An investigation into metaphor use in learner language: the interaction of word class and L1

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DOI: http://dx.doi.org/10.26418/jeltim.v3i1.43006

Abstract

This study aims at investigating the use of metaphor in learner language with a focus on interaction of word class and L1. The findings of previous studies on metaphor use in learner language point to the fact that metaphor is found in all word classes in learners’ written production, but that some word classes clearly favor metaphorical usage more than others. In similar fashion, the present investigation looked into the interaction between metaphor, word class, and L1, although within a single register and text type, i.e. argumentative essays produced by 20 novice writers. The model underlying the current study was Conceptual Metaphor Theory by Lakoff and Johnson (1980). Identification of metaphors was carried out based on MIP (Metaphor Identification Procedure) (Pragglejaz Group, 2007), a reliable and explicit tool for marking and identifying metaphorically used words. The hypothesis, based on previous research establishing this finding, was that prepositions top the list in this regard, being by far the most metaphorical word class. The cognitive predispositions made available by the student’s L1 are also of importance in this equation. Similar research would advance our understanding of the role of metaphor teaching, and in what form and to what degree it should be explicitly carried out.

Keywords: Metaphor Use; Learner Language; Word Class; L1

How to cite this paper: Hadidi, Y. & Behshad, N. (2021). An investigation into metaphor use in learner language: the interaction of word class and L1. Journal of English Language Teaching Innovations and Materials (Jeltim), 3(1), 15-24. DOI: http://dx.doi.org/10.26418/jeltim.v3i1.43006
The study of metaphor dates back to the ancient times of Aristotle. He looked at metaphor from the perspective of rhetoric, believing that metaphor consists in giving the thing a name that belongs to something else; the transference being either from genus to species, or from species to genus, or from species to species, or on grounds of analogy (Barnes, 2014). The function of metaphors is twofold: providing new ways of conceptualizing familiar things, and providing familiar ways of conceptualizing unfamiliar things (Ortony et al, 1988).

Nowadays, with the application of metaphor to second language teaching and learning, more and more researchers are becoming interested in the value of metaphor in pedagogical contexts (Kövecses, 2001; Dirven, 2001; Piquer Piritz, 2008; Tyler, 2008; MacArthur, 2010), given that metaphor is ubiquitous both in thought and language (Deignan, 2005; MacArthur, 2010; Littlemore et al., 2013). A number of studies have shown the benefits of the use of metaphor in language learning, in, for instance, metaphor helping develop reading skills (Boers, 2000; Holme, 2004; Carter & McCarthy, 2014), and facilitating vocabulary learning (Veliz, 2017). However, much of this research has been concerned with how to help learners understand metaphors in the target language, rather than how to produce metaphors. Some scholars have emphasized the importance of improving the metaphoric competence of students of English as a foreign language (Low, 1988; Ponterotto, 1994; Littlemore & Low, 2006; MacArthur, 2010; Littlemore et al., 2013). Steen et al (2011) have demonstrated that metaphor use varies according to word class and register; in addition, Krennmayr (2011) investigated various sub-registers of the news (hard news, sciences, and soft news), uncovering a significant three-way interaction as well. Identifying the relationship between metaphors, word class, and L1 in argumentative essays of novice writers/learners will contribute to the ongoing debate respecting these topics.

Metaphor has been an important topic within Cognitive Linguistics since the field was born in the 1970s (Lakoff & Johnson, 1980). In the cognitive linguistic view, metaphor is defined as understanding one thing, one concept, in terms of another: understanding one conceptual domain in terms of another. In other words, when we want to explain one abstract concept in terms of a concrete one, we would be left with little choice but to (think in and) resort to conceptual metaphors. One famous example of conceptual metaphors is LIFE IS A JOURNEY. We understand “LIFE” (the abstract concept) through the concrete concept “JOURNEY”. Conceptual metaphors have two domains: one target domain and one source domain. The target domain is the domain that we try to understand through the use of the source domain. Thus, in the abovementioned example, LIFE is the target domain and JOURNEY is the source domain. George Lakoff’s dominant role and major contributions are considered as a historical consequence of metaphor studies in this field. The term metaphor refers to a
pattern of conceptual association, a template for thought, rather than to an individual metaphoric usage or a linguistic phenomenon. The underlying pattern of thought which involves associations at the conceptual level and is then realized by linguistic expressions is of crucial importance here. Metaphors reside in both language and thought, meaning that we not only speak with metaphors but also understand the world through them (Lakoff & Johnson, 1980).

A lot of research has been done to analyze L1 influence in the process of second language acquisition. Too little attention has, however, been paid to L1 influence on the use of figurative language. The results of studies in the field of idioms have indicated that L1 knowledge helps understand identical and similar idioms, although it interferes in comprehension of completely different idioms and in the production of idioms in tests (Irujo, 1986; Charteris-Black, 2002; Chen & Lai, 2013). As to the studies that focus on metaphor in particular, the results have shown that L1 influence is evident in the use of metaphors in written production, as L1 metaphors are calqued in the L2 (MacArthur, 2010; Erel et al, 2015).

The conceptual metaphor examined in this section is the TIME IS MONEY metaphor which is used in Persian. Here, the source domain ‘money’ is used to conceptualize the target domain ‘time’. Below is a set of examples representing this metaphor together with equivalents in English. In these examples, the key words involved in the mapping between the two conceptual domains are underlined. In this case, one key word is a word of time and the other one is mostly a verb originally used in the source domain, which is responsible for the mapping.

a. vaqt-et ro hadar nade/talaf nakon.
   time-GEN.2SG DO NEG.IMP.waste.2SG
   “Don’t waste your time.”

b. lotfan vaqt-e bištari be man bede.
   please time-EZ more to me IMP.give.2SG
   “Please give me a little more time.”

c. vaqt-et ro četor sarf mikoni?
   time-GEN.2SG DO how IND.spend.2SG
   “How do you spend your time?”

d. vaqt-e ziādi barāye in prože hazine kardam.
   time-EZ much for this project invest.PST.1SG
   “I invested a lot of time in this project.”

e. terāfik-e emruz sobh do sá’at barā-m hazine dāšt.
   traffic-EZ today morning two hour for-me cost.PST.3SG
   “The traffic this morning cost me two hours.”
As can be seen in the above examples, metaphorical expressions vary across languages and L1 has an effect on the distribution of metaphor across word classes.

One way of creating a portrait of the language pattern in texts is through the creation of ‘word category profiles’, by which the “unique matrix of frequencies of various linguistic forms” (Krzeszowski, 1990) is drawn up. Granger and Rayson (1998) maintain that such profiles offer a quick means of developing a reliable impression of the interlanguage of learner populations. Goatly (2011: 80) maintains that “[t]he most obvious way of classifying metaphors is to categorize them according to the word-class to which the V-term [that is, Vehicle-term] belongs.”

It is against this brief background that the current study set out to provide more empirical evidence concerning the relationship between metaphor, word class, and L1, within a single register and text type, i.e. argumentative essays produced by novice writers. In this spirit, this study seeks to see how ‘metaphorical’ individual word classes in learner texts are, and whether or not L1 plays any role in the distribution of metaphor across word classes.

METHOD

The materials used in this study include argumentative essays produced by 20 novice EFL students which had been selected randomly. The author examined argumentative essays in order to narrow down the research into one type of essay. The students aren’t provided with the same topic in order to investigate wider variety of metaphors. The students were supposed to write a 500 word essay which is about 3 to 4 paragraphs. The model underlying the current study was Conceptual Metaphor Theory by Lakoff and Johnson (1980). Identification of metaphors was carried out based on MIP (Metaphor Identification Procedure) (Pragglejaz Group, 2007), a reliable and explicit tool for marking and identifying metaphorically used words. Use was also made of the CLAWS5 tagger, a word-tagging system which automatically assigns part-of-speech tags to the words in a given text indicating their word-class membership.

The text of the English essays along with its Persian translation was analyzed with the aim of identifying the relationship between metaphor, word class, and L1. The steps we went through subscribed to MIP, short for Metaphor Identification Procedure (Pragglejaz Group, 2007), and involved sequential stages beginning with first determining the lexical units in the argumentative essays. The procedure then recommends establishing the unit’s meaning in the
context, and determining if it has a basic contemporary meaning. If it has a basic current meaning in other contexts than the given one, the analyst would have to decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it. If yes, then he/she can mark it as metaphorical.

**FINDINGS**

All individual word elements in the essays were annotated by the CLAWS Part of Speech tagger with one of 57 tags (Nacey, 2013). These tags fall into one of eight major word classes: adjectives (Adj), adverbs (Adv), conjunctions (Conj), determiners (Det), nouns (Noun), prepositions (Prep), verbs (Verb), and a ‘remainder’ category (Rem). This last category is a grab bag of items that do not readily belong to one of the standard word classes. Looking at these results (See Table 1), we can note that prepositions top the list in this regard, being by far the most metaphorical word class.

Table 1. Distribution of metaphor within word classes, divided by L1

| Word Class | English | % of total | Persian | % of total |
|------------|---------|------------|---------|------------|
| Adjective  | 35      | 14.71      | 21      | 9.45       |
| Adverb     | 21      | 8.82       | 15      | 6.75       |
| Conjunction| 6       | 2.52       | 2       | 0.90       |
| Determiner | 15      | 6.30       | 11      | 4.95       |
| Noun       | 24      | 10.07      | 37      | 16.66      |
| Preposition| 87      | 36.55      | 91      | 40.99      |
| Verb       | 42      | 17.65      | 34      | 15.31      |
| Remainder  | 9       | 3.36       | 11      | 4.95       |
| Total      | 239     | 100        | 222     | 100        |

Figure 1. Frequencies of word classes
Table 2. Specific instances for each word class illustrated by the italicized terms in the sentences

| No | Word Classes | English | Persian |
|----|--------------|---------|---------|
| 1  | Adjective    | *a widespread* opinion. | *bavar rayej* |
| 2  | Noun         | Economical *damage.* | *Zarbeye eghtesadi.* |
| 3  | Preposition  | *In our modern time...* | *Dar asr emroziye ma...* |
| 4  | Verb         | Crime doesn’t *pay* | Jorm avagheb badi baraye mojrem darad. |
| 5  | Adverb       | They have waited *long enough...* | Anha be andazeye kafi montazer mande and... |
| 6  | Determiner   | To defend *this point of view...* | Baraye defaa azin aghideh |
| 7  | Conjunction  | *In such a materialistic society, where they want...* | Dar jameeye madigerayi ke anha ghasd darand... |
| 8  | Remainder    | ...the courage to go for your *next* dream. | ..shojaat talash kardan baraye royayi digar |

DISCUSSION

Based on the results, it turned out that the word class with by far the highest percentage in both English texts and Persian texts were prepositions. The reason is that prepositions abound in metaphorical language. Although the figure for metaphor-related prepositions included the identified metaphorical uses of ‘of’ and ‘for’, should one disregard these two prepositions for possible metaphorical use for more reliable findings (following Steen et al, 2011), the proportion of prepositions constituting one word class in themselves still remains the highest of all the eight-word classes, with 36.55 in argumentative essays. After prepositions, the open word classes exhibited the highest relative proportions of metaphor, because they are used for the purpose of conveying the meaning. Verbs were the word class exhibiting the second-highest frequency (17.65%) followed by adjectives (14.71%) as the third most metaphorical word class; nouns (10.07%) and adverbs (8.82) emerged bringing up the rear. This pattern of relative overuse of metaphor-related verbs and prepositions found in this study is in line with the results in all four registers by Steen et al. (2010b: 202–208). These two-word classes thus ‘prefer’ metaphor more than the others do, in learner texts.

Also a closer contextualized look at the nouns and verbs identified as misused linguistic metaphors, as pointed out by Jarvis & Pavlenko (2008), reveals that differences in ways of thinking about and framing particular aspects of the world around us. They argued that conceptualization differences, might result in L2 users’ reliance on the frames favored in the source language when using the target language, which in this case were Persian and English, respectively; for
instance, one of the novice writers mentioned “...this loses of time...”. As this example shows, the wrong choice of the noun might be explained by factors such as L1 transfer. In Persian, time is seen as gold, as in “Vaght tala ast” (time is gold). Gold is a valuable object that can be lost. In contrast, in English, time is conceptualized in terms of money which can be wasted, as in “Don’t waste your time”. The Persian speakers warn against losing time as opposed to wasting it, because for them, time is gold, not money. This example point to the fact that language and cultural differences has an effect on the distribution of metaphor across word classes.

The claim that metaphors reflect underlying conceptual representations is the idea that metaphors in natural language mirror how people think. A related, but distinct, claim is that the metaphors we encounter actually shape how we reason about the world, a possibility George Lakoff has written about in his popular work on the language of politics (Lakoff, 2014, 2008). This is more of a process-oriented view of metaphor that explores how people use metaphors to learn about novel concepts, make decisions about complicated issues, and influence others (Thibodeau, Hendricks, & Boroditsky, 2017).

CONCLUSION

This study provides preliminary insights into the relationship between metaphor, L1 and word class in argumentative essays written by L2 learners. By analyzing the essays, we note that prepositions top the list in this regard, being by far the most metaphorical word class. This finding might come as a surprise to those new to the idea that prepositions may be metaphorically used, but this behavior of prepositions – at least with respect to overall proportion of metaphor – supports the hypotheses put forward by cognitive linguists (following Nacey, 2013), to the effect that abstract relations are frequently expressed through mappings from the source domain of space (e.g., ’on Saturday’, ’half past six’, etc.).

Steen et al. (2010b: 201–208) also found that prepositions are metaphorically used more frequently than expected in all registers. The remaining closed classes – determiners, conjunctions, and the ‘remainder’ category – are the least metaphorical, presumably reflecting their primary grammatical function. Kaal (2012:130–131) noted that only the register of conversation exhibits a relative overuse of metaphorical determiners, a feature that might thus be typical of spoken discourse in particular. In this respect, the texts written by L2 learners follow the same patterns as academic prose, news and fiction rather than spoken discourse (Nacey, 2013). The results of the analysis may improve the quality of metaphor-based research across different contexts. Metaphors are very useful in teaching and learning because they use already held knowledge as a scaffold upon which to build new knowledge or to illustrate
some property of the new concept to be learned. The metaphors use knowledge that the learner already has of the surrounding world to illustrate some property of the unfamiliar topic. Thus learning takes place by building on that previously held knowledge. Similar research would advance our understanding of the role of metaphor teaching, and in what form and to what degree it should be explicitly carried out in other context and across different cultures.

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