CONCEPTUAL METAPHOR WITHIN INVARIANT MEANING: THE LEARNING OF PHRASAL VERBS AMONG MALAYSIAN ESL LEARNERS

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Abstract

This study intends to determine the invariant/core meanings of verbs and particles in isolation and see how these meanings motivate the distribution of messages in English phrasal verbs. It also aims to see if the exposure to the core meanings of the individual items that make up a phrasal verb (i.e. verb and particle) helps Malaysian learners to use phrasal verbs appropriately in English writings. The linguistic data were extracted from the BNC corpus. Tobin (1990)'s concept of invariant meaning and Lakoff & Johnson (1980)'s notion of Conceptual Metaphor were used to determine the core meanings of the verbs and particles. The analyses showed that the identification of single invariant meaning of the verbs and particles is important as they contribute to the realisation of different senses of phrasal verbs. These invariant meanings were then applied as treatment with fifteen students in the experimental group whereas another group of fifteen students which was assigned as the control group was engaged into traditional instruction by providing the meanings of the phrasal verbs extracted from the Oxford Phrasal Verbs Dictionary. The inferential analyses through paired samples t-test and independent samples t-test for the taught items indicate that although both groups performed significantly better in post-tests compared to pre-tests, the experimental group which received the semantic-based explicit (verbs and particles in phrasal verbs) instruction

outperformed (significantly) the control group which received traditional instruction.

Keywords

Phrasal Verbs, Invariant Meaning, Conceptual Metaphor, Semantic-Based Instruction, Linguistic Sign, Cognitive Semantics

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1. Introduction

'Phrasal verbs' has been identified as one of the most challenging parts of the lexical categories to be mastered by EFL and ESL learners, especially for the speakers of first language (L1) from a non-Germanic language family which does not have the verb and particle combinations (Armstrong, 2004; Celce-Murcia & Larsen-Freeman, 1999 cited in Darwin & Gray, 1999; Mohammad Khatib & Minoo Ghannadi, 2011; Neagu, 2007; Vieira, 2011; Yasuda, 2010). In spite of this, it is necessary to highlight that the use of phrasal verbs has also been identified as problematic to Dutch ESL learners from the Germanic language family although there is a similar construction in their L1 (Dagut & Laufer, 1985 cited in Darwin & Gray, 1999; Hulstijn & Marchena, 1989 cited in Darwin & Gray, 1999).

Defining the feature of phrasal verbs, Bolinger (1971:xi) cited in Armstrong (2004) says it is "an explosion of lexical creativeness that surpasses anything else in our language". Thus, it is productive in nature as the combinations of verb and particle may vary at any time, depending on the context of its occurrence. Discussing on its function, according to Celce-Murcia & Larsen-Freeman (1999) there are three semantic categories of phrasal verbs namely literal (i.e. transparent), idiomatic (i.e. figurative or opaque) and aspectual (combination of transparent and opaque). Phrasal verbs with literal meaning are often easily distinguishable and analysable by individual units of its composition. However, idiomatic phrasal verbs are not easily analysable but the particle contributes to the meaning of the lexical phrase (Lindner, 1981 cited in Neagu, 2007; Rudzka-Ostyn, 2003). Therefore, a lucid understanding of how the meaning of verb and particle motivates the meaning of the phrasal verb in its entire occurrences is perhaps essential.

In Malaysian context, as far as the researcher is concerned, to date, there are few studies which have used a corpus based analysis to highlight the Malaysian students' inappropriate use of phrasal verbs and strategies they adopt in avoiding the use of phrasal verbs in their writings (Akbari, 2009; Rafidah Kamarudin, 2013; Zarifi & Mukundan, 2014). Corpus based studies carried out using the Malaysian learner corpus indicate that students tend to avoid using phrasal verbs in their writings and opt for single word equivalent than a multi-word expression (Akbari, 2009; Rafidah Kamarudin & Azmi Abdul Latiff, 2011). For

Malaysian learners, the students' lack of lexical knowledge in L2, unawareness of the idiomatic expressions of phrasal verbs (Zarifi & Mukundan, 2014) as well as influence of learners' L1 to certain extent, have been reported as the reasons for the occurrence of inappropriate uses of phrasal verbs in their English writings (Rafidah Kamarudin & Azmi Abdul Latiff, 2011).

It was also identified that phrasal verb is one of the Multiword Units (MWUs) which is not tested regularly in examinations; hence it is not given much emphasis in reference materials and teaching and learning process in the classroom. Previous study on the use of phrasal verbs by Malaysian ESL learners reported that in Malaysian context, textbooks serve mandatory preferences in the classroom. Although the presence of phrasal verbs in textbooks is undeniable, the "various meanings", "different usages", or "grammatical structures" are not presented. It is rather explicitly presented and discussed in the vocabulary and grammar sections whereas in reading texts and guided writing activities, its presentation is implicit (Rafidah Kamarudin, 2013:252). It was also recommended that a pedagogical approach which addresses the semantic confusion (differences in the meaning and usage of phrasal verbs) is implemented and tested on the learners to see its effectiveness (Bronshteyn & Tom, 2015; Rafidah Kamarudin, 2013). Likewise, Zarifi & Mukundan (2014) points out the role of material developers and teachers in providing materials and activities which may help learners to effectively use phrasal verbs especially the ones which carry idiomatic meanings.

Scouring for ways to resolve the problems in understanding the appropriate use of phrasal verbs, previous studies in cognitive linguistics have illustrated that each idiomatic expression is analysable to certain extent, through its individual word analysis which contributes to the figurative meaning as a whole (Boers, 2004 cited in Yasuda, 2010; Neagu, 2007; Rudzka-Ostyn, 2003).

Thus, this study intends to find out if the exposure to the core meanings of the individual items that make up a phrasal verb (i.e. verb and particle) enables the students to understand and produce this lexical phrase appropriately in their English writings.

1.1 Objectives

The objectives of this study are:

1.1.1 To determine the invariant meanings of verbs and particles in English phrasal verbs.

1.1.2 To see how the invariant meaning of verb and particle motivates the distribution of messages in English phrasal verbs.

1.1.3 To investigate whether the teaching of English phrasal verbs through semantic-based instruction helps Malaysian ESL learners to be able to make appropriate use of phrasal verbs in English language writings.

1.2 Research Questions

1.2.1   What are the invariant meanings of verbs and particles in English phrasal verbs?

1.2.2   How does the invariant meaning of verb and particle motivate the distribution of messages in English phrasal verbs?

1.2.3   Is there any difference in relation to producing English phrasal verbs in writings between the experimental group (which received explicitly, the semantic-based instruction of the use of phrasal verbs (i.e., verbs and particles) and control group (which received traditional instruction)?

2. Phrasal Verbs Studies

A phrasal verb can be defined both syntactically and semantically. Syntactically, it consists of a "verb (proper) and "a morphologically invariable particle" which function as a single grammatical unit (Quirk et al., 1985:1150). Semantically, according to Quirk et al. (1985:1152) "the meaning of the combination manifestly cannot be predicted from the meaning of the verb (proper) and particle in isolation" and thus, it functions as a single lexical unit too. Phrasal verb is a type of Multiword Expressions (MWEs) other than idioms, prefabrication and formulaic expressions. It is "compositional" when each word is individually analysable to compose the overall meaning of the lexical phrase or expression and "non-compositional" or rather "idiomatic" when it does not allow individual word analysis to compose the whole meaning (Cook & Stevenson, 2006:1)

It is difficult to understand the use of phrasal verbs as the learners do not realise the key concept where the meanings of phrasal verbs are defined from the 'concrete' to the 'abstract' (Neagu, 2007). Traditional grammarians pointed out that the construction of meaning for phrasal verbs are merely unsystematic which means arbitrary and idiosyncratic (Bolinger, 1971 cited in Neagu, 2007; Fraser, 1976 cited in Neagu, 2007; Lipka, 1972 cited in Neagu, 2007). However, the cognitive grammarians found that the verbs and particles in phrasal verbs are compositional (i.e. analysable) to certain extent and they are systematic (Condon, 2008; Lakoff & Johnson, 1980 cited in Yasuda, 2010; Lindner, 1981 cited in Neagu, 2007; Mahpeykar & Tyler, 2015; Rudzka-Ostyn, 2003).

To enhance learners' understanding and retention of the appropriate use of phrasal verbs, previous studies have indicated the use of conceptual metaphor or image-schema

where it is defined as "a metaphor that exists in the mind of a speaker, and may thus be unconscious" (Johansen, 2007:11). Using the conceptual metaphor or image-schema, the mental representation is articulated through the mapping of an abstract concept (i.e. target domain) with a concrete concept (i.e. source domain) (Kovecses, 2002 cited in Vieira, 2011). In one of the empirical studies conducted with the Hungarian L1 learners, the use of conceptual metaphor benefited the experimental group to outperform the control group which did not apply the conceptual metaphor instruction (Kovecses & Szabo, 1996). Boers (2000b) too opined that enhanced metaphor awareness of the language learners can facilitate their retention of novel figurative expressions.

Likewise, Morimoto & Loewen (2007) identify that the use of image-schema based instruction although not significant in its overall contribution, results in better performance in the use of polysemous words (words which have more than one sense of meaning) in comparison to translation based instruction as the learners can mentally visualise the representation of the target items. The underlying principle in this study is the use of core meaning to understand various senses of meanings of the target item (i.e. 'break' and 'over'). This was successful in the use of preposition 'over' especially when the equivalent of the target item was present in the learners' L1 system.

In a study conducted by Yasuda (2010), the use of orientational metaphor of particles was found helpful to facilitate the acquisition of novel phrasal verbs by Japanese English as foreign language (EFL) learners. The preceding study highlighted the use of explicit instruction to introduce the orientational metaphor to the learners in order to comprehend and produce novel phrasal verbs. The findings of a separate study showed that Schemas for the Orienting Basis of Action (SCOBA) through Concept-Based Instruction (CBI) enhanced the systematic understanding of phrasal verbs and therefore, it was suggested that there is a need for meaning-oriented grammar instruction to be implemented in order to improve learners' understanding of metaphorical features (Lee, 2012). In a recent study which was carried out on Turkish learners, Kartal & Uner (2017) illustrate that the use of conceptual metaphor is beneficial in helping the learning of phrasal verbs as the experimental group achieved significantly better than the control group.

Generally, most previous studies denoted the use of Lakoff & Johnson's (1980) notion of conceptual metaphor which conceptualises the cognitive process as fundamentally metaphorical in nature. According to Lakoff & Johnson (1980) cited in Yasuda (2010) the construal of an entity by any human being is affected by experience and environment. The interpretation or construal of the meaning of particles through conceptual metaphor seems

highly technical and schematic as it involves an in-depth cognitive process. For instance, BODY/MOUTH, BUILDING, PROBLEM, BLANK and ACTIVITY are perceived as CONTAINER in which the meanings of the particles 'IN' and 'OUT' are motivated. On the other hand, INCREASING, POWER, HAPPY and COMPLETION are used to describe the orientational (i.e. spatial) and metaphorical (i.e. non-spatial) meanings of the particle 'UP' (Lakoff & Johnson, 1980 cited in Yasuda, 2010).

Revisiting some significant views in the past, in Condon's (2008) study, the results indicate that the Cognitive Linguistics (CL) motivations for literal meanings of particles yielded significantly better performance compared to the more abstract CL motivations. Hence, it was suggested that "a link between the more abstract uses and the more literal uses of a particle" need to be highlighted to make the use of the particles more obvious (Condon, 2008: 152). A more precise explanation using the CL concept is deemed necessary especially to enable learners to differentiate between "the seemingly opposing meanings of *go out* and *come out* in sentences such as *the lights went out* and *the sun came out* (Condon, 2008: 152). Despite carrying the same particles, the words 'go' and 'come' too own significant semantic properties which also need explanation. As perceptions may vary from one individual to another, the notion of these conceptual metaphors may not be applied utterly by all users of the language. Accordingly, explicit interpretation of the meaning of both verbs and particles based on its real context occurrences is definitely crucial.

Therefore, this study intends to propose the learning of meaning of a lexical item through the context of its occurrence rather than in isolation following the Columbia School theory which views language in Saussurean sense as a *system* rather than a rule-governed behaviour based on the sign-oriented approach. As both form and function are inseparable entities in learning a language, in this study, the Saussurean view of language is adopted and applied to the ESL learners to see its effectiveness in developing the learners' use of language. In the Saussurean sense, each lexical item is a sign that carries a vague or abstract meaning (i.e. invariant meaning) which differs from one another and at the same time, reciprocates with the message which is being communicated (Tobin, 1990).

Tobin (1990:51) describes meaning and message as two different entities where "the same linguistic sign with a single invariant meaning can be inferred to have many and diverse messages as well as multiple syntactic and pragmatic functions within different discourse contexts." The distinction between meaning and message needs to be highlighted in any linguistic analysis as different linguistic signs may be interpreted or perceived differently. Tobin (1990) further suggests that invariant meaning is universal and this single meaning

should be applicable in various contexts of its use. A linguistic sign, according to Tobin (1994) does not only mean a single word as a signal, but it involves a wide interpretation where phonemes, compound words, grammatical signals such as 'zero' (-Ø) for singular entity and '-s' for plural entity, word order, formulaic expressions or idioms and an entire text are also included in the list.

Theoretically, Tobin (1994) points out a vivid example by postulating the invariant meaning for the lexical item 'drive' as 'LED/TRANSPORT X or CAUSED X TO MOVE'. This invariant meaning is applicable in all context of occurrences of the signal 'drive', from 'nominal' to even 'phrasal verbs' composed of 'drive + prepositions' (Tobin, 1994:15). For instance, for the expression 'to *drive in* a nail', according to Tobin (1994:15), one could postulate the invariant meaning 'LIMITED BY BOUNDARIES' for the preposition 'in' where this meaning is also universally exploited in different linguistic and situational contexts.

Perhaps in the case of phrasal verbs, the identification of the single invariant meaning for these lexical items would be able to reveal the differences of the verb and particle combinations as suggested by Saussure, each word in a language is a sign which conveys a vague or abstract meaning. As far as the researcher is concerned, there are not many studies (if there is any) which have highlighted the invariant meaning of the phrasal verbs in English. Hence, in this study, the researcher takes a stance to figure out these meanings in order to expose them in the process of teaching and learning in the classroom to make the learning of this lexical category which is regarded as one of the most confusing elements in English, much easier.

3. Method and Participants

This study involves two phases (i.e. quantitative and qualitative). The instrument (treatment) used in the quantitative approach was developed through the findings from the qualitative data analysis. In the first phase of the study, the qualitative approach was employed to address the first and second research questions which intend to identify the invariant meanings of verbs and particles in English phrasal verbs, and to see how the invariant meaning of verb and particle motivates the distribution of messages in English phrasal verbs. The data were language samples extracted from the English Concordancers (i.e. BNC – British National Corpus) which highlight the use of target verbs and particles as well as the phrasal verbs in writings. The selection of phrasal verbs for the analysis was based on the list of frequently occurring phrasal verbs identified by Gardner & Davies (2007)

through BNC. There are altogether 100 items provided in the list of frequently occurring phrasal verbs. However, for the purpose of this study, the researcher limited the item of analysis to 20 phrasal verbs. There were 10 verbs chosen from the top 20 lexical verb which function in phrasal verb forms. The choice of particles was limited to four, based on the frequently occurring list of adverbial particles. The researcher tactfully decided to limit the choice of verbs and particles to show the mixed combination of the same verb with different particles, to see the distribution of messages of same verbs with different particles, and same particles with different verbs. The 20 phrasal verbs chosen as the item of analysis are; *get out, go out, set out, put out, break out, get off, go off, set off, put off, take off, turn down, break down, come down, look down, bring down, turn up, take up, look up, come up* and *bring up*.

For the second research question, the data were collected through a quasi-experimental design. Due to the constraints of creating an artificial group for the purpose of the experiment as the researcher lacks control over the participants (students) enrolled, the researcher used intact groups as the experimental group and control group. Hence, the samples for the experimental group and control group were chosen from the two classes taught by the researcher in a normal classroom setting. The samples were semester 1 students of Politeknik Sultan Idris Shah, Sabak Bernam, Selangor who were pursuing Diploma in Secretarial Science when the data was collected. The experimental group which comprised fifteen students was taught by the researcher with the semantic-based instruction of the use of phrasal verbs (i.e., verbs and particles). In other words, the invariant meanings identified in the first phase of study were applied as treatment for the experimental group. At the same time, another group of fifteen students which was assigned as the control group was engaged into traditional instruction by providing the meanings of the phrasal verbs extracted from the Oxford Phrasal Verbs Dictionary. The students were taught explicitly both the invariant meaning of verbs and particles to enable them to use the phrasal verbs appropriately. This is parallel to the aim of this study which intends to show that the exposure of meaning of the particles merely is insufficient to understand the use of phrasal verbs but both the verbs and particles are important.

4. Research Instruments

4.1 Pre-tests and Post-tests

The instruments used were pre-test and post-test which were administered to both groups before and after the treatment. Students were asked to write an argumentative essay in English for about 350 words by including all the 20 phrasal verb items listed, in their essays.

The pre-test was given to determine the subjects' prior knowledge in their English writings in relation to producing phrasal verbs. Moving on to the post-test, the aim of the test was to find out if there would be any development in the students' use of phrasal verbs in their English writings through a total of 4 hours of treatment. The time limit in order to complete their writings was an hour and 30 minutes.

4.2 Treatment Implementation

As it was mentioned earlier, the students in the experimental group were given semantic-based instruction (explicitly) of the use of phrasal verbs (i.e., verbs and particles), whereas the control group students were engaged into traditional instruction by providing the meanings of the phrasal verbs extracted from the Oxford Phrasal Verbs Dictionary. The treatment session was carried out for two consecutive weeks (i.e., two hours per week). A week before and after the treatment, the pre-tests and post-tests were given to both groups respectively.

During the first week (of 2 hours), the phrasal verbs in the particle group of 'out' and 'off' were concentrated. The treatment session was initiated with a brainstorming session where the students were asked what a phrasal verb is. It was important for the researcher to know the students' understanding of phrasal verbs before the treatment commenced. The students in the experimental group were then given explicit instructions on the form of phrasal verbs (i.e., separable / inseparable, transitive / intransitive) (Fuchs et al., 2006).Then, the students were asked to underline all the phrasal verbs that can be found in an article (which was taken from the grammar book) provided to them.

All the 10 phrasal verbs in the 'out' and 'off' particle categories were written on the whiteboard and the students were asked if the individual meanings of these items were known. The students then were explained that each word in any language is called a linguistic sign and therefore each sign or signal carries a single invariant meaning which is an unchanged meaning in any circumstances of its use. The students were also given explicit instruction that the meanings of words that can be found in any dictionaries are called messages or different senses of the word in its different context of use. These senses are derived from the single invariant meaning of the sign.

Although most of the time, the particles (i.e., 'out' and 'off') reveal the meaning of the phrasal verbs, the researcher emphasised that the meaning of individual verbs in the phrasal verbs is equally important to be unveiled to enable the learners to understand and get across the messages of different senses. The invariant meaning of the individual verbs and particles which were obtained through the first phase of this study was taught explicitly to the

students. The students were provided some authentic language samples extracted from the BNC Written Corpus – English Concordancers) to show how the invariant meaning (which comprises conceptual metaphor) contributes to the different messages in the sentences. As a form of practice, the students were given a short fill-in-blank exercise which comprised the phrasal verbs taught. In addition, students were also asked to construct two sentences for each phrasal verb item learned to see their understanding.

The same method was repeated for the second week of treatment (of 2 hours) with phrasal verbs with another two categories of particles, i.e., 'down' and 'up'. For both weeks of treatment, the control group students were not given any explanation on the invariant meaning of verbs and particles but they were only taught explicitly the meanings of phrasal verbs obtained from the Oxford Phrasal Verbs Dictionary.

At the end of the treatment, the paired samples t-test and independent samples t-test were run to find out if there is any difference in relation to producing English phrasal verbs in writings between the experimental group (which received explicitly, the semantic-based instruction of the use of phrasal verbs (i.e., verbs and particles) and control group (which received traditional instruction)

5. Findings and Discussion

The invariant meanings of the English phrasal verbs were postulated based on the analyses of individual signs (i.e., verbs and particles) which form the phrasal verbs. The analyses below illustrate that the sign 'take' despite its various syntactic and pragmatic functions, signifies a single invariant meaning, which is 'X POSSESSES / RAISES Y'. For the sign 'take' in [1], '**take** a small inked roller' signifies that the object is being possessed / raised. The sign 'take' would by all means be associated with 'possessing' something, which means the speaker would have something for him / herself. Likewise, in [2], '**take** half-an-hour to buy coffee' the same sign suggests the amount of time which is 'possessed' by someone to perform the activity.

The invariant meaning for 'break' as in [1], [2] and [3], is postulated as 'X CAUSES Y TO MALFUNCTION'. Despite its different part of speech (i.e. verb for [1] and [3], and noun for [2]), this single invariant meaning conveys an unchanged meaning of this sign in different context of its use, but at the same time, with different messages as in *taking a break from routine life* with a slightly abstract concept and *the net will not break under the strain* which is literally showing the meaning of 'break' here as 'X exerts energy upon Y in order to impair Y's shape, function and continuity' (Morimoto & Loewen, 2007).

5.1 Take

TAKE: X POSSESSES / RAISES Y

1.   When the glue has had time to dry **take** a small inked roller and roll across the items.

[A SMALL INKED ROLLER IS POSSESSED]

2.   It can **take** half-an-hour to buy a coffee and seats are often not available.

 [HALF-AN-HOUR IS POSSESSED]

5.2 Break

BREAK: X CAUSES Y TO MALFUNCTION

1.   The old habits, acquired in the industrial revolution, are difficult to **break**.

[IT IS DIFFICULT FOR SOMETHING TO CAUSE THE OLD HABITS TO MALFUNCTION]

2.   I believe many people increasingly want their news when it is convenient for them -- when they get in from work, when they've picked up the children from school, when they take a **break** from their work, or finish a meeting, when they arrive at a hotel. [THEIR ROUTINE SUCH AS WORK / MEETING MALFUNCTIONS]

3.   If you clear them from the surface regularly, the net will not **break** under the strain.[THE NET WILL NOT MALFUNCTION IF IT IS CLEARED FROM THE SURFACE REGULARLY]

Discussing on the sign 'off', the invariant or core meaning of this particle is postulated as 'X IS AWAY FROM Y' where the conceptual metaphor 'STOPPING' and 'DEPARTURE' is embedded in the messages conveyed by each sentence above. In [1], *the backlit facility which is switched off* signifies the condition where the facility is away from the normal condition of use, which means 'stopped' in certain circumstances. Likewise, 'off' in [2] conceptualises the sign as in the sense of 'departure' when *someone is away from their place of origin / residence*.

On the other hand, 'down' is postulated as 'X DESCENDS TO Y / X SUBMERGES'. The use of this sign in language sample [1] is vivid where the meaning can always be inferred literally as *someone is walking down / descending / lowering to the lower floor*. However, the problem arises when the same sign is used as in [2] where the meaning connotes a metaphorical concept in which *unprofitable state enterprises is closing down*. Despite this situation, the single invariant meaning 'X DESCENDS TO Y / X SUBMERGES' is able to resolve this conflict from a literal to metaphorically abstract concept of the same sign which

shows that the *unprofitable state enterprises is submerging* that means 'going down (SUPPRESSING)'.

5.3 Off

OFF: X IS AWAY FROM Y

1. The backlit facility can be switched on and **off**. [THE BACKLIT FACILITY IS AWAY FROM USE - STOPPING]

2. A couple of years older than dad, she had lived in London for three decades, on and **off**. Mostly, she was **off**, travelling the world with Mr Gibbon, her constant companion for twenty-nine of those thirty years. [MOSTLY, SHE IS AWAY FROM LONDON - DEPARTURE]

5.4 Down

DOWN: X DESCENDS TO Y / X SUBMERGES

1. Soon after, the children heard Ruth call a taxi, then there was the sound of feet going outside and **down** the steps. [SOMEONE DESCENDS TO THE LOWER FLOOR - LOWERING]

2. While the Abalkin plan had tight deadlines for closing **down** or leasing unprofitable state enterprises, (industry by the beginning of 1991, state and collective farms by 1992), Mr Ryzhkov gave no cut-off date. [UNPROFITABLE STATE ENTERPRISES SUBMERGE - SUPPRESSING]

Table 1: *The Invariant Meaning of Verbs and Particles that Make up Phrasal Verbs*

No.	Verbs	Core meaning	Particles	Core meaning
1	Go	X (STARTING POINT) MOVES TO Y (END POINT)	Out	X ESCAPES THE BOUNDARIES OF Y
2	Get	X ACHIEVES / ACCOMPLISHES / ATTAINS Y	Off	X IS AWAY FROM Y
3	Set	X DETERMINES Y (WITH A FORCE)	Down	X DESCENDS TO Y / X SUBMERGES
4	Put	X PLACES Y (CONDITION)	Up	Y ASCENDS TO X / Y EMERGES
5	Break	X CAUSES Y TO MALFUNCTION		
6	Take	X POSSESSES / RAISES Y		

7	Turn	X APPEARS AS Y		
8	Come	X REACHES Y		
9	Look	X INTERPRETES THE ATTRIBUTES OF Y		
10	Bring	X MOVES TO Y (WITH A FORCE)		

The language sample analyses below show how the invariant meaning of individual verbs and particles motivate the distribution of messages when forming phrasal verbs. The analysis revealed that the invariant meanings of 'take' which is 'X POSSESSES / RAISES Y' and 'off' which is 'X IS AWAY FROM Y' are applicable to show the distribution of messages of the phrasal verb 'take off'. In [A], '**take off** your gloves' is inferred as 'gloves are possessed – X POSSESSES Y' and 'put away from hand – X IS AWAY FROM Y (SEPARATION)'.

> [A] TAKE OFF   TAKE   : X POSSESSES / RAISES Y
>
> OFF   : X IS AWAY FROM Y

And when you leave the laboratory, always remember to **take off** your gloves and check your hands in front of the scanner." (T)

[GLOVES ARE POSSESSED AND PUT AWAY FROM HAND – SEPARATION]

> [B] TAKE UP   TAKE   : X POSSESSES / RAISES Y
>
> UP   : Y ASCENDS TO X / Y EMERGES

When a friend suggested that I **take up** racing, my initial reaction was that at 42 I was too old. (T)

[RACING ACTIVITY IS POSSESSED AND IT ASCENDS / EMERGES TO BE CONTINUED – ACCESSIBLE]

The same sign, which is 'take', does not lose its point of departure despite being paired with another particle. The single invariant meaning of 'take' when combined with the invariant meaning of the particle 'up' (Y ASCENDS TO X / Y EMERGES), the combination revealed that '**take up** racing' can be inferred as 'an activity which is being possessed – X POSSESSES Y' and it 'ascends, which means it emerges to be continued – Y EMERGES (ACCESSIBLE)'.

> [C] BREAK DOWN   BREAK   : X CAUSES Y TO MALFUNCTION
>
> DOWN   : X DESCENDS TO Y / X SUBMERGES

In order to **<u>break down</u>** the straw, a greater use of chemicals will be required to encourage bacterial growth in time to assimilate the product, before the new crop emerges. (T)

[CHEMICALS CAUSE THE STRAW TO MALFUNCTION WHICH RESULTS IN THE STRENGTH OF THE STRAW TO DESCEND – SUPPRESSING]

[D] BREAK OUT   **BREAK**   **: X CAUSES Y TO MALFUNCTION**

                                               OUT   **: X ESCAPES THE BOUNDARIES OF Y**

An opposition MP, Mr Jan Van Eck, yesterday accused the police of complicity in the latest fighting to **<u>break out</u>** at the Cape Town squatter camp, Crossroads. (I)

[FIGHTING CAUSES INCONVENIENCE AS THE SITUATION IS NO LONGER SAFE (PEOPLE ESCAPE THE BOUNDARIES OF SAFETY - EXCLUDING]

In [C], the message of the phrasal verb 'break down' appears to be derived from the invariant meaning of 'break' which is 'X CAUSES Y TO MALFUNCTION' and 'down' which is 'X DESCENDS TO Y / X SUBMERGES' (which is also the opposite of 'up'). The message which is being communicated in 'in order to **<u>break down</u>** the straw, a greater use of chemicals…' is 'chemicals cause the straw to malfunction – X CAUSES Y TO MALFUNCTION' and therefore, 'it results in the strength of the straw to descend – X DESCENDS TO Y / X SUBMERGES (SUPPRESSING)'.

For [D], referring to the meaning of phrasal verb 'break out' in the Oxford Phrasal Verbs Dictionary, it is often associated with 'something unpleasant such as a fire or war which starts suddenly' and also 'escaping from a place or situation'. However, the invariant meaning of 'break' (X CAUSES Y TO MALFUNCTION) and 'out' (X ESCAPES THE BOUNDARIES OF Y) motivates the distribution of messages of these signs as in a phrasal verb form such as in [D] where 'the latest fighting to **<u>break out</u>** at the Cape Town…' is realised as 'fighting causes inconvenience – X CAUSES Y TO MALFUNCTION' and 'people are escaping the boundaries of safety – X ESCAPES THE BOUNDARIES OF Y (EXCLUDING)'.

6. Results

6.1 Results from pre-test and post-test

It was found that for the taught items, the students' scores have indicated significant improvement within the experimental group [i.e. paired samples t-test: {t = (14) = -7.4, p

<.05} between pre-test (M = 34.33, SD = 9.23) and post-test (M = 61, SD = 15.38)] and in between the groups [i.e. independent samples t-test: {t = (28) = 3.67, p <.05} between experimental group (M = 61, SD = 15.38) and control group (M = 38.67, SD = 17.88)]. The control group too, marked improvement in the paired samples t-test [i.e. {t = (14) = -2.32, p <.05} between pre-test (M = 29.33, SD = 15.68) and post-test (M = 38.67, SD = 17.88)]. The inferential analyses through paired samples t-test and independent samples t-test indicate that although both groups performed significantly better in post-tests compared to pre-tests, the experimental group which received the semantic-based explicit (verbs and particles in phrasal verbs) instruction outperformed (significantly) the control group which received traditional instruction.

Despite the convincing results, for the untaught (novel) items, the students' performance did not illustrate any significant mean difference within the experimental group [i.e. paired samples t-test: {t = (14) = -1.14, p <.05} between pre-test (M = 25.93, SD = 13.55) and post-test (M = 28.89, SD = 14.43) and control group (i.e. paired samples t-test: {t = (14) = -1.08, p <.05} between pre-test (M = 26.3, SD = 14.62) and post-test (M = 29.26, SD = 12.85)]. There was also no significant mean difference found for the results of the independent samples t-test between the groups for the untaught items [i.e. {t = (28) = -.08, p <.05} between experimental group (M = 28.89, SD = 14.43) and control group (M = 29.26, SD = 12.85)].

The independent samples t-test for the taught items pre-test and untaught items pre-test showed no significant mean difference between the groups [i.e. taught items: {t = (28) = 1.06, p <.05} between experimental group (M = 34.33, SD = 9.23) and control group (M = 29.33, SD = 15.68); untaught items: {t = (28) = -.07, p <.05} between experimental group (M = 25.93, SD = 13.55) and control group (M = 26.3, SD = 14.62)]. These results signify the homogeneity of samples' knowledge from both experimental and control groups. The tables below illustrate the findings from the paired samples t-test and independent samples t-test for the taught and untaught phrasal verb items:

Table 2: *Mean Difference between the Pre-Test and Post-Test for Taught Items*

Group	Pre-Test	Post-Test	Paired samples t-test (Sig. < 0.05)
Experimental N = 15	M : 34.33 SD : 9.23	M : 61.00 SD : 15.38	0.000
Control N = 15	M : 29.33 SD : 15.68	M : 38.67 SD : 17.88	0.036
Independent samples t-test (Sig. < 0.05)	0.296	0.001	-

The findings of this study have shown that the semantic-based explicit (verbs and particles in phrasal verbs) instruction is to certain extent effective in developing the students' use of phrasal verbs. This suggests that the explicit exposure to the invariant meaning (which comprises conceptual metaphor) of individual signs that makes up phrasal verbs helps learners to assimilate the meanings to interpret the messages conveyed by the phrasal verbs as a whole, in all contexts. Based on Table 3, it is clear that the findings of this study are significant in its own way than that of certain previous studies (Condon, 2008; Yasuda, 2010). In Condon's (2008) study, the results show that the performance of the experimental group improved after the treatment session for the taught items compared to the control group especially in the delayed post-test which signifies that the explicit knowledge of CL motivations underlying phrasal verbs helps retention. In addition, the use of conceptual metaphor was also found fruitful especially for the learners to use the knowledge to make appropriate use of unexposed (novel) phrasal verb categories instead of the exposed categories (Yasuda, 2010). Discussing on the most contributing factor which resulted in the success of the treatment is perhaps the treatment method itself which adopted the invariant meaning concept which is blended with the Cognitive Linguistics approach within the ESL context which is different from an EFL context.

Table 3: *A Comparison with Previous Quasi-Experimental Studies*

Previous Studies Method / Findings	...lon ...8)	Yasuda (2010)	Lee (2012)	Kartal & Uner (2017)	This Study
Method of Instruction	Experimental group (Class A: groups 2 and 4): Cognitive Linguistics motivations based on Rudzka-Ostyn's (2003) classification of particles. Control group (Class B: groups 1 and 3): Traditional approach of providing paraphrases and translations.	Experimental group: Cognitive semantic approach with orientational metaphor awareness of particles. Control group: Traditional approach (translation from English to Japanese and memorisation).	Experimental group: Concept-Based Instruction with Schemas for the Orienting Basis of Action (SCOBAs) to accompany the metaphorical aspects of phrasal verbs.	3 pairs: Beginner, Elementary, Pre-intermediate. Experimental group: instruction on orientational metaphor or particles and memorisation of meanings of phrasal verbs. Control group: 21 English phrasal verbs translated into Turkish and participants were asked to memorise.	Experimental group: Semantic-based explicit instruction (conceptual metaphor within invariant meaning of verbs and particles). Control group: Traditional instruction with meanings extracted from Oxford Phrasal Verbs Dictionary.
Item in focus	Phrasal verbs with 'up', 'down', 'out' and 'in'.	Phrasal verbs with 'up', 'down', 'into', 'out' and 'off'.	Phrasal verbs with 'up', 'out' and 'over'.	Phrasal verbs with 'down', 'into', 'out', 'up' and 'off'.	Phrasal verbs with 'out', 'off', 'down' and 'up'.
L1 of participants	French	Japanese	Chinese Korean Thai	Turkish	Malay
Context	EFL	EFL	EFL	EFL	ESL

| Findings | The experimental group in Class A did significantly better than the control group for the taught phrasal verbs in the delayed post-test.

The control group in Class B did best for the taught phrasal verbs in the immediate post-test.

Both experimental groups remembered more of the taught phrasal verbs in the delayed post-test than in the immediate post-test.

There was no evidence of successful transfer of Cognitive Linguistics insights to the processing and remembering encountered phrasal verbs. | The experimental group performed significantly better than the control group in the unexposed category of phrasal verbs, whereas the difference between the two groups is not statistically significant in the exposed list of phrasal verbs.

Metaphorical thought helps learners to make an attempt to understand a novel combination. | CBI enhanced understanding for the majority of students.

(Schemas for the Orienting Basis of Action) developed to accompany the explanation of the metaphorical properties of phrasal verbs were clearly instrumental for understanding the motivated nature of particle use.

Meaning-oriented grammar instruction should not be neglected. | The effectiveness of the explicit teaching of metaphoric knowledge shows differences across proficiency levels.

Pre-intermediate students were the most successful group in applying the conceptual metaphoric knowledge to the novel (unexposed) phrasal verbs. | The experimental group outperformed the control group for taught phrasal verb items.

The invariant meaning concept which is blended with the Cognitive Linguistics approach within the ESL context helps to improve learners' use of phrasal verbs. |
|---|---|---|---|---|---|

7. Conclusions and Pedagogical Implications

The findings of this study are parallel to previous studies' results (Lee, 2012; Kartal & Uner, 2017). However, this study is perhaps the first to examine the effect of an explicit semantic-based instruction of verbs and particles on learning phrasal verbs in a Malaysian ESL context. On another note, as a step of looking it forward, this study offers a rather novel approach by combining the Cognitive Linguistics motivations with the Columbia School theory to reveal that in order to make appropriate use of phrasal verbs, not only the particles, but the meaning of verbs should also be made explicit to enhance learning. This is in line with the Columbia School theory which believes "polysemy creates a communicative burden of remembering all the possible uses of a form and inferring the particular meaning exploited in each specific context" (Dreer, 2007:31) and hence offers the postulation of "relatively abstract invariant meanings that account for all uses of their signs" (Dreer, 2007:31), which is in contrary to the Cognitive Grammar which upholds polysemy.

In conclusion, it is recommended that this approach is adopted in the teaching and learning process of English phrasal verbs in the ESL classrooms. The ESL learners need to be exposed to the invariant meanings of each sign which constitute a phrasal verb (i.e., verb and particle). It is highly suggested that the ESL teachers play a vital role in analysing authentic language samples to see how these signs are being used in order to communicate messages in the speech community. The exposure to the different types of phrasal verbs, ranging from literal to non-literal (figurative) is deemed necessary to show how each sign motivates the distribution of messages of the English phrasal verbs. The postulation and understanding of the invariant meaning needs a learner's use of cognitive ability (i.e. mental imagery) on how they perceive information by relating it to the existential knowledge. The results of this study support Saussurean (1983)'s claim that each linguistic item is a sign which carries a vague (unchanged) meaning which motivates the distribution of messages in every context of its occurrences (i.e. a sign is extended metaphorically from concrete 'spatial' messages to the more abstract realm of 'temporal' to the even more abstract realm of 'existential' message).

8. Limitations & Recommendations for Future Research

This study was conducted in rather a small scale which included only 15 students in the experimental group and another 15 students in the control group. These students were not randomly selected as the researcher was not able to exercise complete authority over the

respondents. The use of intact groups may to some extent have an impact on the homogeneity of the samples. Hence, the results obtained may not be completely generalised to other settings or context of learning. In relation to these constraints, it is recommended that future researchers be more tactful in planning and executing the research especially in terms of number of respondents (at least 30 as in one class) and homogeneity of respondents (i.e., demographic background – age, ethnicity, language spoken; English language proficiency level – low, average, high, etc.) These aspects are important to yield a significant result which can be generalised to a wider context.

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