The Effect of Conceptual Metaphor Awareness on Learning Phrasal Verbs by Iranian Intermediate EFL Learners

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Abstract

The ability to comprehend and produce phrasal verbs, as lexical chunks or groups of words which are commonly found together, is an important part of language learning. This study investigates the effect of ‘conceptual metaphor awareness’, as a newly developed technique in Cognitive Linguistics, on learning phrasal verbs by Iranian intermediate EFL learners. To meet this objective, two intact homogeneous (in terms of their knowledge of English phrasal verbs) groups of Iranian intermediate EFL learners were included. Both groups were given a pretest on phrasal verbs designed by the researchers. Then, in a 5-week instructional period the phrasal verbs were presented with traditional method of explanation and sentence examples to the control group, without providing any explicit explanation about the metaphorical nature of the meaning of phrasal verbs. In the experimental group, the phrasal verbs were presented with an explicit emphasis on the metaphorical nature of the meanings of phrasal verbs contributed by their particles. Two weeks after the last instructional session, a post test on target phrasal verbs (designed by the researchers) was given to the subjects in order to compare the performance of the subjects in the two groups in terms of guessing the meanings of the phrasal verbs based on the instructional methods they had been provided with. The results showed that the experimental group had significantly outperformed the control group; accordingly the outcome of this study yielded positive results on teaching phrasal verbs with cognitively oriented methods like conceptual metaphor awareness.

Keywords: Cognitive Linguistics, Conceptual Metaphor, phrasal verbs, awareness

1. Introduction

One crucial factor in learning a language is the amount of vocabulary one possesses, as vocabulary forms the biggest part of the meaning of any language (McCarthy,
Phrasal verbs, a significant subcategory of the vocabulary of any language, do a great deal of meaning communication particularly in advanced language use. Meanwhile, learning these phrasal verbs has been a serious problem for non-native learners. Apparent sources of these difficulties are said to be “(1) lack of transparency in meaning” and “(2) […] the [semantically] random nature of the particles (Condon, 2008, p. 133)

Recent investigations in Cognitive Linguistics have shed light on the nature and formation of figurative language. In Cognitive Linguistics, the metaphorical mappings of the image-schemas to the conceptual domains makes the basis of abstract reasoning (Gallese & Lakoff, 2005; Johnson, 2005; Lakoff, 1980; Lakoff, 1990; Lakoff & Johnsen, 1980; Lakoff & Turner, 2009 to mention some); “[t]he best examples of knowledge are things that we know about basic-level objects, actions, and relations in the physical domain” (Lakoff, 1990, p. 297), then abstract conceptual structures arise from basic-level by metaphorical projection from the domain of the physical to abstract domains (Lakoff, 1990, p. 268). Lakoff & Johnson (1980) in their seminal work Metaphors We Live By, show convincingly that a great proportion of everyday language is figurative, that is, language use is full of conventionalized metaphoric and metonymic expressions.

This systematic conceptual motivation of human thought is most clearly characterized in the construction of language in general and phrasal verbs in particular. Besides communicating a particular message which is somehow a function of the meanings of their constituent parts, phrasal verbs are microcosms modeling the metaphorical nature of our abstract conceptual system underlying our thought and language. The abstract meaning communicated with phrasal verbs then is the result of a metaphorical mapping - maintained mainly by the spatial particle of a phrasal verb - between the literal meaning of their constituent parts as the concrete source domain and the target abstract domain of their figurative meaning.
This mainstream of investigations in Cognitive Linguistics has in turn found its way to the field of current language pedagogy, in general, and the area of vocabulary learning in particular (Beréndi, Csab, & Kövecses, 2008; Condon, 2008; Kövecses, 1996; Yasuda, 2010). The aforementioned line of reasoning makes up the theoretical framework of the present paper which aims at utilizing the insights from Cognitive Linguistics to investigate the effectiveness of a particular method of teaching phrasal verbs. The hypothesis is that giving the learners some awareness of the metaphorical nature of the meaning of the phrasal verbs in the target language might help with their understanding of these verbs and hence boost their learning ability.

1.1 Statement of the problem
Despite the alleged bad reputation of phrasal verbs in foreign language learning as to be vague and unsystematic in terms of their meaning and choice of constituents, in the theory of conceptual metaphor the abstract meaning of phrasal verbs is supposed to be based on some systematic metaphorical mapping between two domains; they seem to be good examples of mapping concrete domains to an abstract one. Accordingly, the problem with understanding the abstract meaning of these verbs could be because of the fact that “foreign learners do not understand this map so easily and clearly” (Brygida, 2003, p. 1).

This metaphorical nature of abstract concepts is not language specific but, as Lakoff (1990, p. 292), and Johnson (2005) argue, metaphorical mappings of the image-schemas to the conceptual domains is generally the basis of abstract reasoning; Iranian EFL learners would not be exceptions regarding this general nature of understanding and could well benefit from methods of language teaching developed based on the insights of the conceptual metaphor theory.

In the present paper, the objective is to investigate the plausible effect of giving awareness about the metaphorical mappings behind the abstract meanings of phrasal verbs on their learning by Iranian intermediate EFL learners. In other words, this research is trying to let out results with which the impact of conceptual metaphor awareness, as a cognitive method of teaching and learning vocabulary, could be measured.

1.2 Purpose of the study
The immediate goal of the researchers in this paper is to conduct a quasi-experimental investigation to see if conceptual metaphor awareness could be effective in improving phrasal verbs learning by Iranian intermediate EFL learners.
The results of such a quasi-experimental study might also level the ground for designing a more effective method for teaching phrasal verbs in particular and vocabulary in general.

1.3 Research Question

Q-1- Does conceptual metaphor awareness have any effect on learning phrasal verbs by Iranian intermediate EFL learners?

1.4 Research Null Hypothesis

H₀-1- Conceptual metaphor awareness does not have any significant effect on learning phrasal verbs by Iranian intermediate EFL learners.

2. Literature review

Phrasal verb is defined as “a verbal construction consisting of a verb plus an adverb particle… The meaning of some of these verbal constructions can be guessed from the meanings of their parts (e.g. cut down on). But the meaning of others is idiomatic (e.g. put down to)” (Richards & Schmidt, 2010, p. 436). One intriguing question is if there is any logic behind the idiomatic phrasal verb combinations or they are randomly constructed. According to Cognitive Linguistics (as discussed below) these combinations are motivated.

Metaphors used to be considered as dead clichés enjoying their menial lives conventionally in literature and poetry until Lakoff and Johnson (1980), through series of empirical investigations, showed that metaphor is a living phenomenon in our everyday life, our everyday thinking, and even in our actions.

The pioneer scholars of cognitive linguistics show a great interest in language-mind relation and deny the traditional way of explaining linguistic items using only the properties within language (Kemmer, 2009). Lakoff and Johnson (1980) suggest that metaphors facilitate thought and understanding by providing an experiential framework in which newly acquired abstract concepts may be accommodated. Hereby, the Lakoffian Conceptual Metaphor Theory dusts the soil off the face of metaphor; it polishes up metaphor’s role in every aspect of our ordinary life and reincarnates its soul into our thoughts, experiences, actions and perceptions.

Since then there has been an increasing interest in the study of metaphor, principally in the field of psychology and Cognitive Linguistics. Many researchers
Researchers also have tried to bring the Theory of Conceptual Metaphors to the field of language teaching, particularly teaching phrasal verbs to non-native learners, and have let out different results. Bailey (2003) suggests that metaphors could be seen as a means of understanding and explaining language use. He provides an overview of the Theory of Conceptual Metaphor and advocates its usefulness in language teaching and the study of literary texts. In his work, he considers the status of conceptual metaphor in current practice in English Language Teaching (ELT) and makes the case for explicit inclusion of metaphor in language teaching programs aimed at increasing proficiency in second language (L2).

Condon (2008) and Yasuda (2010) examine whether enhancing awareness about the orientational metaphors established by the particles in phrasal verbs facilitates the acquisition of phrasal verbs by different language learners in different places and situations. The results of their study offer support for the suggestion by Kövecses and Szabo (1996) that the cognitive semantic approach is successfully transferable when language learners try to tackle novel phrasal verbs.

Beréndi, Csab, & Kövecses (2008) report three experiments the overall results of which support the hypothesis that an enhanced awareness of conceptual metaphors and metonymies on the part of language learners can help them comprehend and remember figurative lexis.

Ganji (2011) compared Translation, Sentential Contextualization and Metaphorical Conceptualization approaches to teaching phrasal verbs to Iranian EFL learners. In his study, Ganji (2011) presents some 20 phrasal verbs to the subjects in 3 groups for two 45-minute sessions (10 phrasal verbs each session) and collected the data through immediate tests conducted 2 hours after each session and one final test given 5 weeks later. The results of the test on phrasal verbs showed that both Sentential Contextualization and Metaphorical Conceptualization approaches were by far better than traditional one and had significant difference.

There is one curious thing worth of being mentioned about Ganji (2011), which eventually makes the present study different from his. In the experimental group II, where the phrasal verbs are supposed to be presented based on the Theory of Conceptual Metaphors, only the orientational meanings of the particles are listed; while doing this could actually raise the subjects’ awareness about the source domain of the given metaphorical mappings, because the method comprises only a list of
related meanings without explaining the actual mapping between the concrete source domain and the abstract target domain, subjects seem to be still relying on their memory rather than doing an online analysis of the conceptual metaphor mapping; something reminiscent of the Lakoffian concept ‘dead metaphor’ (Lakoff, 1987).

In contrast, the methodology for teaching phrasal verbs to the experimental group devised on the basis of the Conceptual Metaphor Theory in the present study, engages more explanations about the mappings between the concrete source domain and the abstract target domain including some visualizations.

Although quite a number of Cognitive Linguistics oriented studies on teaching phrasal verbs already exist, it still seems that further empirical researches are needed to corroborate the applicability of Cognitive Linguistics approaches to language teaching, particularly applying the Theory of Conceptual Metaphors to teaching phrasal verbs; a road map which might end up as a well defined cognitive methodology for teaching vocabulary.

3. Methodology

3.1 Design
The research design of the present study is quasi-experimental, since the subjects were two intact classes chosen from a limited set of Iranian intermediate EFL learners available in the settings of the project, rather than through a random sampling.

3.2 Participants
The participants of this study were undergraduate university students majoring in English translation; since this study was to focus on the knowledge of the subjects about the English phrasal verbs not on their general English proficiency, the criteria for deciding about their general English proficiency level as to be ‘intermediate’ was the fact that the subject were chosen from sophomore and junior university students majoring in English translation. Two intact homogeneous (in terms of their knowledge of English phrasal verbs) groups of Iranian intermediate EFL university students were selected; there were 15 students in each group.
3.3 Instrumentation

3.3.1 Phrasal Verbs Sampling

As there are numerous phrasal verbs in English, the book *Essential Idioms in English, Phrasal Verbs and Collocations* (2004) was used as the corpus for sampling phrasal verbs. The book classifies the phrasal verbs in levels from beginner to intermediate and advanced; as the subjects of the present study were Intermediate EFL learners, only those phrasal verbs which were in the intermediate section of the book were selected. In order to narrow the number of phrasal verbs down to a manageable number to be presented in the instructional sessions, among all the phrasal verbs in the intermediate section the ones containing the first four most frequent particles of English, i.e. UP, DOWN, OUT and IN (Brygida, 2003), were chosen as the target samples. Eventually 30 phrasal verbs were chosen to be presented in 5 instructional sessions (6 phrasal verbs per session). These 30 phrasal verbs were also randomly assigned to two classes of 15 phrasal verbs to be used on the pretest and posttest separately so as for these two tests not to include the same test items. The division was done so as for both of the tests to include phrasal verbs with all the four particles mentioned above (appendices 1 and 2).

3.3.2 Homogeneity and Pretest

In order to investigate the homogeneity of the subjects in the two groups, a test on 15 English phrasal verbs designed by the researchers and validated by some relevant local experts was conducted (appendix 1). The researchers wanted to use the results of this test to determine how much the subjects were familiar with the chosen phrasal verbs, so that they could decide to: 1) leave out the overly easy target phrasal verbs, and 2) leave out the subjects who did not accord with the general homogeneity of the two groups. In order to do this, an independent samples t-test was run on the results of this test. In this phase, from the overall number of 30 students (15 in each control and experimental groups), 3 subjects from the control group and 1 from the experimental group were left out. Also, as long as the mean scores (over 20) of the this test (table 2) show (i.e. 10.8333 for the control group and 11.7857 for the experimental group) both groups were familiar with roughly 50% of the phrasal verbs; this means the study could be conducted without leaving any of the target phrasal verbs out. Based on the results obtained from the aforementioned test (to be discussed below), this same test was taken as the pretest of this study before the implementation of the treatment.
After the completion of the instruction course, i.e. the treatment, a post-test was given to compare the control and experimental groups’ overall performances in terms of learning the target phrasal verbs. The posttest included 15 different phrasal verbs from the ones given in the pretest, i.e. the second random class of 15 target phrasal verbs (appendix 2). Finally, the results of an independent samples t-test (to be discussed below) would show whether the conceptual metaphor awareness method could be more effective than the traditional method applied to the control group.

### 3.4 Teaching Methodology

In the traditional method of teaching phrasal verbs the focus is on how they work, i.e. what their meanings are and where they stand in a sentence, rather than on why they are structured that way, i.e. why this verb must go with this particle and not another (Nhu, 2009, p. 6). Accordingly, in the control group of the present study, the traditional method of teaching phrasal verbs comprised explaining the general meaning of each phrasal verb and providing several examples of their usages in the context of different sentences.

In contrast, in the methodology devised for teaching phrasal verbs to the subjects in the experimental group of the present study, the Theory of the Conceptual Metaphor was utilized to provide the subjects with explanations about the structure and the metaphorical mappings behind the abstract meanings of the phrasal verbs.

According to the Theory of Conceptual Metaphor, conceptual structure is organized by cross-domain mappings or correspondences between conceptual domains. Some of these mappings are due to pre-conceptual embodied experiences while others build on these experiences in order to form more complex conceptual structures. For instance, we can think and talk about the concept of ‘quantity’ in terms of the concept of ‘vertical elevation’, as in ‘the grades are going up!’; where ‘up’ in the phrasal verb ‘going up’ in this sentence relates not literally to physical height but to the quantity of the grades; through the perspective of the Conceptual Metaphor Theory, this is because the conceptual domain ‘growth in quantity’ is conventionally structured and therefore understood in terms of the conceptual domain ‘vertical elevation’ (Cummings, 2010, Evans, 2007).

Based on the aforementioned theoretical framework, the procedure undertaken in the present study for the experimental group was based on the orientational notions of particles following the verbs. For example in order to
elaborate on the different concepts which can be communicated by the particle UP, explanations about the concrete source domain was given to the subjects using configurations like the following:

Figure (1): a visual configuration of the concrete meanings contributed by the particle UP to the source domain of the metaphorical mappings in phrasal verbs

Adopted from Brygida (2003, p. 119)

The subjects in the experimental group were provided with visual configurations, like the one given in Figure (1), about the four chosen verb particles (Up, Down, In, and Out) along with decent explanations about the possible metaphorical mappings for each of the presented phrasal verbs containing these particles (see examples of brief explanations about the contribution of the particle ‘up’ to the metaphorical mappings in appendix 3). There were five 15-minute instructional sessions devoted to teaching the 30 phrasal verbs (6 phrasal verbs in each session) and 2 additional sessions for conducting the pretest and the post-test. The post test was given to the subject two weeks after the last instructional session.

4. Results

4.1 Homogeneity and Pretest

In order to show the homogeneity of the two groups prior to the study a pretest was run and the results of it are presented in Tables 1 and 2. Table (1) depicts the statistical description of the pretest.

<table>
<thead>
<tr>
<th>Table 1. The Statistical Description of the Pretest</th>
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<tbody>
<tr>
<td>Groups</td>
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<tr>
<td>--------</td>
</tr>
<tr>
<td>Students</td>
</tr>
<tr>
<td>Control</td>
</tr>
<tr>
<td>Experiment</td>
</tr>
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</table>
As mentioned earlier, the subjects whose performances showed a dramatic deviation from the general pattern of the groups were omitted (1 from the experimental and 3 from the control), hence the imbalance in the number of participants in the two groups. The descriptive statistics in Table (1) gives the mean, number of participants and the standard deviations of the two groups. The mean score of the experimental group ($M_e$) is 11.78 with a standard deviation ($SD_e$) of 3.80; for the control group $M_c$ is 10.83 with an $SD_c$ of 4.98. This shows that the mean score of the subjects in the experimental group is higher than that of the students in the control group; however, we needed to run an independent samples t-test to check whether this discrepancy is statistically significant or not. The results of the independent samples t-test are shown in table 2.

The other necessary thing to be investigated at the beginning of this research was making sure about the difficulty level of the target phrasal verbs, i.e. we needed to make sure that the target phrasal verbs were not too easy. As long as, the pretest for the two groups was graded from 0 - 20, the mean scores in Table (1) (10.8 for the control group and 11.7 for the experimental group) clearly shows that both groups were familiar with roughly 50% of the phrasal verbs which meant the study could be conducted.

Table 2. The Results of the Independent Samples T-test

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td>student</td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.586</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-.540</td>
</tr>
</tbody>
</table>

As shown in Table (2), there are two rows labeled "Equal variances assumed" and "Equal variance not assumed" respectively – this has to do with the equal variances assumption. Since the probability of the F value (Sig. = 0.58) is more than the alpha level which was set at 0.05, so the variances are not significantly different from one
Based on these statistics, the homogeneity of the variance assumption has been satisfied; therefore, the subjects in both experimental and control groups were considered to be in the same level; hence the homogeneity of the two groups is guaranteed.

Since the homogeneity test comprised the same phrasal verbs to be taught and tested in this study, in order to avoid the effect of repeated test items, having ensured the homogeneity of the two groups, this same test was taken as the pretest of this study before the implementation of the treatment and as it was mentioned earlier 15 different phrasal verbs from the overall 30 phrasal verbs were reserved to be given on the posttest.

4.2 Performances Comparison

After the completion of the treatment, a post-test comprising 15 different phrasal verbs from the pretest, was given to the two groups (appendix 2) and an independent samples t-test was run on the results to compare the performances of the two groups in terms of learning phrasal verbs. The descriptive statistics is given in Table (3):

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co</td>
<td>12</td>
<td>12.9167</td>
<td>4.23102</td>
<td>1.22139</td>
</tr>
<tr>
<td>Ex</td>
<td>14</td>
<td>16.7143</td>
<td>2.23361</td>
<td>.59696</td>
</tr>
</tbody>
</table>

As shown in Table (3), the obtained mean scores of both the experimental group (M= 16.71) and the control group (M= 12.96) show noticeable but different amounts of improvement. In Table (4) we will see if the expected P value is met or not.
Table 4. The Results of the Independent Samples T-Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>VAR00001</td>
<td>Equal variances assumed</td>
<td>2.868</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>2.793</td>
</tr>
</tbody>
</table>

As long as the P value of the final posttest is 0.007 (P < 0.05), based on the overall results of the final posttest the null hypothesis (H₀-1) introduced in the beginning of the present study is rejected. Accordingly, these results confirm that there is a significant difference between the performances of the experimental and the control groups in the way that the experimental group has outperformed the control group.

5. Discussion and Conclusion

The overall results of this study confirm the significant positive effect of the conceptual metaphor awareness on learning phrasal verbs. The findings of this study corroborate the claim that explicitly teaching of the cognitive structures which underlie idiomatic phrasal verbs and the orientational meanings of particles in the construction of them would enable the learners to grasp the figurative meaning of idioms more easily and they would retain these lexical items in their memory for a longer time.

The findings of this study, in line with the results reported by Yasuda (2010), support the idea that the Cognitive Linguistics Approach could successfully be applied to teaching phrasal verbs in particular and possibly learning linguistic
expressions in general. According to Yasuda, Kovecses, and Szabo ((1996) as cited in Yasuda (2010)) the Cognitive Linguistic approach could be considered to be an alternative strategy for teaching and learning idiomatic phrases. From the Cognitive Linguistics point of view, idiomatic phrases are decomposable and analyzable, and their meanings are not arbitrary, but are motivated by conceptual systems that exist in the minds of people. Now, in the present study the application of this approach to teaching phrasal verbs in Iranian EFL context corroborates the previous related findings in the field supporting the positive effect of using this method for teaching phrasal verbs.

One general viewpoint in Cognitive Linguistics is that all the abstract concepts we learn in our everyday life derive from basic level concrete perceptions (Gallese & Lakoff, 2005; Lakoff, 2008; Lakoff & Johnsen, 1980; etc.). All in all, besides supporting the idea of using methods developed in Cognitive Linguistics for teaching foreign languages, in accord with the general viewpoint of Cognitive Linguistics, the findings of our study corroborate the Lakoffian view and many other proponents of Cognitive Linguistics about the role of conceptual metaphor in reasoning and understanding in general.

One problem facing this study, and most of the previous related studies, was that, as long as conceptual metaphor awareness is a recently introduced method to the field of language teaching and learning, there are not many clearly configured methods of teaching based on this approach available in the literature. Hence, by supporting the theoretical basis of teaching methods developed by cognitive approaches to language teaching and providing practical details, studies like the present one might practically level the ground for building up clearly structured cognitive methods of language teaching which could plausibly be more effective than the traditional methods.

5.1 Suggestions for Further Researches
It goes without saying that, further related researches might shed more light on other aspects of applying the conceptual metaphor awareness method to teaching phrasal verbs; one which the present researchers suggest would be investigating possible manipulations to the levels of motivation and attitude while applying this method to see if it is the method per se or the motivational aspects of the method which make the performance of the learners improve.
References


