

Applying Cognitive Linguistics to Teaching Conceptual Basis of *UP* and *DOWN* in Phrasal Verbs

M. Reza Talebinejad¹, Elham Sadri²

¹Department of Foreign Languages, Islamic Azad University Shahreza branch, Shahreza, Iran

²Department of Foreign Languages, Sheikbahaee University, Isfahan, Iran

ABSTRACT

Phrasal verbs are abundant in today's colloquial English; however, non-native learners find them confusing and unprincipled, and not strangely, show a poor command of them or avoid using them. The major problems with phrasal verbs are their semantic complexity and idiom city. As opposed to the time-honored approach that considers memorization as best strategy, Cognitive Linguistics provides a way of teaching and learning phrasal verbs in meaningful cognitive ways. In this view, particle component of the phrasal verb carries the semantic load of the construction. Particles in English encode specific conceptualizations of spatial relations; native speakers are subconsciously aware of such conceptualizations and draw on their conceptual knowledge in dealing with phrasal verbs while non-native EFL learners are unaware of such conceptualizations. Thus, familiarizing EFL students with underlying conceptual bases of particles may help them learn phrasal verbs more efficiently. The present study examines the usefulness of a CL-based approach to teaching 20 phrasal verbs with *up* and *down*. A host of 60 Iranian EFL learners at intermediate level of language proficiency were randomly assigned to two equal control and experimental groups. The experimental group received target phrasal verbs through a CL-based approach whereas the control participants were presented with dictionary definitions and single verb equivalents of the target phrasal verbs. The collected data from a pre-posttest assessment and analyzed through T-Test procedures revealed better learning gain of phrasal verbs for the experimental participants as well as a developed ability to transfer their acquired knowledge to unfamiliar phrasal verbs. Overall, the study suggests promising outcomes for a CL-based approach to the pedagogy of phrasal verbs.

KEYWORDS: Phrasal verb (PV), particle, Cognitive Linguistics (CL), conceptualization, motivation, semantic network.

1. INTRODUCTION

Language teachers and researchers have long recognized that the acquisition of particles poses major challenges for second language learners (e.g., Celce-Murcia & Larsen-Freeman, 1999; Tyler & Evans, 2003). When particles combine with verbs and create the so-called phrasal verbs (hereafter PVs) the problems become even more complicated because in some cases the same verb gets different meanings in conjunction with various particles (e.g., call up, call off, call in, call out, call on, etc.) and the same particle imply different and even opposite interpretations combined with different verbs. For example, *out* in *leave out* implies exit from a place but in *lock out* implies being kept from entering a place. As a matter of fact, the meaning of the PVs usually cannot be identified by combining the meanings of the constituent parts; therefore, they are widely believed to be arbitrary and unsystematic lexical items that have to be learned one by one; an arduous, time-consuming and not very rational task. Such difficulties in semantics of PVs have made them a notoriously difficult part of the English language. Rudzka-Ostyn (2003) characterizes PVs as: "although they are common in spoken and written English and new ones are constantly being created, they do not enjoy a good reputation for EFL learners" (p.1). As a natural result, EFL learners, even the advanced ones, show a poor command of PVs and tend to avoid them in their speaking or writing production (Dagut & Laufer, 1985; Liao & Fukuya, 2004). The semantic complexity and ambiguity of PVs has captured the attention of many researchers and has made them the foci of many studies. A noticeable number of self-study books (e.g., Gairns and Redman, 2011; Rudzka-Ostyn, 2003) and phrasal verb dictionaries (e.g., McIntosh, 2006; Rundell, 2005) have been published to help English learners build effective mastery of this significant part of the English language. Regarding the pedagogical approach to PVs, the time-honored traditional account has represented the semantics of PVs as largely arbitrary (Bloomfield, 1933; Frank, 1972; Chomsky, 1995). Consequently, pedagogical treatments have often presented PVs in long lists of learn-by-heart vocabulary and have suggested memorization as the best strategy. Memorizing the PVs, however, does not guarantee mastering how to use them in practice nor does incorporate them into the active vocabulary repertoire of the learner (Dainty, 1992). Besides, learning a list of strung together PVs by heart is of little pedagogical value and enhances the negative attitude of the learners toward PVs (Wingate, 2001).

*Corresponding Author: M. Reza Talebinejad, Department of foreign languages, Islamic Azad University, Shahreza Branch, Iran, Email: talebinejad@iaush.ac.ir

In contrast to traditional approach, Cognitive Linguistics (CL) offers an alternative perspective, suggesting that the many distinct meanings associated with a particular particle are motivated and related in systematic principled ways (Brugman & Lakoff, 1988; Dirven, 1993; Evans & Tyler, 2005; Lakoff, 1987; Lindner, 1982; Tyler & Evans, 2001, 2003). Hence, this approach provides a cognitive way of learning PVs without relying on meaningless memorization and rote learning. The basis of CL-based approach toward the semantics of PVs roots in a main tenet of CL, namely *embodiment principle*. This CL thesis argues that human cognition is developed and structured as a result of bodily experiences and physiological perceptions on one hand and situatedness in and interaction with space on the other hand (Lakoff & Johnson, 1987, 1999; Johnson, 1987; Johnson & Rohrer, 2007). CL argues that spatio-physical sensory perceptions are not conceptualized in haphazard ways (Johnson, 1987; Mandler, 2004). Gestalt psychologists and cognitive physiologists identified a number of unconscious perceptual mechanisms that result in a reformatting of humans' direct experience with the world into what they perceive. These cognitive mechanisms constrain and provide particular structure to human experience. The work of the Gestalt psychologists firmly established that humans do not perceive objects and their relations in the world as a flat visual array; rather, the human perceptual system organizes the conceptualization of the spatial scenes in terms of foreground and background, or figure (F) and ground (G) (Talmy, 2000). Within a spatial scene, the (F) tends to be the smaller, more moveable element which is the focus of attention; and the (G) is the larger, less moveable, locating element.

Building on this ground, the contribution of CL to the study of particles is that particles provide the primary system for describing spatial relations in English; which most typically is a conceptualized spatial relationship between a focus element (F) and a locating or ground element (G). This basic spatial meaning of a particle is then abstracted away giving rise to additional senses many of which are non-spatial. (Tyler & Evans, 2003; Evans & Tyler, 2005) That is how particles in English have developed complicated polysemy networks. Since the multiple meanings associated with a particle are driven by the same spatial scene they are systematically related within a motivated semantic network. Representing the many meanings associated with a particle as a systematic network, whose principles of semantic extension draw on salient human experiences with the physical world, has the potential to provide a useful rubric for aiding L2 learners in mastering the semantic complexities of PVs.

So far, a number of researchers have examined the pedagogical benefit of a CL-based approach by presenting the learners with CL motivations underlying particles in PVs (For example, Boers, 2000; Condon, 2008; Condon & Kelly, 2002; Kövecses & Szabó, 1996; Kurtyka, 2001). Although most of these studies yielded positive results in terms of their general instructional objectives and confirmed the usefulness of applying CL motivations to PVs, they reported some limitations in their findings and suggested that those shortcomings should be addressed in further research. One of the missed-out points in previous CL-based studies on PVs is the problem of *asymmetry*; that is, particles that appear symmetrical at the perceptual level do not always behave as such at the linguistic level. In traditional accounts, asymmetries are never considered as an issue of primary importance. However, in empirical studies of paired particles within the CL framework various asymmetrical characteristics are observed both in pre-language and language levels. For example, Lakoff and Johnson (1980) showed the asymmetrical distributions among orientation metaphors but the metaphor mappings and image-schema transformations that were the basis of their approach proved unable to plausibly handle the problem of asymmetry (Sandra, 1998; Sandra & Rice, 1995). In another research Lindner (1982) addressed the same issue and suggested that the paired particles should be considered based on the way they are conceptually foregrounded against some aspects of the world background knowledge. However, her suggestion remained unjustified and vague and was not examined empirically.

Regarding this gap in the body of CL-based research on PVs, the present study aims at addressing the issue of semantic complexities of paired particles in PVs, particularly the particles *up* and *down*, and investigates the practical usefulness of a CL-motivated approach to tackling this issue.

2. Statement of the Problem

The particles *up* and *down* constitute a contrasting pair that traditionally has been assumed to indicate a symmetrical antonymous meaning along the vertical axis. Put another way, they have been supposed to indicate two *opposite spatial directions* along the vertical axis. However, in many cases *up* and *down* behave quite differently, especially in PVs. In many PVs they do not imply spatial concrete meanings and in some other PVs they appear to be synonyms. The following examples demonstrate some of problematic behaviors of PVs with *up* and *down*.

- (1) a. I walked up the hill.
b. I walked down the hill.
- (2) a. House prices are going up.
b. House prices are going down.
- (3) a. Everyone was dressed up for the occasion.
b. He was rather dressed down for the occasion.
- (4) a. The house burned up.
b. The house burned down.

In (1), *up* and *down* show the upward and downward directions in the space, and in this sense they simply and literally convey two opposite spatial meanings. In (2) no physical entity experiences an upward or downward movement in space, but it is understood from the sentences that house prices, metaphorically speaking, are going up (increase) or going down (decrease). In (3), the meaning of *up* and *down* are rather more complicated and not predictable from the context; the meanings of *up* and *down* here seem to be irrelevant to those in (1) and (2); dress up does not imply the upward motion of one's clothes nor does it mean increase in the amount, length, or size of the clothes; rather, it means wear more formal or better clothes than usual. In (4), *up* and *down* show their most surprising characteristic as a contrasting pair: they appear to be synonyms.

In sum, the problems related to PVs with particles *up* and *down* could be summarized as follows: firstly, these spatial particles that basically characterize the orientation of physical concrete objects in space can also refer to non-spatial and abstract domains. Secondly, the meanings of these two particles seem to change unpredictably when used in abstract senses; in other words, these particles seem to have a polysemous semantic network. Thirdly, *up* and *down* that are assumed to be semantic antonyms appear to be synonyms in some PVs.

To address such issues, the study took advantage of the insights proposed by Tyler and Evans (2003). In their book-length description of English particles titled *The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning and Cognition*, Tyler and Evans lay out a CL analysis of the particles *up* and *down* which shape the foundation of the CL treatment of this study. They argue that the conceptual basis of *up* and *down* could be schematized by a spatial scene where the (F) element moves upward (for *up*) or downward (for *down*). However, the physical experiences and perceptual observations lead to attributing *semantic values* to these particles. The positive/negative value of *up* and *down* serves as a functional element and gives rise to additional meanings which are mostly non-spatial. Taken together, *up* and *down* hold a semantic network which is both motivated (i.e., principled) based on the conceptual configuration of the particle, and related as a result of the semantic value.

3. Research Questions

The study hypothesized that a CL-motivated approach toward teaching PVs with particles *up* and *down* which presents the students with underlying systematic principles of the two particles would be a more efficient and fruitful approach than a traditional approach that relies on memorization and repetition. To test such hypothesis, the following research questions were formulated:

1. To what extent does a CL-based approach to teaching phrasal verbs (with *up* and *down*) yield different results from a traditional approach such as the use of dictionary definitions, single verb equivalents, and examples?
2. To what extent do CL-instructed students and the students who received their treatment by dictionary definitions and single verb equivalents differ in developing a strategy transfer to unrehearsed novel phrasal verbs (with *up* and *down*)?

4. METHOD

4.1. Participants

The participants who took part in this study were 60 young female students (aged 17-23) of a private language school in Isfahan, Iran. They all shared Persian as their mother tongue. The study was conducted during the summer English courses of the institute and before starting the course participants were informed that they were going to receive instruction concerning a number of PVs incorporated into their regular program. The participants were at the intermediated level of language proficiency (based on a placement procedure using a version of the Oxford Placement Test. (OPT, 2010))

4.2. Materials

The data required for the quantitative analysis of the results of the study were collected through a pretest-posttest assessment. Before starting the experiment, the participants were asked to take a written pretest. Before administering the pretest, participants were briefed about PVs; highlighting that PVs consist of a verb plus a smaller word (such as *up*, *down*, *in*, and *out*) and giving examples they had already been practically familiar with, such as *get up*, *stand up*, *sit down*, *come in*, and *go out*. The participants were assured that their scores on the experimental tests would have no negative effect on their end-of-term results, and then the test was distributed. The pretest was later used as the posttest at the end of the experiment. The test had a force-choice, fill-in-the-blank format. It consisted of cloze passages in the form of short dialogs or paragraphs, each of which was missing several PVs. For each cloze passage, the participants were asked to select the most appropriate PV from a given word bank. The participants were told not to worry about tenses, and that they could, if they had difficulties with tense changes, insert the PVs in the infinitive form.

The test was designed to address the two posed research questions of the study; thus it was split up into two parts. The first part examined the taught 20 target PVs of the study. The second part took focus on 10 novel unrehearsed PVs to investigate the extent the participants' could infer the meaning of unfamiliar PVs based on their acquired knowledge during the treatment.

The criteria for choosing the target PVs of the study were two-fold: firstly, they were chosen from classifications of most frequent and useful PVs for pedagogical purposes provided by Gardner and Davies (2007). Secondly, only PVs with idiomatic meanings were selected and literal ones were excluded. The reason was that literal PVs are rather catchy and simple for EFL students but idiomatic PVs (where the meaning of the whole construction is not predictable from the meaning of the components) are proven to be extremely problematic for EFL learners (Celce-Murcia & Larsen-Freeman, 1999; Rudzka-Ostyn, 2003).

4.3. Research Design

Using tables of random numbers, the 60 intermediate participants of the study were divided into two equal control and experimental groups. The experimental groups received their instruction of 20 target PVs through the model proposed by Tyler and Evans (2003) within the CL framework. The control group received the same PVs following a traditional approach, with no cognitive motivation and only relying on dictionary definitions and synonyms of PVs and using them in some example sentences.

The instruction of PVs was integrated into an extended general EFL program lasting over 1.5 summer months in 3 one-and-a-half-hour sessions per week (a total of 18 sessions). Owing to the bulk of content students had to cover in their program, a limited amount of time (ten minutes per session for both groups) was devoted to the instructional treatment. The course lasted for 6 weeks; the first 4 weeks were allotted to the particle *up* and 10 target PVs ending in *up* and the other 3 weeks were devoted to particle *down* and 10 target PVs with it. Due to an odd/even schedule, both groups attended the same class at the same hour of the day and were instructed by the same teacher.

4.4. Instructional Procedure

4.4.1. Experimental Group

The instructional procedure for experimental group began with introducing the notion of figure (F) and ground (G). However, to avoid the risk of overwhelming the students with technical terminologies and CL-specific jargon, the dominant employed terms were (F) element or the focus of attention, and (G) or the background. The students were instructed that our understanding of space and the phenomena in our surrounding environment is organized by our brain. The brain does not perceive the world in a flat array; rather, it organizes our perception in terms of (F) and (G) elements. In an imaginary scene, (F) tends to be the smaller, more moveable element which is the focus of attention; the (G) is the larger, less moveable, locating element.

Gradually, they were taught that particles *up* and *down* in English refer to specific scenes with certain configurations of (F) and (G) elements. The conceptual scene for *up* is an object (F) which is moving upward toward the top of another object or background (G). And for *down*, the scene is an object (F) which is moving downwards to the bottom of a background (G). Often times, the (G) is assumed to have a head or bottom in the same way that humans have their head at the top of their bodies and legs at the bottom. For examples, even though mountains, trees, buildings or rivers do not actually have physical bodies we imagine them as having human—shape bodies. That is why we can talk about *climbing up a mountain*, *walking down the street*, *the head of the faculty/government/stairs/steam* and so forth. Moreover, human brain has this amazing ability to extend this conceptualization to the domain of feelings, thoughts, ideas and other invisible abstract things; and therefore, express and understand sentences such as: *The house prices are going up*. (Even though prices do not have actual bodies and cannot move) or: *The temperature went down*. There is a very important point to consider in this analogy: *up* entails a positive value; when humans are happy and healthy their body posture is upright, when things are *up* their quantity increases, they become complete, or more visible, accessible, better, etc. On the other hand, *down* has a negative value; when people are sick, or in bad physical or spiritual conditions they lie down or their body posture tends to be bent and down. The positive/ negative value of *up/down* functions as the primary factor in determining their meaning. In fact, *up* and *down* other than their literal meaning (i.e., moving upward/downward) have three additional meanings. Table 1 and Table 2 present the basic and additional meanings of *up* and *down* as well as some example PVs.

Table 1.
Basic Meaning and Additional Senses for the particle UP

Basic spatial meaning	Additional senses	Examples
Moving upward toward the top	more	These exercises are good for <i>building up</i> leg strength.
	Better (improvement)	I need to <i>brush up</i> my maths skills before the exam.
	complete	<i>Fill up</i> the kettle if you want to make coffee.

Table 2.
Basic Meaning and Additional Senses for the particle DOWN

Basic spatial meaning	Additional senses	Examples
Moving downward toward the bottom	less	I won't have a cigarette; I'm trying to <i>cut down</i> .
	Worse (inferior)	Even though he is a boss, he always <i>plays down</i> his success.
	complete	Please <i>wipe down</i> the cooker when you've finished.

As evident from the above tables, *up* and *down* have a sense in common: the complete sense. That is why in some cases these two opposite particles show the same meaning. However, this shared sense stems from two different grounds: the complete sense of *up* implies a positive value; that is, completing an activity or reaching the ultimate goal. On the contrary, the complete sense of *down* refers to its negative value; thus, it implies consumption or depletion of something or reaching the ultimate limit or surface that prevents further activity. This shared *complete* meaning of *up* and *down* arises from two different ways of observing the same spatial scene or event. Each event or conceptualized scene can be viewed from different vantage points resulting in shifts in (F) and (G) profiles. An element which is the focus of attention in one scene can become the (G) once the scene is viewed from a different vantage point. This is exemplified in the scene of a burning house. This scene can be viewed in two ways:

- (1) a. The house burned up.
- b. The house burned down.

The sentence (1.a) encoded a scene where the activity of burning continues until it is completely done; in other words here the fire or the activity of burning is (F). However, in (1.b) the house is (F) and it is consumed and depleted until it is finally destroyed and down. These two different ways of viewing this scene are depicted in figure1 and figure 2.



Figure1. The house burned up.

Figure 2. The house burned down.

4.4.2. Control Group

The target PVs of the study were taught to the participants in the control group under the same schedule but through a non-cognitive traditional approach. A target PV was written on the board and the students were asked to look it up in the dictionary. Then some example sentences using those PVs were presented. The single verb equivalent of the PV was also presented (if any existed). Finally, the students were asked to use the PV in sentences of their own and try to memorize them by heart.

5. RESULTS

The data collected through administering a pretest/posttest assessment was analyzed by running T-Tests in the SPSS software (version 20.0). The results were analyzed in terms of mean scores and their corresponding *p*-values. Since the study addressed two research questions two sets of analyses were performed, each dealing with one research question.

5.1. Results for the first research question

The first research question dealt with the learning gain of the participants on taught target PVs. Table3 presents the amount of learning that took place during the experiment period (from pretest to posttest) for both groups in terms of mean scores and their corresponding *p*-values.

Table3.
Overall mean scores and *p*-values onpretest/posttest (part 1)

Group	Pretest	Posttest
Control	4.48	10.07
Experimental	4.03	18.89
Significance	$p > .7$	$P < .005$

As evident in table3, the groups did not perform significantly different from each other at the beginning of the experiment (pretest); however, the groups' results on posttest indicate a statistically significant ($p < .005$) difference between the two groups' performances. This implies an advantage for the experimental group over the control group, supporting the superiority of the CL-based approach.

5.2. Results for the second research question

The second research question dealt with the students' performance encountering 10 novel and unrehearsed PVs with particles *up* and *down*. These results obtained from the second part of the pre/posttest are summarized in table4.

Table 4.
Overall mean scores and p-values on pretest/posttest (part 2)

Group	Pretest	Posttest
Control	2.90	3.8
Experimental	2.71	7.32
Significance	$P > .8$	$P < .005$

The data indicate that both groups obtained approximately the same level of scores before the experiment. But after the treatment the experimental group showed significantly better results than the control group. This suggests the advantage of the CL-based approach over the non-cognitive traditional approach in inferring the meaning of unfamiliar PVs.

6.DISCUSSION

6.1.Explanatory answer to the first research question

Analysis and comparison of the results demonstrate significant differences between the performances of the experimental and control groups on the first part of the pretest/posttest; and hence, lend strong support to the postulation that applying CL to teaching and learning PVs is beneficial and yields better results than a traditional approach. Put another way, the findings evidence that presenting the explicit knowledge of CL motivations about conceptual bases of the particles *up* and *down* reinforces the students' learning gain. The explanation for such superiority lies in the fundamental idea behind CL motivation that was applied to this study. According to embodiment principle of CL, linguistic structures are strongly motivated by their conceptual bases, which root in the characteristics of human body and its interaction with the environment. One of the physiological features of human body is that it is asymmetrical along the vertical axis; that is, humans have a head at the top and their legs at the bottom. CL holds that such asymmetry has consequences for humans understanding of the world; it makes them attribute top and bottom or up/down distinction to entities that do not literally have top or bottom (e.g., river, street) or even physical existence (e.g., feelings, ideas). Moreover, based on the same physical characteristics, *up* and *down* connote a positive-negative value reversal which reflects in linguistic structures as well. Building on this ground, *up* and *down*, aside from their primary spatial meaning, obtain other additional meanings that are all driven by their positive-negative values. Hence, each of these two particles holds a semantic network which is both motivated (by principles of embodied conceptualization) and related (by the assumed positive-negative value). As the results of this study confirm, making the students aware of conceptual basis of the particles *up* and *down* and their semantic network components helps them learn and recall PVs with these particles more efficiently.

Furthermore, the above-described facts shed more light on why the control group displayed lower learning gain on taught PVs than the experimental group; they received the target PVs through dictionary definitions. Dictionary definitions rather than providing conceptual basis of the particles introduce the meaning of a certain PV or present its single verb equivalent; obviously, the only way a student can relate to such information is through memorization. In this approach, PVs are considered as random and unprincipled lexical items that should be learned or memorized one by one and separately from other PVs; consequently, learning them becomes an arduous and time consuming task. Besides, they are stored as distinct, unrelated knowledge in the brain which make no firm associations with the old stored knowledge. Not strangely, this kind of mindless rote learning is less efficient – witness the results of this study- than the meaningful learning that CL-based approach brings about where students learn, organize, and associate PVs in their mind in a rational manner.

6.2.Explanatory answer to the second research question

Regarding the second research question, the results of the study provide evidence that the experimental participants had a better performance on the test of novel unfamiliar PVs with particles *up* and *down*. That is to say the experimental participants transferred their acquired knowledge to unrehearsed PVs more successfully. The potential reason for this result roots in the basic assumptions upon which CL is founded. CL, as its name implies, has to do with the relationship between language and cognition, and cognition embodies a group of mental processes including information, attention, memory, critical thinking, inferring and applying knowledge and so forth. CL gives priority to understanding and meaning versus rote learning and holds that deep learning requires engaging in reflective and rational thinking; such learning will not happen unless concepts and subjects of learning activity are structured in cognitive meaningful ways. According to the results of data analysis, CL approach applied to the experimental group of the present study has been successful in developing an inferring ability to guess the meaning of unfamiliar PVs. It can be concluded that the CL instruction given to the experimental group raised their awareness toward system city of *up* and *down* in PVs. The instruction that PVs are not as random as they have been assumed and the awareness of conceptual bases of the particles helped the

learners guess or infer the meaning of novel PVs that they had not encountered before. Analogously, isolated dictionary-type definitions and examples of PVs strung together in a list, such as the ones applied to control group in this study, does not help learners build such ability. In practice, traditional approaches that advocated relying on non-cognitive ways of learning PVs tend to force the learners to believe that different senses of particles that, according to discrete definitions of dictionaries appear to be unmotivated and unrelated, are bizarre accidents that fall under the unexplained mysterious intricacies of English language. This has a severe impact on learners' attitudes toward PVs; since they have become accustomed to memorization they do not relate to them in cognitive ways. For example, as observed in this study, control participants considered *up* and *down* as two opposite words and since they were not instructed about the conceptual basis of these two particles, they were not able to think about them critically and meaningfully, therefore, when they encountered new PVs in unrehearsed contexts they automatically skipped them over without thinking because the unfamiliar PVs did not ring a familiar bell in their memory.

7. Conclusion

This study examined the usefulness of teaching phrasal verbs with the particles *up* and *down* focusing on the conceptual basis of these particles. As opposed to traditional approach which advocates memorization of lists of PVs as best strategy, CL proposes a cognitive approach which lays emphasis on the *particle* component of the PV as having the leading role in determining the meaning of the construction (Tyler & Evans, 2003).

Particles, from a CL viewpoint, have a primary spatial meaning and additional non-spatial abstract meanings. These meanings derive from embodied experience and cognitive mechanisms through which a particle is conceptualized. The conceptualization of a particle is a property of human conceptual organization arising as a result of interaction within a certain environment and socio-cultural context than a characteristic specific to linguistic elements per se (Evans, 2012). Native speakers of English have a genuine bodily and socio-cultural experience within their language community. Hence, they subconsciously are aware of such conceptualizations and constantly manipulate them in their use and comprehension of language; especially in idiomatic PVs. Non-native learners of English in foreign language settings who do not share the lifelong sociocultural experiences of the native speakers, as was the case for participants in this study, are not familiar with the way the particles are conceptualized in the English language and this leads to a number of issues in recognition and production of PVs for them. A favorable way to overcome such problem is making EFL learners aware of existence of such conceptualizations which was the basis of CL treatment of the present study. The results of the study suggest that presenting the conceptual bases of the two particles *up* and *down* enhances the students learning gain of PVs with these particles as well as their ability to transfer their acquired knowledge to infer the meaning of novel PVs with the same particles. In sum, the budding paradigm of CL provides a promising way of familiarizing the EFL students with conceptual bases of PVs and facilitating the pedagogy of this difficult part of English language for both teachers and learners. Further experimental investigations, however, are required to study the usefulness of CL treatment in different contexts, with various participant samples, and on numerous English particles.

REFERENCES

- Bloomfield, L. (1933). *Language*. New York: Holt, Reinehart and Winston.
- Boers, F. (2000). Metaphor awareness and vocabulary retention. *Applied Linguistics*, 21, 553–571.
- Brugman, C. & Lakoff, G. (1988). Cognitive topology and lexical networks. In S. Small, G. Cottrell and M. Tannenhaus, (Eds.) *Lexical Ambiguity Resolution* (pp. 477–507). San Mateo, CA: Morgan Kaufman
- Celce-Murcia, M. & Larsen-Freeman, D. (1999). *The grammar book: an ESL/EFL teacher's course*. Boston: Heinle and Heinle.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, MA.: MIT Press.
- Condon, N. (2008). How cognitive linguistic motivations influence the learning of phrasal verbs. In F., Boers, & S., Lindstromberg (Eds.), *Cognitive linguistic approaches to teaching vocabulary and phraseology*. Berlin: Mouton De Gruyter. pp.133-158.
- Condon, N. & Kelly, P. (2002). Does Cognitive Linguistics have anything to offer English language learners in their efforts to master phrasal verbs? *I.T.L.* pp.137–138: 205–231
- Dagut, M., & Laufer, B. (1985). Avoidance of phrasal verbs: A case for contrastive analysis. *Studies in Second Language Acquisition*, 7, 73–79.
- Dainty, P. (1992). *Phrasal Verbs in Context*. London: Macmillan Education.

- Dirven, R. (1993). Dividing up physical and mental space into conceptual categories by means of English prepositions. In C. Zelinsky-Wibbelt (Ed.), *The Semantics of Prepositions: From Mental Processing to Natural Language* (pp. 73–97). Berlin: Mouton de Gruyter.
- Evans, V. (2012). *Cognitive Linguistics*. Retrieved April 3, 2012, from http://wires.wiley.com/WileyCDA/WiresIssue/wisId-WCS_3_2.html
- Evans, V. & Tyler, A. (2005). *Applying Cognitive Linguistics to Pedagogical Grammar: The English Prepositions of Verticality*. Retrieved May 12, 2012, from <http://www.vyevans.net/applycoglxpedagogy.pdf>
- Frank, M. (1972). *Modern English: A Practical reference Guide*. Englewood Cliffs, NJ.: Prentice-Hall.
- Gairns, R. & Redman, S. (2011). *Idioms and phrasal verbs*. Oxford, New York: Oxford University Press
- Gardner, D., & Davies, M. (2007). Pointing out frequent phrasal verbs: A corpus-based analysis. *TESOL Quarterly*, 41, 339–360.
- Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination and reason*. Chicago: Chicago University Press.
- Johnson, M. & Rohrer, T. (2007). We Are Live Creatures: Embodiment, American Pragmatism, and the Cognitive Organism. *Body, Language, and Mind*, 1, 17–54
- Kövecses, Z. & Szabó P. (1996). Idioms: A view from cognitive semantics. *Applied Linguistics* (17), 326–335.
- Kurtyka, A. (2001). Teaching English Phrasal Verbs: A Cognitive Approach. In M., Pütz, S., Niemeier and R., Dirven (Eds.), *Applied Cognitive Linguistics, vol. II: Language Pedagogy* (pp. 29–54). Berlin/New York: Mouton de Gruyter.
- Lakoff, G. (1987). *Women, fire, and dangerous things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Lakoff, G. & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to western thought*. Chicago: Basic Books.
- Liao, Y., & Fukuya, J. Y. (2004). Avoidance of Phrasal Verbs: The Case of Chinese Learners of English. *Language Learning* 54, 193–226. Retrieved 14 January 2012, from <http://www.hawaii.edu/sls/sls/wpcontent/uploads/2011/.../LiaoFukuya.pdf>
- Lindner, S. (1982). What goes up doesn't necessarily come down: The ins and outs of opposite. *CLS*, 8, 305–323.
- Mandler, J. (2004). *The Foundations of Mind: Origins of Conceptual Thought*. Oxford: Oxford University Press.
- McIntosh, C. (Ed.) (2006). *Oxford phrasal verbs dictionary for learners of English*. Oxford: Oxford University Press.
- Oxford University Press. (2010). *Oxford placement test*. Retrieved June 5, 2010, from http://www.lang.ox.ac.uk/courses/tst_english_placement.html
- Rundell, M. (2005) *Macmillan Phrasal Verbs Plus*. Oxford: Bloombury Publishing Plc.
- Rudzka-Ostyn, B. (2003). *Word power: Phrasal verbs and compounds*. Berlin/New York: Mouton de Gruyter.
- Sandra, D. (1998). What linguists can and can't tell us about the mind: a reply to Croft. *Cognitive Linguistics*, 9 (4), 361–78.
- Sandra, D. & Rice, S. (1995). Network analyses of prepositional meaning: mirroring whose mind – the linguist's or the language user's? *Cognitive Linguistics*, 6 (1), 89–130.
- Talmy, L. 2000. *Toward a Cognitive Semantics*. Cambridge, MA: MIT Press.
- Tyler, A. & Evans, V. (2001). The relation between experience, conceptual structure and meaning: non-temporal uses of tense and language teaching, in M. Pütz, S. Niemeier & R. Dirven (Eds.), *Applied Cognitive Linguistics I: Theory and Language Acquisition* (pp. 63–108). Berlin: Mouton de Gruyter
- Tyler, A. & Evans, V. (2003). *The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning and Cognition*. Cambridge: Cambridge University Press.
- Wingate, J. (2001). Emotional Intelligence: How to Use E.I. in Teaching Reading Comp. and Phrasal Verbs. *Humanizing Language Teaching*, 3 (1). Retrieved July 23, 2012, from <http://www.hltnmag.co.uk/jan01/sart2.htm> (Accessed 5/3/2011)