I. ARTICLES

Sadia Belkhir

Mouloud Mammeri University of Tizi-Ouzou

Personification in EFL learners' academic writing: A cognitive linguistic stance

Abstract. The paper offers a report of a small-scale corpus investigation into some advanced EFL learners' use of personification in academic writing within a higher education context (Mouloud Mammeri University). Its main objective is to shed light on the extent of the occurrence of this phenomenon in their writings. The question raised is whether the examination of their dissertations would reveal extensive use of personification. Conceptual Metaphor Theory constitutes the theoretical framework featuring in this research. Relying on the Metaphor Identification Procedure (MIP) (Pragglejaz Group 2007), six master's dissertations are selected for examination, and a quantitative analysis of the identified metaphorically used words is conducted. The results of the study reveal an overwhelming manifestation of personification. These findings may constitute a small contribution to the field of education, as offering useful data to educational practitioners and researchers.

Keywords: personification, academic writing, EFL learners, higher education, cognitive linguistics.

1. INTRODUCTION

In cognitive linguistics, metaphor is defined as reasoning and talking about one conceptual domain in terms of the structure of another conceptual domain (Lakoff & Johnson 1980). It has been argued that speakers of English draw on concrete domains in order to comprehend abstract concepts because thinking about difficult abstract concepts is facilitated by concrete physical concepts (Kövecses 2002). There seems to be an accepted reason that leads people to build commonly source-target conceptual mappings in order to attain an understanding of abstract concepts. This reason rests upon the connection between people's frequent physical experiences and the metaphorical correspondences they make to structure the abstract concepts they try to understand (Gibbs 1996). Metaphori-

cal thought was described as normal and ubiquitous, leading to a spontaneous and unconscious act of metaphor use in ordinary everyday language (Lakoff & Johnson 1980).

Metaphor is pervasive in both educational and academic discourse. This phenomenon has attracted the attention of applied linguists because of its contribution to the understanding of human thought processes and communication (Cameron 2003; Cameron & Low 1999). Therefore, metaphor in EFL learners' writing needs to be researched. As Eubanks (2011: 13) argues, "If we want to think more carefully about who writers are, what writing is, and how writing affects our lives, we should pay attention to our figurative language and thought."

In higher education settings, such as Mouloud Mammeri University of Tizi-Ouzou, EFL learners are most of the time involved in a spontaneous and unconscious process of metaphor use in academic written productions. This unconscious act constitutes an outstanding reason that stimulates thinking about the frequencies of metaphor use in text. To date, there seems to be no study that has explored the production of metaphors, particularly personification, in EFL learners' written discourse at Mouloud Mammeri University. An attempt to conduct such an investigation within the specific context of academic discourse as a register used in higher education settings can be of interest to educators and researchers, and may enlighten their understanding of EFL learners' use of metaphorical expressions in academic text.

The main point behind the present research is to answer the question of whether or not personification metaphors are used in six-selected master's dissertations under study and to what extent. I suggest that a significant amount of metaphors is produced in the written discourse in question; and this goes in line with the rather obvious fact that metaphor appears frequently, as this is known for at least a quarter of a century, if not since Aristotle.

The objective of this paper is three-fold. First, it tries to show that personification importantly features students' writing. Second, it aims at revealing that the metaphorical lexical items (verbs) within personification are used at variable rates. Finally, it attempts to explain the reasons behind the overwhelming metaphoric use of verbs within personification metaphors in the corpus of the present study.

The present research is circumscribed within the scope of Conceptual Metaphor Theory (CMT), cognitive linguistics related work, and metaphor in educational contexts. Therefore, this paper begins with some background information about personification in Conceptual Metaphor Theory (CMT) and Metaphor Identification Procedure (MIP). It then provides a review of some pertinent studies about metaphor in educational and academic discourse. Next, it introduces the research methodology applied. Finally, the article discusses the results of the research, and draws some conclusions.

2. PERSONIFICATION IN CONCEPTUAL METAPHOR THEORY (CMT)

From a cognitive linguistics perspective, metaphors are primarily conceptual not linguistic. They are viewed as tools that facilitate communication through the understanding of abstract concepts in terms of concrete ones (Lakoff & Johnson 1980: 34). The relationship between the two types of concepts is guaranteed by *conceptual mappings*, i.e., correspondences between a source and a target domain. CMT treats linguistic manifestations of metaphors in written discourse from a cognitive linguistic stance. That is, metaphors are first conceptual constructs existing in language users' minds, which are then given a more concrete form, as for example, metaphoric written words. Interest in the study of metaphor has emerged out of the necessity to apprehend its use and interpretation in order to contribute to an understanding of communication.

In Conceptual Metaphor Theory, *personification* is described as a process that "allows us to comprehend a wide variety of experiences with nonhuman entities in terms of human motivations, characteristics, and activities" (Lakoff & Johnson 1980: 33). It is a type of conceptual metaphor that "involves understanding nonhuman entities, or things, in terms of human beings. It thus imputes human characteristics to things" (Kövecses 2002: 251). In other words, "this type [of metaphor] occurs when a nonhuman entity (referring to some discourse entity, such as a text) is the subject with a verb that requires a human agent" (Steen et al. 2010a: 108). This is illustrated in the example (1) hereafter.

(1) This chapter *discusses* participants' pragmatic competence.[1]

The word "discusses" is used metaphorically in Example (1) above. In fact, this verb requires an animate subject, but here, it co-occurs with the inanimate noun "chapter". This example is illustrative of what Low (1999: 231) calls the ESSAY IS A PERSON metaphor that exemplifies personification.[2] The metaphorical word "discusses" in Example (1) has been identified by means of the Metaphor Identification Procedure (MIP). A comparison of the contextual meaning of "discusses" and its basic meaning reveals that it is used metaphorically in Example (1) above (Belkhir 2020: 46).

The ability to interpret metaphors in written discourse requires first the capacity to identify them with consistency and accuracy. The act of identifying metaphors in written discourse means that metaphorically used expressions are searched for in usage. The term "usage" refers both to text and to talk,

---

[1] See Hadj Mohand (2019: 45).
[2] Conceptual metaphors are transcribed in small capitals (see Lakoff 1993).

and is opposed to that of "grammar" (Steen 2007). It has been argued that metaphor identification is not a trouble-free task because of inconsistency in researchers' intuitions associated with a lack of accuracy in determining what counts as a metaphoric expression (Pragglejaz Group 2007). As a result, a group of ten cognitive linguists specialized in conceptual metaphor research, who called themselves the *Pragglejaz Group*, elaborated a method to facilitate the identification of metaphorically used words in natural discourse. They called this method the Metaphor Identification Procedure (MIP). Steen et al. (Steen, Dorst, Herrmann Berenike, Kaal, & Krennmayr 2010b: 768) describe MIP as an inductive tool that requires "moving from the available linguistic structures towards a set of reconstructed conceptual structures that constitute cross-domain mappings".

MIP is implemented in four steps. In the first step, the analyst ensures that the overall meaning of the discourse is understood. In the second step, s/he identifies the lexical units that s/he assumes to be metaphorical in the text in question. In the third step, s/he sets up their meaning in context; then, s/he searches for other basic concrete/bodily meanings in other contexts and decides whether the meaning in the text can be understood in terms of or in comparison with meaning which is more basic. If this is found to be right, the researcher marks the identified lexical units as being used metaphorically, in the fourth step. Later, a more elaborated form of MIP, referred to as the MIPVU[3], was introduced to deal with metaphors in news text and conversation as well as simile in academic discourse (Steen et al. 2010a). In the present paper, only the first version of MIP (2007) is applied to identify action verbs that exhibit personification.

Another pertinent dimension characterizing personification is metonymy, which implies "using one entity to refer to another that is related to it" (Lakoff & Johnson 1980: 35). Metonymy also suggests "people take one well-understood or easily perceived aspect of something to represent or stand for the thing as a whole" (Gibbs 1994: 320). It should also be pointed to the fact that in such registers as academic discourse, "essay and (research) paper personification metaphor was closely bound to the metonymy of the essay standing for the person who wrote it" (Low 1999: 247).

Similar to metaphor, metonymy is of a conceptual nature (Kövecses 2002: 145). Barcelona (2003: 4) defines metonymy as "a conceptual projection whereby one experiential domain (the target) is partially understood as another experiential domain (the source) included *in the same common experiential domain*." He goes on to maintain that the basis of any metaphorical transfer is to originate

---

[3] MIPVU stands for Metaphor Identification Procedure (Vrije Universitaet).

from a metonymic projection. According to Deignan (2005: 71), "metonymy now seems to be so closely intertwined with metaphor that it is a difficult and probably unnecessary exercise to try to disentangle the two in every analysis". This is to say that metaphor and metonymy are interconnected and thus function simultaneously within personification. Example (1) above represents the linguistic instantiation of the ESSAY IS A PERSON conceptual metaphor, which is directly related to the metonymy the ESSAY STANDS FOR A PERSON. Metaphor and metonymy, it should be remembered, are "interacting and not opposing forces" (Steen 2007: 102). Rundblad (2007: 251) argues that metonymic linguistic expressions "enable the author to remain absent in the text and encourage the reader to focus on the article, the investigation, and the results". In her view, metonymy, has received little attention in scientific discourse. This view is shared by Barcelona (2003: 4), who argues: "Metonymy has received much less attention from cognitive linguists, although it is probably even more basic to language and cognition".

3. STUDIES INTO METAPHOR IN EDUCATIONAL AND ACADEMIC DISCOURSE

Discourse studies have demonstrated the important part played by metaphor in structuring thought and language (see Littlemore, Krennmayr, J. Turner & S. Turner 2014; Musolff & Zinken 2009; Cameron 1999; Gibbs 1999; Steen 1999). The ubiquitous nature of metaphors in spoken and written educational and academic discourse is an observed fact that has been vastly researched (see Semino 2008; Cameron 2003; Cameron & Low 1999), as this issue gained significant importance in the field of education. Textbooks, for instance, are filled with countless metaphorical expressions, so often, unnoticed by students (Goatly 2007: 1).

The importance of metaphor in foreign language teaching and learning has been explored to a significant extent. For example, metaphor has been researched in academic discourse with respect to book reviews (Low 2008b). An analysis of reviews revealed authors' regularity in metaphor use for positioning purposes. However, Low (2008a) stresses the need to consider how metaphor is used at discourse level, and to determine what learners are required to do with metaphors. In addition, he acknowledges the difficulty of testing for 'metaphoric competence' in a foreign language.

A number of studies considered metaphor as a phenomenon that plays an important role in academic language (see Semino 2008; Giles 2008; Goschler 2007; Cameron 2003; Charteris-Black & Musolff 2003; Charteris-Black 2000;

Darian 2000; Low 1999; Pulaczewska 1999). In this paper, academic discourse is understood as being the spoken or written form of language produced in accordance with standards set within academic frameworks including higher education contexts. Low (1999: 231) calls these standards "norms of the academic community". Understood in such terms, academic writing can be said to be represented by such instances of language production as advanced EFL learners' master's dissertations. It is worth noting in passing that academic discourse has been found to be characterised by the highest amount of metaphorically-used words (Steen et al. 2010a: 781).

With reference to personification, most metaphorical uses in news discourse are of the personification type. This is to give the impression of objectivity in communicating information by concealing human responsibility for decisions and actions (Krennmayr 2017: 169). This view is shared by Steen (2007: 103) who claims that linguistic expressions of personification, in news texts, as for example, "The White House says" can be employed to avoid assigning responsibility while "This essay argues", in academic texts, can be used to avoid the use of the personal pronouns *I* and *we*.

In academic educational discourse, *personification* is most importantly used in two sections: the introduction and conclusion of an essay or paper (Low 1999: 231). A brief overview of previous research into personification in educational contexts is relevant to the present research. Low (1999) examines how a number of assessors reacted to personification in university assignments. He reaches the conclusion that the majority of the teachers in the study reacted negatively to the expression *This essay thinks* or *believes* produced by a student, but marked *This essay argues* or *takes the view* as acceptable.

Moreover, Charteris-Black (2000) investigated the teaching of lexis to ESP learners in relation to theoretical work on metaphor. His findings reveal the use of animate metaphors to refer to economy and economic organisations. Along the same lines, Darian (2000) dealt with the use of figurative language in teaching science. In his view, an important role is played by personification and animation in science texts. As a result, these phenomena are pertinent to pedagogy. Finally, Cameron (2003: 246) dealt with animating metaphors of which personification is a subset. She conducted research into the use of verb metaphors in discourse, as for example "minerals *come out of* rocks." She found that: "The educational discourse data of different types showed widespread use of verb animating metaphors applied to processes and relational correspondences in a concept domain." She furthermore concludes, "Animating metaphors seem to help make formalized abstract concepts and explanatory theories more accessible through the activation of actions and relations in more concrete and familiar vehicle domains."

4. METHODOLOGY OF DATA COLLECTION AND ANALYSIS

In this section, I first describe the corpus on which the research was conducted, along with a sample of text, which includes metaphorically used words indicating personification. Then, I present the method used in collecting the tokens of metaphorical linguistic expressions. Finally, I report on the quantification method adopted in the analysis of the findings.

The account of metaphors in students' academic writing was based on a corpus of 144,901 words. To build up the discourse sample, metaphorical linguistic expressions displaying personification were collected from master's dissertations produced by six major students in 2018, 2019, and 2021 at the Department of English, Mouloud Mammeri University in Tizi-Ouzou, Algeria.[4] The choice of these six dissertations was prompted by the fact that the present corpus-based study is of a small-scale nature. The procedure used to collect the tokens of metaphorical linguistic expressions was a simple search on the computer using a set of keywords: discuss, show, display, provide, highlight, explain, confirm, investigate, explore, involve, shed light, present, describe, deal, review, reveal, refer, indicate, introduce, allow, and represent. The literal uses were then separated from the metaphorical expressions. MIP was the method used in the identification of these metaphors. To compare the contextual meaning of the lexical units with their basic meaning, I referred to *Cambridge Online Dictionary*.[5] For instance, the basic meaning of the word "discuss" in the metaphorical expression: "This chapter discusses the results of the investigation" was examined by referring to this dictionary. This has led to the classification of this metaphorical linguistic expression within the CHAPTER IS A PERSON metaphor.

To analyse the data, I relied on a quantification method. The quantitative analysis was conducted on a corpus comprising 907 metaphorical linguistic expressions identified, exhibiting personification (see Table 1 in the section on results). The total number of words that made up the corpus was 144,901. The results of the analysis were quantified in numbers and percentages and were displayed in the form of a table. The percentages were calculated by means of the percentage formula $z\% = x*100/y$. The symbol x represents the frequency of occurrence of identified metaphors, and y stands for the total number of identified metaphorically used words in the corpus; i.e., 907.

The identified metaphors were calculated with respect to their types. That is, ontological metaphors based on personification were isolated from other

---

[4] See Arab (2021), Abboud (2021), Hadjam (2021), Hadj Mohand (2019), Mebarki (2019), Boudiaf (2018).

[5] *Cambridge Online Dictionary* is available at https://dictionary.cambridge.org/.

types like journey, money, or spatial metaphors. In addition, verbs constituted the metaphorically used lexical items that were retained for analysis. To reveal the salience of personification in the EFL learners' academic writing, the three outstanding metaphorical expressions were displayed in a descending order and were analysed with reference to the conceptual metaphors they involved, along with the metonymy appearing in them.

5. RESULTS AND DISCUSSION

The results of the present investigation are supplied in Table 1. It reveals the rates of personification used in the six master's dissertations labelled: A, B, C, D, E, and F. The 21 metaphorically used lexical items, which were searched for in the corpus are arranged randomly on a column. The frequency of use of each item, e.g. "discuss", has been calculated within the six dissertations separately in order to compare the rates. Then, a total was computed and a percentage was determined following the methodology described in the previous section. This percentage revealed the frequency of use of each metaphorically used item in the whole corpus. The three outstanding metaphorically used verbs are classified following their rates. The discussion of these results is conducted with respect to the frequencies of metaphor use, and the variation in the rates of each prominent and less prominent metaphorically used verbs. An explanation of the causes for the personification use is also debated. The discussion is based on the results displayed in Table 1 hereafter.

Table 1. Frequencies of metaphorically used verbs in personification

Verbs	Number of tokens of linguistic expressions per dissertation (A, B, C, D, E, F)						Totals	Percentages
Discuss	10	7	7	1	13	6	44	4,85
Show	10	28	21	21	21	16	117	12,89
Display	5	2	0	1	2	1	11	1,21
Provide	14	17	27	7	21	9	95	10,47
Highlight	5	0	1	3	2	4	15	1,65
Explain	2	3	0	0	7	11	23	2,53
Confirm	6	2	0	9	4	4	25	2,75
Investigate	3	7	4	7	1	2	24	2,64
Explore	3	5	0	2	2	1	13	1,43
Involve	9	18	18	10	9	6	70	7,71
Shed light	3	1	2	1	1	1	9	0,99

Present	8	12	16	2	9	8	55	6,06
Describe	4	7	2	8	5	4	30	3,30
Deal	17	4	17	8	8	6	60	6,61
Review	2	3	3	5	3	4	20	2,20
Reveal	15	13	16	20	16	12	92	10,14
Refer	20	21	30	8	9	9	97	10,69
Indicate	1	2	2	1	3	3	12	1,32
Introduce	1	4	1	1	0	2	9	0,99
Allow	13	12	19	2	2	7	55	6,06
Represent	1	2	7	6	12	3	31	3,41
Total							907	100

The analysis of Table 1 indicates that the three most prominent metaphorically used verbs in the corpus come in the following order:

(1) Show (2) Refer (3) Provide

Show is ranked in the first position with a rate of 117 occurrences, making 12.89% of all the identified metaphors. A variety of metaphorical expressions involving the verb *show* was produced in the six dissertations as an instantiation of the conceptual metaphor RESULTS ARE PERSONS and the related metonymy results stand for persons. This is illustrated in examples (1), (2), and (3) hereafter:

(1) The findings show that the techniques vary from one teacher to another.

(2) The pre-test results show that only four (4) participants of each group used verbal fillers.

(3) The results of the questionnaire show that many MS4 learners support the fact that there is a difference in the inclusion of intercultural contents in the two textbooks under study.

The verb *refer* comes in the second position. It occurred 97 times in the corpus, with a percentage corresponding to 10.69% of all the identified metaphors. This verb was involved in the linguistic manifestation of the conceptual metaphor CONCEPTS ARE PEOPLE, which is connected to the CONCEPTS STAND FOR PEOPLE metonymy, as shown in examples (4), (5), and (6) below:

(1) This term refers to the individual's ability to understand and perform a given task appropriately and effectively.

(2) Formulaic Competence refers to those words, expressions, collocations, idioms, phrasal verbs and fixed phrases used to facilitate communication.

(3) High culture refers to all the artistic artefacts such as painting, classical music, and literature.

The verb *provide* is found to be less used than *refer* and *show,* thus occupied the third position in terms of frequency with the rate 95 (=10.47%). This verb

was used in metaphorical linguistic expressions of the conceptual metaphor the CHAPTER IS A PERSON and the metonymy the CHAPTER STANDS FOR A PERSON, as revealed in examples (7), (8), and (9):

   (1) This chapter provides a detailed description of the sample.
   (2) This chapter provides some definitions of the term communicative competence.
   (3) The General conclusion provides an overall summary of the main points that are tackled in the research.

The least frequently used verbs in the corpus are, on the one hand, *shed light* and *introduce* with an equal rate of 9 (= 0.99%) for each, and, on the other hand, *display* and *indicate* with frequencies equating 11 (= 1.21%) and 12 (=1.32%) respectively. This indicates that the metaphorically used verbs in personification manifested at variable rates throughout the corpus.

The aforementioned analysis has revealed that personification was largely used in the six dissertations wherein metaphorical verbs have been used at variable frequency rates. The 21 metaphorically used verbs, which were investigated in the corpus lead to the identification of 907 instances of personification in a corpus including 144,901 words. This observed fact demonstrates the significant part played by personification in advanced learners' academic writing.

However, a question arises here. That is, the reason why this phenomenon is overwhelmingly present in their written discourse. One reasonable answer would be that the authors of the dissertations might have resorted to personification as a strategy to produce some greater impact, as it renders a non-human entity more vivid and lively through human attributes. Readers can easily understand the human traits and in turn, the non-living entities are described in a prominent and remarkable way that grabs the readers' attention. The use of this device enables the object, action, or concept that is personified, to connect with the readers, as it adds a deeper meaning to the piece of writing that makes them comprehend and remember the text.

As argued earlier, "personification makes use of one of the best source domains we have-ourselves. In personifying nonhumans as humans, we can begin to understand them a little better" (Kövecses 2002: 35). Students making an extensive use of metaphorical verbs in personifications, not only conceal their actions and decisions as the producers of the dissertations, but also employ the source domain HUMAN (i.e., THEMSELVES) to reach a better interpretation of the meaning conveyed through the use of non-human elements within the target domain (CHAPTER, SECTION, FINDINGS, DIAGRAM, or TABLE). In the same line of thought, Cameron (2003) claims the usefulness of animating metaphors in making theoretical abstract notions accessible to readers, and this via concrete source domain concepts.

Further reasons may have prompted the use of personification as well. Probably, the students were required to use personification as a practical tool for achieving objectivity and modesty in academic scientific research. This is likely to keep distance *vis à vis* the text they produced. As Low (1999: 223) argues, "the production of expressions like **This essay thinks** is not so much the creation of animacy, but rather part of a strategy for avoiding or reducing subjectivity". That is, metonymy is employed as a technique wherein the person writing the dissertation is substituted by the dissertation or any part of it in order to create a kind of distance between himself/herself and the text. This explains well the practices of students at the Department of English in Mouloud Mammeri University. They are very often discouraged from using first personal pronouns to guarantee this distance and attain objectivity in their academic writings. This is similar to what is claimed by Steen. Namely, such expressions as *This essay argues* "can be used to avoid using the personal pronouns I and we" (2007: 103).

Educational practitioners and teachers need to show awareness of the overwhelming presence of personification in students' dissertations. They have to consider its pertinence within EFL contexts and make clear decisions on how to cope with it. Personification is a central aspect featuring scientific texts produced by EFL students, and as advocated by Darian (2008), it should be given an important position in teaching science.

6. CONCLUSION

The main issue raised in this research was whether personification metaphors are used in EFL students' academic writing and to what extent. The corpus under examination included six master's dissertations. Three objectives were set at the beginning of the present paper: (1) show that personification importantly featured students' writing, (2) reveal that the metaphorical verbs within personification were used at variable rates, and (3) clarify the reasons behind the overwhelming metaphoric use of action verbs within personification metaphor in the selected corpus.

The findings displayed in Table 1 reveal that the metaphorical verbs searched for in the corpus have been used extensively, each at variable frequency rates. This is to say that personification importantly featured students' writing. This confirms the claim made at the outset of this paper; i.e., a significant number of personification metaphors is produced in the written discourse in question.

The discussion of the findings has attempted to provide some plausible explanations for the causes that have led to the overwhelming use of personification in the six dissertations. One likely justification was that personification

has been used as a strategy to produce some greater impact on readers. Their use of personification was also explained in terms of their inclination to make their text more comprehensible to readers through the attribution of human qualities to non-human elements. Another reason was that the students have resorted to personification to conceal themselves; i.e., the text they produced or part of it substituted the authors to avoid the use of first person pronouns *I* and *we*, and attain objectivity.

This research has a limited scope as it concerned only some advanced EFL students' production of personification metaphors in their dissertations. This scope can be enlarged to include further issues relating to metaphors used in EFL learners' writings and teachers' reaction to this natural-occurring phenomenon. Investigations can be conducted in EFL educational settings to elucidate such questions as:

- students' awareness of metaphor use in their own written productions,
- learners' attention to metaphor manifestations in academic discourse,
- learners' understanding of what metaphors are and how they can be used efficiently in written discourse,
- teachers' familiarisation with personification metaphors in academic discourse,
- teachers' training to cope with personification metaphors to help learners improve their academic writing.

It must be pointed out that the conclusive statements made in this paper are constrained to the present research, and thus are not generalizable. In addition, the number of dissertations that have been analysed is very restricted. Besides, only 21 metaphorically used verbs were searched in the corpus. A greater number of dissertations and metaphorical verbs would have brought far-reaching data that would have been fruitfully exploited. It can be hoped, nonetheless, that this small-scale corpus research has contributed with some useful information to the existing literature on personification in academic and scientific texts, and to the field of metaphor in educational contexts within a cognitive linguistic perspective that would be of interest to students, researchers, and educational practitioners.

REFERENCES

Abboud, L. (2021). *EFL students' identification and memorization of metaphorical vocabulary at Mouloud Mammeri University* (Unpublished master's thesis). Tizi-Ouzou: Mouloud Mammeri University, Tizi-Ouzou.

Arab, L. (2021). *EFL learners' attitude towards English idioms and idiom learning strategies at Mouloud Mammeri University of Tizi-Ouzou* (Unpublished master's thesis). Tizi-Ouzou: Mouloud Mammeri University, Tizi-Ouzou.

Barcelona, A. (2003). *Metaphor and metonymy at the crossroads: A cognitive perspective*. Berlin et al.: Mouton de Gruyter.

Belkhir, S. (2020). Does MIP promote EFL learners' cognitive ability to identify metaphors in written discourse? In: S. Belkhir (ed.), *Cognition and language learning* (pp. 43–62). Newcastle upon Tyne: Cambridge Scholars Publishing.

Boudiaf, H. (2018). *Enhancing students' development of the oral communicative competence through YouTube's EFL teaching videos: A case study* (unpublished master's thesis). Tizi-Ouzou: Mouloud Mammeri University, Tizi-Ouzou.

Cameron, L. (1999). Identifying and describing metaphor in spoken discourse data. In: L. Cameron / G. Low (eds.), *Researching and applying metaphor* (pp. 105–132). Cambridge: Cambridge University Press.

Cameron, L. (2003). *Metaphor in educational discourse*. London et al.: Continuum.

Cameron, L. / Low, G. (eds.) (1999). *Researching and applying metaphor*. Cambridge: Cambridge University Press.

Charteris-Black, J. (2000). Metaphor and vocabulary teaching in ESP economics. *English for Specific Purposes, 19* (2), 149–165.

Charteris-Black, J. / Musolff, A. (2003). 'Battered hero' or 'Innocent victim'? A comparative study of metaphors for euro trading in British and German financial reporting. *English for Specific Purposes, 22* (2), 153–176.

Darian, S. (2000). The role of figurative language in introductory science texts. *International Journal of Applied Linguistics, 10* (2), 163–186.

Deignan, A. (2005). *Metaphor and corpus linguistics*. Amsterdam et al.: John Benjamins.

Eubanks, P. (2011). *Metaphor and writing. Figurative thought in the discourse of written communication*. Cambridge: Cambridge University Press.

Gibbs, R.W. (1994). *The poetics of mind: Figurative thought, language and understanding*. Cambridge: Cambridge University Press.

Gibbs, R.W. (1996). Why many concepts are metaphorical. *Cognition, 61*, 309–319.

Gibbs, R.W. (1999). Researching metaphor. In: L. Cameron / G. Low (eds.), *Researching and applying metaphor* (pp. 29–47). Cambridge: Cambridge University Press.

Giles, T.D. (2008). *Motives for metaphor in scientific and technical communication*. Amityville: Baywood.

Goatly, A. (1997). *The language of metaphors*. London: Routledge.

Goschler, J. (2007). Is this a metaphor? On the difficult task of identifying metaphors in scientific discourse. *Cultura, Lenguaje y Representación / Culture, Language and Representation, 5*, 27–41.

Hadj Mohand, A. (2019). *The role of implicit and explicit instruction in enhancing students' pragmatic competence: The case of first year students in the Department of English at Mouloud Mammeri University of Tizi-Ouzou* (unpublished master's thesis). Tizi-Ouzou: Mouloud Mammeri University, Tizi-Ouzou.

Hadjam, K.F. (2021). *Analyzing code switching in Algerian multilingual rap song lyrics* (unpublished master's thesis). Tizi-Ouzou: Mouloud Mammeri University, Tizi-Ouzou.

Kövecses, Z. (2002). *Metaphor: A practical introduction*. Oxford: Oxford University Press.

Krennmayr, T. (2017). Metaphor and parts-of-speech. In: E. Semino / Z. Demjén (eds.), *The Routledge handbook of metaphor and language* (pp. 165–177). London et al.: Routledge.

Lakoff, G. (1993). The contemporary theory of metaphor. In: A. Ortony (ed.), *Metaphor and thought* (2nd ed.) (pp. 202–251). Cambridge: Cambridge University Press.

Lakoff, G. / Johnson, M. (1980). *Metaphors we live by.* Chicago: University of Chicago Press.

Littlemore, J. / Krennmayr, T. / Turner, J. / Turner, S. (2014). An investigation into metaphor use at different levels of second language writing. *Applied Linguistics*, *35* (2), 117–144.

Low, G. (1999). "This paper thinks…" Investigating the acceptability of the metaphor AN ESSAY IS A PERSON. In: L. Cameron / G. Low (eds.), *Researching and applying metaphor* (pp. 221–248). Cambridge: Cambridge University Press.

Low, G. (2008a). Metaphor and education. In: R. Gibbs (ed.), *The Cambridge handbook of metaphor and thought* (pp. 212–231). Cambridge: Cambridge University Press.

Low, G. (2008b). Metaphor and positioning in academic book reviews. In: M. Zanotto / L. Cameron / M. Cavalcanti (eds.), *Confronting metaphor in use* (pp. 79–100). Amsterdam: John Benjamins.

Mebarki, K. (2019). *A comparative study of fourth grade middle school English and French textbooks from an intercultural standpoint: The case of 'On the Move' and 'Mon Livre de Français'* (unpublished master's thesis). Tizi-Ouzou: Mouloud Mammeri University, Tizi-Ouzou.

Musolff, A. / Zinken, J. (eds.) (2009). *Metaphor and discourse.* Basingstoke et al.: Palgrave Macmillan.

Pragglejaz Group (2007). MIP: A method for identifying metaphorically used words in discourse. *Metaphor and Symbol*, 22 (1), 1–39.

Pulaczewska, H. (1999). *Aspects of metaphor in physics*. Tübingen: Max Niemeyer.

Semino, E. (2008). *Metaphor in discourse.* Cambridge: Cambridge University Press.

Steen, G.J. (1999). Metaphor and discourse. In: L. Cameron / G. Low (eds.), *Researching and applying metaphor* (pp. 81–104). Cambridge: Cambridge University Press.

Steen, G.J. (2007). *Finding metaphor in grammar and usage*. Amsterdam et al.: John Benjamins.

Steen, G.J. / Dorst, A.G. / Herrmann Berenike, J. / Kaal, A.A. / Krennmayr, T. / Pasma, T. (2010a). *A method for linguistic metaphor identification: From MIP to MIPVU*. Amsterdam / Philadelphia: John Benjamins.

Steen, G.J. / Dorst, A.G. / Herrmann Berenike, J. / Kaal, A.A. / Krennmayr, T. (2010b). Metaphor in usage. *Cognitive Linguistics*, 21 (4), 765–796.

SADIA BELKHIR
Mouloud Mammeri University of Tizi-Ouzou
sadia.belkhir@ummto.dz
ORCID: 0000-0003-1753-1468