learners by the non-literalness of the language of business and economics (Herrera, White 2000, 56). With regard to the functions metaphor performs, the previous research has identified its key functions, such as the signalling of evaluation, agenda management, mitigation and humour, technical language, reference to shared knowledge, topic change, discourse organizing function (Semino 2008; Littlemore, Low 2006a). There is some evidence of the increasing sophistication with which learners are able to use and manipulate metaphor effectively, which contributes to language development across the CEFR levels (Littlemore et al 2012). Furthermore, learners' ability to use metaphor in different functions can be explained by their intention to write persuasively about difficult issues, or to get a particularly important point across (Kimmel 2010).

However, there are still very few substantial discussions of the influence that ESAP L2 learners' proficiency may have on metaphor production in their writing. Given the

lack of attention in ESP studies to the processes through which ESAP learners develop their academic and professional proficiency in discipline-specific writing (economics), investigations into metaphor use that allow for the reasonable explanation of mechanism underlying metaphor production seem necessary. To pursue this line of research, this study was aimed at identifying features of metaphor that distinguish different professional competence levels in ESAP L2 writing. To meet this aim, we propose to ask these research questions:

1. Does the amount of metaphor produced in L2 writing vary across different competence levels in economics?
2. In what ways do the functions performed by metaphor vary across levels of ESAP command?
3. To what extent are the ESAP learners able to use metaphor accurately and to what extent is their use of metaphor affected by L1 background?

2. ANALYSIS PROCEDURE

The present analysis is carried out on a corpus of sixty essays written by 60 Russian learners of English as a foreign language in National Research University Higher School of Economics (HSE), Perm, Russia: 30 essays at each of the two levels of professional competence (non-professional and professional ones).

Participants of this study were 60 second- and third-year university students (44 women, 16 men). The age of participants ranged from 18 to 22 years old with a mean of 19.40 (*S.D.* = 0.57). Participants reported a mean grade average of 7.07 (*S.D.* = 0.93). All students majored in Economics. HSE students take two classes (3 hours) of English per week during the first two years of their studies, and one class of English per week during one semester of their third year. Participants in this study took the IELTS at the end of their second year, which is required for all HSE students. Their IELTS scores ranged from 5 to 8 with a mean of 6.12 (*S.D.* = 0.74).

The students were assigned to write a discursive essay presenting their personal opinion concerning the topics of economics and finance, with 250–300 word limit (Example 1).

Example 1. Writing task.

You should spend about 40 minutes on this task. Write about the following topic:

Should everyone pay tax and in what proportion to their income?

What is your opinion?

Give reasons for your answer and include any relevant examples from your own knowledge and experience. Write at least 250 words.

It should be noted that according to EFL curriculum (Educational program 2015) a language-focused type of provision is introduced to the learners in their first and second years. Starting from the third year an ESP course is introduced to students majoring in economics with the aim to develop proficiency in the foreign language learning and discipline-specific learning with the equal emphasis made on both elements of language and content. The ESP course ensures linguistic and subject knowledge acquisition, development of English skills for professional communication, which means L2 learners can reach a professional competence level. Therefore, at the non-professional competence level learners (second-year students) are not yet prepared to produce texts on economic

issues in the target language whereas at the professional level learners (third-year students) are capable of both oral and written professional communication in economics.

In order to identify the commonality and divergence of metaphor production in terms of professional competence the learners' academic texts were divided into two sub-corpora, one representing the non-professional competence level of L2 learners (2 year of study) and the other - the professional level of L2 learners (3 year of study). At the initial stage of analysis procedure, in order to establish the contextual meaning we apply a practical and systematic method for identifying metaphorically used words, after Pragglejaz Group (2007), which includes four steps: 1) Read the entire text-discourse to establish a general understanding of the meaning; 2) Determine the lexical units in the text-discourse; 3) (a) For each lexical unit in the text, establish its meaning in context; that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit; (b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be: more concrete (what they evoke is easier to imagine, see, hear, feel, smell or taste), related to bodily action, more precise (as opposed to vague), historically older. Basic meanings are not necessarily the most frequent meanings of the lexical unit; (c) If the lexical unit has a more basic current-contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning, but can be understood in comparison with it. 4) If yes, mark the lexical unit as metaphorical (Pragglejaz Group 2007). In the following sentence, which comes from our data, "**On** the one **hand**, there is an opinion that higher education should **fit in** a competitive **environment**, because competition **dictates** required professions" the meaning of the words 'on', 'hand', 'fit', 'in', 'environment', and 'dictates' in this context (contextual meaning) can be understood in comparison with their more basic meaning. These lexical units are marked as being metaphorically used. Following the findings obtained in the studies by Alejo (2010), Sinclair (1991) and Littlemore et al (2012), we regard a single word as a metaphorically used unit even if some uses may be recorded in the dictionary as making up a phraseological unit, which, however, may be treated by non-native speakers in a more compositional way. By applying this technique, we analyse two samples of essays to identify metaphorically used units in each sample. All in all, we analyse 3058 metaphoric units selected from the sample of ESAP learners' written texts and calculate the proportions of metaphors used at each level of professional competence.

We then analyse the samples of metaphors used by ESAP L2 learners at a different level of professional competence to establish how they used metaphors with reference to their functions and accuracy. In order to establish the percentage of errors that involved metaphor and to assess the role of L1 influence in these errors, we carry out error identification by coding these metaphors as erroneous if the errors are due to an 'interlanguage', a simplified or distorted representation of the target competence, which has developed characteristics different from those of L2 norms (Council of Europe 2001, 155). We then calculate the proportion of errors involving metaphors and the proportion of those affected by L1 influence at each level of professional competence.

Both quantitative and qualitative findings are presented below followed by a discussion of similarities and divergence of metaphor use at the non-professional and professional competence level of ESAP L2 learners.

3. RESULTS AND DISCUSSION

According to the procedures, metaphorically used words in the essays of the ESAP L2 learners at the non-professional and professional level of proficiency in economics were determined, and the proportion of the total metaphors was found to be larger in the texts produced by the learners at the non-professional competence level (17%) compared to the percentage of metaphor produced by the learners at the professional competence level (14%).

Both quantitative and qualitative analysis of how learners were using metaphor in their writing and what function it was used to perform in both samples of essays was conducted to reveal both similarities and divergence of metaphor use. A clear role of metaphor expressing abstract concepts as well as providing discourse coherence in essays (Littlemore, Krennmayr, Turner, Turner, 2012) can be observed in both samples, however, with some differences in the amount. The quantitative analysis shows that there is a divergence in metaphor use of transferring subject-specific knowledge: 72% of metaphors at the non-professional competence level and 59% of metaphors at the professional competence level. As far as metaphor in its discourse organizing function is concerned, the larger percentage of metaphorically used words has been found in the sample of essays produced by the learners at the professional level (41%) compared to 28% of metaphors at the non-professional competence level. It should be emphasized that at the professional level learners are beginning to use metaphors that combine a function of presenting abstract concepts with a discourse organising function in a more balanced way.

Results of the qualitative analysis indicate that to express abstract concepts (those referring to the economic and financial domains), L2 learners at both the non-professional and professional competence level use more non-conventional, 'novel' or 'creative' metaphors than conventional, 'dead' or 'sleeping' metaphors (Müller 2008), which reflects the commonality in metaphor use in this function in terms of professional competence level. Despite the difference in the professional level, L2 learners try out new metaphors in addition to using metaphoric prepositions and metaphors with the appropriate phraseology. In the following examples (1, 2), learners at the non-professional competence level (NP) and at the professional level (P) are able to make use of personification metaphor [Note: The examples given in the article are quoted exactly as they stand in the original]:

(1) Enormous companies may **act** versus this firm and **push it from** the market. Small firms are often **under pressure**. (Candidate, NP)

(2) Some people consider that large companies are more likely to **fail**, because nowadays economic crises happen too often, and corporations can not **fight** with them. (Candidate, P)

Another crucial issue arising from the analysis of metaphor use in its function of transferring subject-specific knowledge is that at both professional competence levels learners widely used metaphoric prepositions, appropriate phraseology and 'novel' metaphors, as we can see in the contexts obtained from the essays produced by ESAP L2 learners (examples 3, 4):

(3) Besides, every government **take care** of equality **in** society, it **tries to cut a gap between** the rich and the poor. (Candidate, NP)

(4) Accordingly there is need to invest **wisely taking into account** all possible risks. (Candidate, P)

However, there is some difference in metaphor use in this function. In particular, ‘direct metaphors’ (i.e. similes) are used to express abstract concepts only by L2 learners at the non-professional level. For example,

(5) Then in “good hands” firm may act sufficiently and might will not be staff turnover and other problems like policy for smokers, dress cod, commission payments become less actual owing to the fact that firm will be **like well-working mechanism**. (Candidate, NP)

The analysis of how L2 learners make the metaphor use to provide discourse coherence in their essays shows that they at both professional competence levels tend to use ‘dead’ or ‘sleeping’ metaphors. Mainly prepositions and fixed expressions tend to be found in metaphor use in its discourse organizing function, which can be illustrated in the following contexts: **on** the one **hand**, **on** the other **hand**, **in** my opinion, **from** my **point** of view, to sum **up**, **as** a rule, a **good** example of, **in** addition **to** this, **as** a result, **in order** to, **apart from** this fact, it is **common knowledge**, etc. However, by using these conventional metaphors to provide coherence learners at the professional competence level attempt to use them in a more sophisticated way to support their points of view. This divergence in metaphor use at the non-professional and professional level can be observed in the following examples:

(6) I **strongly** believe that small companies are more likely to fail than large ones. (Candidate, NP)

(7) **As far as** proportion of tax to people’s income is **concerned**, I **strongly** believe that all countries should switch on progressive fiscal system. (Candidate, P)

(8) **In conclusion** I want to summarise all information that I said before. (Candidate, NP)

(9) I **find** it **difficult** to **reach** a **conclusion** but I’m **tempted** to say that there is a balance between your preferences about higher education and a competitive environment, because it will be very sadly if you are really good worker but you cannot find a job for a long time. (Candidate, P)

Since errors are an inevitable, transient product of the learner’s developing interlanguage (Council of Europe 2001, 155) and ESP learners experience both linguistic and conceptual challenges upon entering into technical discipline (Katiya, Mtonjeni, Sefalane-Nkohla 2015), the investigation into an ability to use metaphor in ESAP writing accurately is of particular importance. In the tradition of error analysis, different sources of errors are identified and errors are classified with making a distinction between errors and mistakes, describing the causes of errors, analyzing errors that occur at different levels (e.g. Runić, Runić 2015). The current study focuses on errors that are due to “transfer” or “language interference,” resulting from the use of elements from one language while speaking/writing another (Richards 1974). In order to answer the research question – to what extent the ESAP learners are able to use metaphor accurately and to what extent their use of metaphor is affected by L1 background – we calculated errors in metaphors produced by L2 learners at the non-professional and professional competence level. We observed a higher percentage of metaphors containing errors at the non-professional level (13%) compared to 9% of metaphors containing errors at the professional level. We then assessed whether any of the errors could be attributed to L1 influence and calculated the proportion of L1-induced errors in metaphor use at each professional competence level.

The results of the error analysis can clearly show that the percentage of metaphors containing errors that show L1 influence at the non-professional level exceeds that of the professional level (57% and 43% correspondingly). This suggests that the rate for

improvement of metaphor errors can be observed with the shift from the non-professional to the professional competence level. It should be noted that in 16% of cases L1 influence on metaphor error tends to be common in metaphor use at both competence levels.

We have identified three types of L1-influenced errors in the metaphorically used words, which arise due to differences between the ESAP learners' native language and the target language. The first type (Type 1 errors) comprises the cases of metaphor errors that are of correct choice of a metaphorically used word but not in the appropriate form due to L1 influence. There tends to be the least frequency of metaphor errors of this type at both professional levels. Consider the following examples:

(10) While big companies production is mass and, thus, small ones can create its unique product. It becomes a **mainstream** to purchase them. (Candidate, NP)

(11) Consequently, if these companies go **bankrupts**, government will have to decrease its budget or borrow money on a financial market, that is why large companies are always helped to be capable of paying. (Candidate, P)

In examples (10) and (11) learners at the non-professional and professional levels turned out to have difficulty in making a distinction between the noun and the adjective due to L1 influence. For example, in excerpt 11, the learner at the professional level can choose the right word but not in the correct form. In English the word 'bankrupt' can be used as a noun in the plural form in its basic meaning, whereas it can only be used as an adjective in the metaphorical expression of 'go bankrupt'. In Russian, however, this sense is usually expressed by the plural noun form.

Another type (Type 2 errors) is the most frequent type of L1-induced errors in metaphor production at the non-professional and professional competence level of ESAP L2 learners. These errors stem from the incorrect choice of a metaphorically used word, which highlights instances where conventions between L1 and L2 differ (Herrera, White 2000). This can be illustrated with the example below:

(12) On the one hand, there is an opinion that higher education should fit in a competitive environment, because competition **dictates** required professions and you have to choose one from a list. (Candidate, P)

The metaphorically used word "impose" is more correct, however the learner used the inappropriate metaphor "dictate" based on a transfer from the Russian verb "diktovat."

An additional burden for ESAP L2 learners lies in the difference between conceptual models and their verbal expressions in the native and target language, which may have a negative influence on the word choice. Consider the following examples:

(13) The **more** is your income, the **more** is a proportion that you should share with the government. (Candidate, NP)

(14) And in total we will have **less** income to our budget. (Candidate, P)

In excerpts 13 and 14, where the metaphor 'low/high' would have been a correct choice, the learners used the inappropriate metaphor 'little/much' because they activated the wrong source domain of a metaphor due to the interference of their L1 (Danesi 2008). Despite the commonality of L1-influenced Type 2 errors demonstrated above, the analysis shows some differences in metaphors produced by L2 learners at the non-professional and professional competence level, as illustrated in the examples below:

(15) Then such firm can **reach** more profit further and become enormous company. (Candidate, NP)

(16) It allows to a large company to produce and to **get** profit. (Candidate, P)

It can be clearly seen from examples 15 and 16 that the metaphor ‘make’, or ‘generate’ would have been a correct choice, whereas learners at the non-professional level used ‘reach’ to conceptualize profit as some point or stage in a process that a business can get to (Macmillan Dictionary for Advanced Learners), and learners at the professional level used ‘get’ to conceptualize profit as something that can be obtained, received, or given (Macmillan Dictionary for Advanced Learners).

Another type of errors (Type 3 errors) comprises errors due to incorrect phraseology. Although these errors are the second most frequent ones among L1-influenced errors in the metaphorically used words at both levels of professional competence, they demonstrate the highest percentage of common patterns in both samples. Consider the following examples:

(17) **Frome** one hande, is more honest for people pay the same proportion, and it is right. (Candidate, NP)

(18) **From** the one hand, all people can be equal and have the same standarts of living and the same amount of money for consumption. (Candidate, P)

(19) But I disagree with their statement because after financial crysis of 2008-09 lot of small producers had to leave market and **end up** their business. (Candidate, P)

The errors identified above reflect the challenge the learners at both professional competence levels experienced in terms of using metaphors with appropriate phraseology.

Thus, the comparative study into the ability of L2 learners to use metaphor accurately with regard to their professional competence level reveals that ESAP L2 learners at the non-professional level are inclined to make relatively more mistakes, which might be explained by their willingness to communicate despite risks (Council of Europe 2001). Furthermore, L2 learners at the non-professional level are more likely to use more L1 strategies (Jin 2011) and risk erroneous ‘direct’ translation (Azuma 2009; Boers 2000b).

4. CONCLUSION

The comparative analysis of metaphor use highlights the areas of commonality as well as divergence in terms of professional competence represented in L2 writing. Although learners at both levels of professional competence tend to use roughly equal number of metaphors, and in the similar functions, the learners at the professional level are able to use metaphors that combine a function of presenting abstract concepts with a discourse organising function in a more balanced way and make much more use of creative metaphors. Meanwhile, the learners at the non-professional level demonstrate a high frequency of metaphors involved in the expression of economic concepts. This confirms our initial supposition of metaphor as a powerful tool of transferring a subject-specific knowledge in the written academic and professional communication. Obviously, L2 learners at the non-professional competence level are unable to communicate new economic concepts and facts effectively, since they have a relatively impoverished stock of words in the subject-specific domain (economics). Therefore, their metaphors predominantly serve as a tool to make a meaning from many everyday words (MacArthur 2010).

A more detailed analysis of the ESAP L2 writing reveals difficulties L2 learners are inclined to have in metaphor production, and indicates quantitative and qualitative differences in the extent the metaphor errors are influenced by L1 background at different professional competence levels. Despite the fact that the proportion of the total metaphors

was by 3% larger in the sample of essays produced by the learners at the non-professional competence level, the percentage of L1-induced errors in metaphors at the non-professional level exceeded by 14% of that of the professional level. We assume that this correlation between learners' professional competence and their competence of metaphor production, in particular the accuracy in the use of appropriate metaphors and in the appropriate form, as well as with the correct phraseology, can be attributed to the fact that at an early stage of professional competence development L2 learners may lack understanding of the underlying concepts of metaphors in both L1 and L2 and produce metaphors with L1 conceptual system in mind (Kecskés 2007), or learners are still insufficiently trained in the fields of their majors to start writing on economic and financial subjects in the target language (Tarnopolsky, Vyselko 2014).

Nevertheless, the limited sample in within-culture variation, requirements and the genre of writing as well as a mode of production make up for research limitations. In order to overcome these limitations, the comparative study of metaphors in first and target language along with the investigation into underlying concepts of metaphors in both L1 and L2 in economics are considered as significant research topics.

Practical recommendations suggest an improved research methodology for studying metaphor production in ESAP as well as a deeper understanding of ESP content and its structure.

REFERENCES

- Alejo, Rafael. "Making sense of phrasal verbs: a cognitive linguistics account." In *Applied cognitive linguistics in second language learning and teaching*, edited by Littlemore Jeannette and Constanze Juchem-Grundmann, 50–71. AILA Review, 2010.
- Azuma, Masumi. "Positive and negative effects of mother-tongue knowledge on the interpretation of figurative expressions." *Papers in Linguistic Science* 15 (2009): 165–192.
- Bailey, Richard. "Conceptual metaphor, language, literature and pedagogy." *Journal of Language and Learning* 1(2) (2003): 59–72.
- Berendt, Erich A., ed. *Metaphors for learning: Cross-cultural perspectives*. John Benjamins Publishing, 2008.
- Boers, Frank. "Cognitive Linguistic approaches to teaching vocabulary: Assessment and integration." *Language Teaching* 46(2) (2013): 208–224.
- Boers, Frank. "Enhancing metaphoric awareness in specialised reading." *English for Specific Purposes* 19(2) (2000a): 137–147.
- Boers, Frank. "Metaphor awareness and vocabulary retention." *Applied Linguistics*, 21(4) (2000b): 553–571.
- Charteris-Black, Jonathan and Timothy Ennis. "A comparative study of metaphor in Spanish and English financial reporting." *English for specific purposes* 20(3) (2001): 249–266.
- Charteris-Black, Jonathan. "Metaphor and vocabulary teaching in ESP economics." *English for Specific Purposes* 19(2) (2000): 149–165.
- Council of Europe. *Common European Framework of Reference for Languages: Learning, Teaching and Assessment*. Strasbourg, 2001.
- Danesi, Marcel. "Conceptual errors in second-language learning." In *Cognitive approaches to pedagogical grammar*, edited by Sabine de Knop and Teun de Rycker, 231–256. Berlin, New York: Mouton de Gruyter, 2008.

- Educational Program. Accessed August 21, 2015. <http://www.hse.ru/edu/courses/94100352.html>
- Gunnarsson, Britt-Louise. *Professional discourse. Continuum Discourse Series*. London, 2009.
- Hashemian, Mahmood and Mohammad Reza Talebi Nezhad. "The development of conceptual fluency and metaphorical competence in L2 learners." *Linguistik online* 30(1/06) (2013): 41-56.
- Henderson, William. "Metaphor, economics and ESP: Some comments." *English for Specific Purposes* 19 (2) (2000): 161-173.
- Herrera, Honesto and Michael White. "Cognitive linguistics and the language learning process: A case from Economics." *Estudios Ingleses de La Universidad Complutense* (8) (2000): 55-78.
- Hoang, Ha. "*The learner-writers' forgotten ally: An exploratory study of metaphoricity in second language writing.*" Presented at the 12th Symposium on Second Language Writing, Jinan, China, 2013.
- Jin, Lingxia. "Second language acquisition of spatial metaphors in English and Chinese writing: Insights from native and learner language corpora." PhD diss., The University of Arizona, Arizona, 2011. Accessed May 20, 2016. http://arizona.openrepository.com/arizona/bitstream/10150/203488/1/azu_etd_11944_sip1_m.pdf.
- Kathpalia, Sujata S. and Heah Lee Hah Carmel. "Metaphorical competence in ESL student writing." *RELC Journal* 42(3) (2011): 273-290.
- Katiya, Misiwe, Mtonjeni, Thembinkosi and Puleng Sefalane-Nkohla. "Making Sense of Errors Made by Analytical Chemistry Students in Their Writing." *Journal of Language Teaching and Research* 6 (3) (2015): 490-503. DOI: <http://dx.doi.org/10.17507/jltr.0603.04>.
- Kecskés, Istvan. "Formulaic language in English lingua franca." In *Explorations in pragmatics: Linguistic, cognitive and intercultural aspects*, edited by Istvan Kecskés and Laurence Horn, 191-218. Berlin, New York: De Gruyter, 2007.
- Kimmel, Michael. "Why we mix metaphors (and mix them well): Discourse coherence, conceptual metaphor, and beyond." *Journal of Pragmatics* 42 (2010): 97-115.
- Krashen, Stephen and Clara L Brown. "What is Academic Language Proficiency?" *Singapore Tertiary English Teachers Society (STETS)*, 2007. Accessed September 22, 2013. <http://www.joanwink.com/research/Krashen-Brown-ALP.pdf>.
- Lakoff, George and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980.
- Littlemore, Jeannette and Graham Low. "Metaphoric competence, second language learning, and communicative language ability." *Applied linguistics* 27(2) (2006a): 268-294.
- Littlemore, Jeannette and Graham Low. *Figurative thinking and foreign language learning*. Basingstoke: Palgrave Macmillan, 2006b.
- Littlemore, Jeannette, Krennmayr, Tina, Turner James and Sarah Turner. "Investigating figurative proficiency at different levels of second language writing." *Research Notes* 47 (2012): 14-23.
- MacArthur, Fiona. "Metaphorical competence in EFL: Where are we and where should we be going? A view from the language classroom." *AILA Review* 23(1) (2010): 155-173.
- Macmillan Dictionary for Advanced Learners*. Accessed July 2015. <http://www.macmillandictionary.com>.

- Müller, Cornelia. *Metaphors, Dead and Alive, Sleeping and Waking. A Dynamic View*. Chicago: University of Chicago Press, 2008.
- Pragglejaz Group. "MIP: A method for identifying metaphorically used words in discourse." In: *Metaphor and Symbol*, edited by Raymond W. Gibbs, Jr., 22(1), 1-39. Routledge, 2007
- Richards, Jack C. *Error Analysis: Perspectives on second language acquisition*. London: Longman, 1974.
- Runić, Jelena and Marija Runić. "Strategies for Reducing L2 English Grammar Errors with L1 Chinese Writers." *The Journal of Teaching English for Specific and Academic Purposes* 3(2) (2015): 275–294. Accessed March 20, 2016. <http://espeap.junis.ni.ac.rs/index.php/espeap/issue/view/8>.
- Semino, Elena. *Metaphor in Discourse*. Cambridge: Cambridge University Press, 1991.
- Sinclair, John. *Corpus, Concordance, Collocation*. Oxford: Oxford University Press, 1991.
- Suomela-Salmi, Eija and Fred Dervin. *Cross-linguistic and Cross-cultural perspectives on Academic Discourse*. John Benjamins Publishing, 2009.
- Tarnopolsky, Oleg and Andriy Vysselko. "Mini-courses on economic disciplines in an advanced ESP course for university students of economics." *The Journal of Teaching English for Specific and Academic Purposes* 2 (1) (2014): 45–59. Accessed March 20, 2016. <http://espeap.junis.ni.ac.rs/index.php/espeap/issue/view/3>.
- Velasco Sacristán, Marisol. "Metaphor and ESP: metaphor as a useful device for teaching L2 Business English learners." *IBÉRICA* 10 (2005): 115-131. Accessed March 20, 2016. <http://www.aelfe.org/documents/07-Ib10-Velasco.pdf>.
- Wang, Huili, Runtsova, Tamara and Hongjun Chen. "A comparative study of metaphor in English and Russian economic discourse." *Text & Talk* 33(2) (2013): 259–288.
- White, Michael. "Metaphor and economics: The case of growth." *English for Specific Purposes* 22(2) (2003): 131–151.