

## Article

# The Conceptualization of English Phrasal Verbs by Greek Primary School Learners: An Empirical Cognitive Approach

Efthymia Tsaroucha 

School of Economics and Administrative Sciences, University of Thessaly, 38221 Volos, Greece; efiaeris@yahoo.gr

Received: 14 April 2019; Accepted: 24 June 2019; Published: 2 July 2019



**Abstract:** This study investigates the way Greek EFL elementary students conceptualize English phrasal verbs of the form component verb (take) plus component particle (*up, down, in, out, back, off, on, apart*). It is suggested image schemas play a facilitatory role in the conceptualization and interpretation of the figurative meanings of English phrasal verbs. The study argues that within the phrasal verb construct, the component particle prompts for the extension from literal to figurative meanings since the particle designates image schematic experiences (bodily-kinesthetic). The study conducted two types of test: (1) meaning of the sentence and (2) image-matching from the sentence. In test 1, participants were asked to read sentences which contained the verb *take* plus particles and they had to select the most appropriate meaning of the phrasal verb that matched the overall meaning of the sentence. In test 2, participants were asked to read sentences wherein phrasal verbs of the form *take* plus particles were highlighted. They were asked to match the meaning of the phrasal verb with one image. Each image represented a different type of image schema such as CONTAINER, FRONT-BACK ORIENTATION and PROXIMITY-DISTANCE.

**Keywords:** English phrasal verbs; figuration; young learners; cognitive processes; metaphor; image schemas

## 1. Introduction

The present study aims to introduce a cognitive linguistics-based teaching approach to the grammatical category of English phrasal verbs. It is suggested that image schemas play a facilitatory role to the conceptualization and interpretation of the figurative meanings of this grammatical category. The study investigates how Greek EFL elementary students conceptualize English phrasal verbs of the form *take plus particles*. The study investigates the extent according to which (i) image schemas raise students' awareness of the underlying conceptual motivation of the component verbs and particles, and (ii) an image-schematic approach to English phrasal verbs helps learners to study the figurative meanings of phrasal verbs more efficiently. It should be noted that the contribution of the current study originates from the fact that there is a blank in the literature concerning the conceptualization of English phrasal verbs by Greek EFL elementary students. As far as the Greek setting of teaching English as a foreign language is concerned, apart from this study, there is only X's (2018) study which investigated how foreign learners of English (Greek and German University students) accessed the non-literal meanings of English phrasal verbs.

To begin with, English phrasal verbs constitute one of the most difficult areas of English grammar as far as their teaching and learning is concerned (cf. Rudzka-Ostyn 2003). Foreign learners of English and even native speakers of English often find it challenging to use and/or interpret the correct phrasal verb within the appropriate context (cf. Tsaroucha 2018). Such difficulties are due to the special grammatical status of English phrasal verbs which derives from the verb plus particle composition

(cf. Bolinger 1971; Jackendoff 2002). It is suggested that English phrasal verbs are idiomatic due to the unpredictability of their meanings since their meanings are not the sum of their component parts (for example, *blow over* means ‘to pass’ or ‘to finish’) (cf. Tsaroucha 2018; Kohl-Dietrich et al. 2016).

A review of the literature has shown that there is no common ground concerning the definition of this special grammatical category. According to Curme (1925), Kruisinga (1925) and Poutsma (1926), English phrasal verbs are defined as “compound verbs”, or as “group verbs”. These definitions suggest that particles function as prepositions when they are attached to intransitive verbs, and the verb governs the object. Moreover, Smith (1923) argued that English phrasal verbs are idiomatic phrases because the meanings of the phrases are not implied by the meanings of the words that compose them. Bolinger (1971) claimed that English phrasal verbs represent a double layer of compounding. Specifically, he suggested that particles are more or less affixal in nature; the first compositional layer is the simple association of a verb and a particle, whereas the second compositional layer is a differentiation within the phrasal verb. This type of differentiation is related to the varying position of the particle in a sentence. Following Bolinger’s (ibid.) approach, Huddleston and Pullum (2002) defined English phrasal verbs as “prepositional verbs” because the verb selects a preposition as its complement. According to Jackendoff (2002), English phrasal verbs are “idiomatic particle verbs” as they have non-compositional meanings and they are listed in the lexicon as complete units.

Moreover, the framework of Cognitive Linguistics defines English phrasal verbs as lexical items acting as prompts for meaning construction (cf. Turner 1991, 1996; Fauconnier 1994, 1997; Fauconnier and Turner 1998, 2002). This idea suggests that speakers conceptualize English phrasal verbs in a highly creative way due to elaboration and integration of both linguistic and non-linguistic information. Rudzka-Ostyn (2003) argued for a cognitive approach concerning the conceptualization of English phrasal verbs. According to this approach, English phrasal verbs are rooted to image schemas.

Rudzka-Ostyn (2003) suggested that if the meaning of the component verb is known and the meaning of the component particle is spatial, the phrasal verb could be easily understood. She has focused on the semantics of the particle and she has claimed that particles communicate image schematic experiences. According to her, the prototypical meaning of the particle can change the overall meaning of the phrasal verb. The present paper examines whether young learners of English can interpret the meanings of English phrasal verbs by means of image schemas.

As far as image schemas are concerned, Johnson (1987) suggested that image schemas constitute spatial pre-conceptual configurations arising from everyday bodily experiences. According to him, image schemas reflect the way humans perceive space; spatial perception constitutes a core tenet of human interaction with the environment that further holds for the embodiment of meaning. Johnson (ibid., p. xiv) stated an image schema could be defined as a “recurring, dynamic pattern [ . . . ] that gives coherence and structure to our experience”. Therefore, image schemas are embodied as they emerge through our continuous interaction with the physical environment and as a consequence, they are “constantly operating in our perception, bodily movement through space, and physical manipulation of objects” (ibid., p. 23).

Johnson (1987, p. xv) stated that embodied experience manifests itself at the cognitive level in terms of image schemas; hence, concepts like contact, balance, source–path–goal are meaningful because they derive from and are linked to our interaction with other people and our environment. These embodied concepts are systematically extended to provide more abstract concepts and conceptual domains with structure (ibid., p. xv). The metaphorical projection from the concrete to the abstract enables the language user to understand physical experience in two ways: (i) our bodily movements and interactions in various physical domains of experience are structured (with image schemas) and (ii) that structure can be projected by metaphor onto abstract domains (ibid., p. xv). Lakoff and Johnson (1980) stated that many areas of experience are metaphorically structured by means of a rather small number of image schemas.

Moreover, Tyler and Evans (2005, p. 30) highlighted that image schemas constitute an attempt to understand conceptual structures or concepts not only as propositional information but also as

"[ ... ] redescriptions of spatio-physical external experience". Even if a significant portion of conceptual structure is external in origin, there is further evidence suggesting that "a portion of conceptual structure represents a redescription not of external preparatory experience, but rather of internal perceptory experience" (Grady 1997; Evans 2000 cited in Tyler and Evans 2005, p. 30).

According to De Mendoza Ibáñez and Velasco (2002, p. 508), an image schema functions as "a source input space cued by the metaphorical expression whose basic structure and logic agrees with the structure and logic of generic space". In their approach, image schemas are grouped into four types, namely, (i) abandoned space (or container), (ii) path, (iii) contact and (iv) bodily orientations (up-down, front-back, center-periphery) (ibid., p. 507). Whenever an image schema is involved in an expression, "it provides the basic blueprint for the projection and combination of information from other Idealized Cognitive Models" (ibid., p. 508). Moreover, according to Taylor (2002, pp. 337–38), the most basic image schemas are CONTAINMENT, A JOURNEY AND ITS COMPONENT PARTS, PROXIMITY-DISTANCE, LINKAGE-SEPARATION, FRONT-BACK ORIENTATION, PART-WHOLE RELATIONSHIP, LINEAR ORDER, UP-DOWN ORIENTATION, MASS VS. MULTIPLEX CONCEPTUALIZATIONS. It should be noted that the present article adopts Taylor's (ibid.) classification of image schemas in order to argue for the cognitive grounding of English phrasal verbs.

Finally, the study investigates how Greek EFL elementary students conceptualize the English verbal phrases of the form *take + up, down, in, out, off, apart, back, on* through two tests: (1) meaning of the sentence (20 phrasal verbs) and (2) an image-matching from the sentence (14 phrasal verbs). It is argued that image schemas play a facilitatory role in accessing and interpreting the non-literal meanings of the grammatical category of English phrasal verbs. It is also suggested that within the construct of an English phrasal verb, the component particle designates senses of space and motion which are communicated by various types of image schemas. It is hypothesized that when foreign learners of English are exposed to image schemas, they can successfully access the non-literal meanings of English phrasal verbs due to the semantics of the particle which embodies senses of space and motion. The findings showed that participants of test 2 (image-matching task) responded better to the interpretation of the non-literal meanings of English phrasal verbs than participants of test 1 (meaning of the sentence). The findings of test 2 demonstrated that EFL elementary students relied on image schemas in order to match the meaning of the English phrasal verb of each sentence to one picture. Therefore, the instruction of English phrasal verbs by means of image schemas seems to constitute a successful teaching approach, since deep cognitive processing is encouraged. Learners can simultaneously adjoin the meaning of the sentence to images which are rooted to bodily-kinesthetic experiences. The instruction of English phrasal verbs through image schemas also encourages learners to connect the meanings of phrasal verbs to more abstract and figurative senses.

## 2. The Study

### 2.1. Institution

The study took place at the third experimental primary school of Evosmos, Thessaloniki, Greece. In this primary school, students are exposed to English on a daily basis. Besides the English course, students are taught courses like geography, physics and mathematics in English. The way courses are taught in this school might indicate that young learners of English could successfully conceptualize the grammatical category of English phrasal verbs due to their constant exposure to the English language through various courses. At the third experimental primary school of Evosmos, all students were enlisted to immersion programs of learning English as a second language.

### 2.2. Participants

Seventy-eight (78) Greek primary school learners participated in the study. An equal number of male and female subjects participated in the study. They were all students of the 4th and 5th grade at the third experimental primary school of Evosmos, Thessaloniki. They were all native speakers of

Modern Standard Greek. They were between 10–11 years of age. They were all exposed to English as a foreign language since 1st grade (4–5 years approximately). Apart from English as a second language, they were taught a great number of courses in English, such as geography, physics and mathematics. All subjects gave their informed consent for inclusion before they participated in the study. The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Ethics Committee of Aristotle University of Thessaloniki, Greece (regulatory decision 47 n. 4485/4-8-2017).

### 2.3. Method: Materials

The study attempted to investigate the degree to which Greek young learners of English can conceptualize English phrasal verbs. Particularly, the study examined phrasal verbs with *take*: *take up*, *take down*, *take in*, *take out*, *take off*, *take on*, *take back* and *take apart*. These phrasal verbs were chosen due to the high degree of frequency of use they exhibit and due to their polysemous meanings. Moreover, these phrasal verbs were selected due to the properties of the component particles which designate physical space and motion. The study aimed to examine how Greek EFL elementary students conceptualize the extensions from physical space and motion into more abstract and figurative senses. The study selected these phrasal verbs in order to investigate how the component particles give rise to certain types of image schemas (e.g., how the component particle *out* when employed onto the phrasal verb construct of *take out* triggers the CONTAINMENT image schema). The items were retrieved from the following sources, namely, *The Oxford Dictionary of English*, *Macmillan Dictionary*, *Collins English Dictionary*, *Merriam-Webster Dictionary*, *Longman Dictionary of Contemporary English*, *BNC*, *The Oxford Dictionary of Phrasal Verbs*.

### 2.4. Types of Task

In this study, two types of tasks were conducted. Both of them were off-line tasks. In task 1, participants were distributed blind closed-type questionnaires. Task 2 was a sentence-processing picture-matching task. The following section presents the tasks conducted in the study, the methodology of the study, and the results for task 1 and task 2 are also presented. In task 1, the study examined how participants interpret the correct figurative meanings of 20 instances of phrasal verbs of the form *take* + *up*, *down*, *in*, *out*, *off*, *apart*, *back*, *on*. In task 2, the study examined how image schemas help participants to conceptualize the correct meanings of 14 instances of phrasal verbs of the form *take* + *up*, *down*, *in*, *out*, *off*, *apart*, *back*, *after*. The context was different in each task. Different groups of subjects participated in each task.

## 3. The Tasks

### 3.1. Task 1

Task 1 was a blind closed-type questionnaire. Forty (40) subjects participated in task 1. Participants were not exposed at all to the scope and content of the study. The questionnaire involved twenty (20) sentences. Each sentence included phrasal verbs of the form *take* plus particles, that is, *take up*, *take down*, *take in*, *take out*, *take off*, *take on*, *back* and *take apart*. For each sentence, participants were given four (4) different interpretations for the phrasal verb. They were asked to choose the most appropriate interpretation for the phrasal verb of each sentence. In each sentence there was also one interpretation which was semantically related to the most appropriate one. This was used in order to test the extent according to which young learners of English can distinguish between two semantically related interpretations of the phrasal verbs of the form *take* plus particles. The rest of the interpretations were irrelevant to the meanings of the phrasal verbs of the sentences.

Table 1 illustrates the phrasal verbs of the form *take* plus particles that were examined in task 1: blind closed-type questionnaire. Table 1 also shows the interpretations for the phrasal verb of each sentence among which participants had to choose the most appropriate one.

**Table 1.** Instances of English phrasal verbs used in task 1 along with their possible interpretations.

SENTENCE	Ph. VERB	INTERPRETATIONS	CORRECT TARGET
I am really busy these days. I do not have time to do anything. The extra duties have taken up most of my time.	<i>Take up</i>	(a) To use up, consume, occupy (b) To develop an interest (c) To deal with (d) To absorb	To use up, consume, occupy
Crops take up nutrients.	<i>Take up</i>	(a) To raise, lift (b) To deal with (c) To absorb (d) To enter into	To absorb
Jane is such a good lawyer. She really managed to take down her opponent during the trial.	<i>Take down</i>	(a) To bring to a lower position from a higher one (b) To understand (c) To humiliate (d) To reduce in size	To humiliate
In maths class the teacher told us to be careful. He asked us to take down all the important points.	<i>Take down</i>	(a) To bring to lower position from a higher one (b) To understand (c) To look at carefully (d) To write something in full details	To write something in full details
I have asked my mum to take in this skirt; I have lost some weight recently.	<i>Take in</i>	(a) To reduce in size (b) To divide (c) To look at carefully (d) To accept	To reduce in size
He speaks so fast. I can't take anything in from him.	<i>Take in</i>	(a) To include (b) To understand (c) To look at/listen carefully (d) To accept	To understand
He played poker and he has lost much money; his bad habits took him in.	<i>Take in</i>	(a) To reduce in size (b) To understand (c) To deceive (d) To convey a prisoner to a police station	To deceive
He works so hard; he earns enough money to take out anything he wishes.	<i>Take out</i>	(a) To remove (b) To obtain (by legal, official processes) (c) To buy (d) To prevent from	To buy
How did you take out your visa? I was trying for a month and I couldn't do anything!	<i>Take out</i>	(a) To remove (b) To obtain (by legal, official processes) (c) To buy (d) To prevent from	To obtain by legal, official process
It's true that John likes you. Has he taken you out yet?	<i>Take out</i>	(a) To cause to leave (b) To remove (c) To make a date (d) To meet	To make a date
The plane takes off at midnight.	<i>Take off</i>	(a) To remove (b) To begin a journey (c) To bring/take/pull something out (d) To fly for an aircraft	To fly for an aircraft
Take off your jacket; it's too hot in here.	<i>Take off</i>	(a) To remove (b) To prevent from (c) To reduce in size (d) To raise, lift	To remove
You have been working so hard lately! You need to take some days off!	<i>Take off</i>	(a) To remove (b) To divide (c) To collect (d) To prevent from	To remove
The fire took their house apart and they have no place to live.	<i>Take apart</i>	(a) To remove (b) To destroy (c) To divide (d) To kill	To destroy

Table 1. Cont.

SENTENCE	Ph. VERB	INTERPRETATIONS	CORRECT TARGET
This was a very expensive vase! How did you take it apart?	<i>Take apart</i>	(a) To break (b) To destroy (c) To divide (d) To collect	To break
We have recently lost our jobs and our apartment was taken apart when we had no money to pay the bills.	<i>Take apart</i>	(a) To break apart (b) To destroy (c) To divide (d) To analyze	To break apart
Take back the box from the other room.	<i>Take back</i>	(a) To bring back, return (b) To withdraw (c) To move (d) To cause someone to remember the past	To move
After what happened between them, he realized he was wrong and he decided to take back his words.	<i>Take back</i>	(a) To bring back, return (b) To resume a relationship after an interruption (c) To move (d) To cause somebody to remember the past	To resume a relationship after an interruption
Jackson took on Jim in the ring. It was a fantastic fight! Jackson is a really good boxer.	<i>Take on</i>	(a) To face (b) To destroy (c) To meet (d) To play	To face
I'll take on this task, no matter how difficult it seems to be!	<i>Take on</i>	(a) To change (b) To accept as a challenge (c) To analyze (d) To play	To accept as a challenge

### 3.2. Results and Instances of English Phrasal Verbs Tested in task 1

The present paper discusses two instances of the English phrasal verbs that were tested in task 1. CASE 1 investigated the way Greek primary school learners of English interpreted the figurative meanings of the English phrasal verb *take in* (1). CASE 2 investigated the way participants interpreted the figurative meanings of the English phrasal verb *take out* (2).

1. He played poker and he has lost much money; his bad habits took him in.
2. He works so hard; he earns enough money to take out anything he wishes.

#### 3.2.1. Case 1: TAKE IN

As far as CASE 1 is concerned, participants were asked to choose the correct meaning for the English phrasal verb *take in*. Table 2 illustrates the correct meaning of *take in* as 'to deceive', when used in the context *he played poker and he has lost much money; his bad habits took him in*.

Table 2. *Take in* interpretations.

Phrasal Verb.	Interpretations	Correct Interpretation
TAKE IN	(a) To deceive (b) To convey a prisoner to a police station (c) To reduce in size (d) To understand	(a) To deceive

The statistical analysis included descriptive statistics and chi-square tests. Two types of statistical tests were conducted. TEST A compares correct to incorrect responses. TEST B compares correct responses to incorrect responses which, however, are semantically related to a certain degree. Table 3 illustrates the frequencies and the percentages of participants' responses to the interpretation of the phrasal verb *take in*. Table 4 illustrates descriptive statistics and chi-square test results for *take in*.



**Table 3.** Percentages and frequencies for *take in*.

PERCENTAGES AND FREQUENCIES ON PARTICIPANTS' RESPONSES					
Phrasal verb		Context			
Take in		He Played Poker and He Has Lost Much Money; His Bad Habits Took Him in.			
SELECTIONS					
Correct Selection	Result %	Frequency	Incorrect Selections	Results %	Frequency
"To deceive"	65%	26	"To convey a prisoner to a police station"	27.5%	11
			"To reduce in size"	5%	2
			"To understand"	2.5%	1
Total number of responses: 40					

**Table 4.** Chi-square tests for *take in*.

DESCRIPTIVE STATISTICS & Chi-SQUARE TEST RESULTS					
ENGLISH PHRASAL VERB TESTED			TAKE IN		
CONTEXT:			<i>He Played Poker and He Has Lost Much Money; His Bad Habits Took Him in.</i>		
TYPE OF TEST	Total	Expected Range	Total	Expected Range	Chi-Square Test: <i>p</i> Value
TEST A: Correct vs. Incorrect Responses Compared	Correct Responses		Incorrect Responses		0.057
	26	20	14	20	
TEST B: Correct vs. Incorrect Semantically Related Responses Compared	Correct Responses		Sem_Rel. Incorrect Responses		0.013
	26	18.5	11	18.5	

Chi-square tests showed that the results are statistically significant in (a) the way participants distinguished between the correct and the incorrect interpretation of the English phrasal verb *take in* and (b) the way participants distinguished between the correct and the semantically related (but incorrect) interpretation of the phrasal verb *take in*. The results of TEST A indicate that participants who selected 'to deceive' as the correct interpretation of *take in* accessed the meaning of this phrasal verb metaphorically. Metaphor, as a fundamental cognitive process, states that two elements are brought together but the source domain loses its existence when mapped onto the target domain (Dirven 2002, p. 100). Even though the source domain seems to be wiped out, some aspects of its own nature or structure are transferred to the target domain (ibid.).

It could be assumed that participants mapped the semantics of *bad habits* onto the semantics of *take in*. This could be related to the fact that the semantic of the particle *in* was interpreted figuratively. According to Rudzka-Ostyn (2003, pp. 55, 57), the figurative meanings of *in* suggest that situations, circumstances, psychological and physical states are viewed as containers. The findings of TEST B suggest that participants, who selected "to convey a prisoner to a police station" as the correct interpretation of *take in*, accessed the meaning of the phrasal verb literally. As a consequence, it seems that participants accessed the literal meaning of the particle *in* which designates actions such as 'being inside a container' and/or 'entering a container' (ibid.).

### 3.2.2. Case 2: TAKE OUT

As far as CASE 2 is concerned, participants were asked to choose the correct meaning for the phrasal verb *take out* as 'to buy' (3). Table 5 illustrates the interpretations of *take out*, among which participants had to choose the most appropriate one.

3. He works so hard; he earns enough money to take out anything he wishes.

Table 5. *Take out* interpretations.

Phrasal verb	Selections	Correct Selection
<i>TAKE OUT</i>	(a) To buy (b) To obtain (by legal/official processes) (c) To prevent from (d) To remove	(a) To buy

CASE 2 followed the same type of statistical analysis as CASE 1. Table 6 illustrates the frequencies and the percentages of participants' responses to the interpretation of the figurative meanings of the English phrasal verb *take out*. Table 7 illustrates descriptive statistics and chi-square test results for *take out*. TEST A compares correct to incorrect responses and TEST B compares correct responses to the semantically related incorrect ones.

Table 6. Percentages and frequencies for *take out*.

PERCENTAGES AND FREQUENCIES ON PARTICIPANTS' RESPONSES					
Phrasal verb		Context			
Take out		He Works So Hard; He Earns Enough Money to Take Out Anything He Wishes.			
SELECTIONS					
Correct Selection	Result %	Frequency	Incorrect Selections	Results %	Frequency
"To buy"	57.5%	23	"To obtain" (by legal, official processes)	17.5%	7
			"To prevent from"	17.5%	7
			"To remove"	7.5%	3
Total number of responses: 40					

Table 7. Chi-square tests for *take out*.

DESCRIPTIVE STATISTICS & Chi-SQUARE TEST RESULTS					
ENGLISH PHRASAL VERB TESTED			TAKE OUT		
CONTEXT	He Works So Hard; He Earns Enough Money to Take Out Anything He Wishes.				
TYPE OF TEST	Total	Expected Range	Total	Expected Range	Chi-Square Test: $p$ Value
TEST A: Correct vs. Incorrect Responses Compared	Correct Responses		Incorrect Responses		0.342
	23	20	17	20	
TEST B: Correct vs. Incorrect Semantically Related Responses Compared	Correct Responses		Sem_Rel. Incorrect Responses		0.003
	23	15	7	15	

As far as TEST B is concerned, chi-square tests revealed a highly statistically significant *p* value. The results showed that only seven (7) participants selected unsuccessfully 'to obtain by legal/official processes' as the correct interpretation of the English phrasal verb *take out*. This may indicate that even if this interrelation is semantically related to the correct figurative meaning of *take out* as 'to buy', the vast majority of the participants were not confused as they managed to select the correct figurative meaning of this phrasal verb.

The results may also indicate that the participants who selected 'to buy' as the correct interpretation of *take out* accessed its meaning by means of metaphor. As discussed in CASE 1 (*take in*), metaphorical mappings encourage correspondences across conceptual domains (Lakoff and Johnson 1980). Therefore, by means of metaphor a particular activity, namely, *hard work*, is mapped onto the domain of MONEY. The domain of MONEY is encouraged by the phrasal verb *take out* because in this particular context (3)





### 3.3.1. Results and Cases Analyzed in Task 2

As far as CASE C is concerned, participants were asked to match the interpretation of the English phrasal verb *take off* (4) to the correct picture. CASE C examined the degree according to which participants could manage to choose the CONTAINMENT image schema as the most appropriate picture for *take off*. As far as CASE D is concerned, participants were asked to match the interpretation of the English phrasal verb *take back* to the correct picture (5). CASE D examined the degree according to which participants could manage to choose the SIMILARITY/LINKAGE/PROXIMITY images schema as the most appropriate picture for *take back*.

4. Take off your sweater; it's too hot in here.
5. This photo takes me back to the old days.

### 3.3.2. Case C: Take Off (The Containment Image Schema)

CASE C examined the degree according to which participants could match the CONTAINMENT image schema (picture d, see Table 8 above) to *take off* when it is used in the context the *take off your sweater; it's too hot in here* (4). According to Johnson (1987, p. 21), “[...] we are aware of our bodies as three-dimensional containers into which we put certain things (food, water, air) and out of which other things emerge (food and water wastes, air, blood, etc.). Rooms, clothes, vehicles and numerous kinds of bounded spaces are experienced as physical containments”. Moreover, Taylor (2002, p. 337) suggested that “the CONTAINMENT schema evokes by definition a container, with its inside and outside parts, in the domain of a three-dimensional space”.

Tables 9 and 10 illustrate the results concerning participants' responses. Table 9 illustrates frequencies of participants' responses for both the correct picture and for the incorrect ones. Table 10 illustrates the results of chi-square tests which were conducted in order to compare the correct to incorrect responses.

Table 9. Frequencies for *take off*.

PERCENTAGES AND FREQUENCIES ON PARTICIPANTS' RESPONSES					
Phrasal verb			Sentence		
Take off			Take Off Your Sweater; It's Too Hot in Here!		
SELECTIONS					
Correct Selection	Result %	Frequency	Incorrect Selections	Results %	Frequency
CONTAINMENT image schema (Entity moving out of a container)	86.1%	31	SIMILARITY/LINKAGE/ PROXIMITY image schema	5.5%	2
			FORCE/SCALARITY image schema	2.7%	1
			SEPARATION image schema	2.7%	1
			PART-WHOLE image schema	2.7%	1
			INCLUSION image schema	0%	0
			BACK ORIENTATION image schema	0%	0
Total number of responses: 36					

Table 10. *p*-value for *take off*.

DESCRIPTIVE STATISTICS & Chi-SQUARE TEST RESULTS					
ENGLISH PHRASAL VERB TESTED			<i>Take Off</i>		
SENTENCE:			<i>Take Off Your Sweater; It's Too Hot in Here!</i>		
	Total	Expected Range	Total	Expected Range	Chi-Square Test: <i>p</i> Value
Correct vs. Incorrect Responses Compared	Correct Responses		Incorrect Responses		0.468
	31	18	5	18	

The results showed that the vast majority of the participants (86.1%) managed to match the CONTAINMENT image schema to *take off*, when it employed to the context of *take off your sweater; it's too hot in here* (4). The results suggested that the participants who selected the CONTAINMENT image schema accessed the prototypical (spatial) meaning of the particle *off*. According to Rudzka-Ostyn (2003, pp. 121–26), *off* carries the interpretations of (i) 'to break contact', (ii) 'loss of spatial contact or spatial separation', (iii) 'separation as loss of contact', (iv) 'separation as interruption of flow/supply' and (v) 'separation due to motion away from its former state, condition or point of reference'. Therefore, the participants who matched the CONTAINMENT image schema to *take off* might have thought of the human body as a container and the *sweater* as a content. In this respect, the figure interpretation of *take off* designates that a content (*sweater*) is moving out of a container (=human body).

### 3.3.3. Case D: Take Back (The Similarity/Linkage/Proximity Image Schema)

CASE D examined the degree according to which participants could match the SIMILARITY/LINKAGE/PROXIMITY image schema (picture e, see Table 8 above) to the English phrasal verb *take back* when it is employed to the context *This photo takes me back to the old days* (5). According to Evans (2010, pp. 31–36), "the SIMILARITY/LINKAGE/PROXIMITY image schema indicates that the conceptualization of objects is subject to Gestalt principles such as: Principle of proximity (or nearness), Principle of similarity, Principle of closure, Principle of smallness, Principle of common fate, Principle of good continuation and, Motion in the same direction".

Tables 11 and 12 illustrate the results of participants' responses. Table 11 illustrates frequencies of participants' responses for both the correct picture and for the incorrect ones. Table 12 illustrates the results of chi-square tests which were conducted in order to compare correct to incorrect selections.

Table 11. Frequencies for *take back*.

PERCENTAGES & FREQUENCIES ON PARTICIPANTS' RESPONSES					
Phrasal verb		Sentence			
Take back		This Photo Takes Me Back to the Old Days.			
SELECTIONS					
Correct Selection	Result %	Frequency	Incorrect Selections	Results %	Frequencies
SIMILARITY/ LINKAGE/ PROXIMITY image schema	47.2%	17	CONTAINMENT image schema	25%	9
			FORCE/SCALARITY image schema	8.3%	3
			INCLUSION image schema	8.3%	3
			BACK-ORIENTATION image schema	8.3%	3
			SEPARATION image schema	2.7%	1
			PART-WHOLE image schema	0%	0
Total number of frequencies: 36					

Table 12. *p* values for *take back*.

DESCRIPTIVE STATISTICS & Chi-SQUARE TEST RESULTS					
ENGLISH PHRASAL VERB TESTED			<i>Take back</i>		
SENTENCE:			<i>This Photo Takes Me Back to the Old Days.</i>		
	Total	Expected Range	Total	Expected Range	Chi-Square Test: <i>p</i> Value
Correct vs. Incorrect Responses Compared	Correct Responses		Incorrect Responses		0.738
	17	18	19	18	

The results showed that the participants who selected the SIMILARITY/LINKAGE/PROXIMITY image schema conceptualized the phrasal verb *take back* as ‘to cause somebody to remember the past’. The results could also suggest that participants employed a mental mapping between *these photos* and *old days* because they accessed the semantics of the particle *back* as ‘to return’, ‘to stay at an earlier location/state/time/situation’ (Rudzka-Ostyn 2003, pp. 173–74).

The results suggested that the participants who selected the SIMILARITY/LINKAGE/PROXIMITY image schema accessed the meaning of *take back* metaphorically. *This photo* is mapped onto *old days* and, therefore, a physical entity is linked to a temporal one. As Johnson (1987, pp. 118–19) observed, the SIMILARITY/LINKAGE/PROXIMITY image schema must be metaphorically interpreted to apply to abstract objects or connections (*photos* are connected to a particular temporal experience namely, *old days*), since there is no actual physical bond of the required sort to relate the objects.

#### 4. Concluding Remarks

This study attempted to argue for an alternative method of teaching the challenging grammatical category of English phrasal verbs. It was shown that young learners of English can successfully access the figurative meanings of English phrasal verbs. The context motivates young learners to successfully distinguish between multiple interpretations and select the most appropriate. The findings suggest that young learners are able to access the figurative meanings of English phrasal verbs by means of conceptual metaphor, since they can establish mental mappings across domains. Image schemas function as a facilitatory and effective way of teaching English phrasal verbs.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

**Dictionaries and Corpus:**

*Collins English Dictionary*. Retrieved from <https://www.collinsdictionary.com/dictionary/english> (last accessed 12 June 2019).

*British National Corpus*. Retrieved from <http://www.natcorp.ox.ac.uk> (last accessed 12 June 2019).

*Longman Dictionary of Contemporary English*. Retrieved from <http://www.ldoceonline.com> (last accessed 12 June 2019).

*Macmillan Dictionary*. Retrieved from <http://www.macmillandictionary.com> (last accessed 12 June 2019).

*Merriam-Webster Dictionary*. Retrieved from <https://www.merriam-webster.com> (last accessed 12 June 2019).

*Oxford English Dictionary*. Retrieved from <http://www.oed.com> (last accessed 12 June 2019).

*The Oxford Dictionary of Phrasal Verbs*. Retrieved from <http://english4success.ru/Upload/books/358.pdf> (last accessed 12 June 2019).

#### References

- Bolinger, Dwight. 1971. *The Phrasal Verb in English*. Cambridge: Harvard UP.
- Curme, George. 1925. The Development of Verbal Compounds in Germanic. *Beiträge zur Geschichte der Deutschen Sprache und Literatur* XXXIX: 11914. [CrossRef]
- De Mendoza Ibáñez, Francisco José Ruiz, and Olga Isabel Díez Velasco. 2002. Patterns of Conceptual Interaction. In *Metaphor and Metonymy in Comparison and Contrast*. Edited by René Dirven and Ralph Porings. Berlin and New York: Mouton de Gruyter, pp. 489–532.

- Dirven, René. 2002. Metonymy and Metaphor: Different Mental Strategies of Conceptualization. In *Metaphor and Metonymy in Comparison and Contrast*. Edited by René Dirven and Ralph Porings. Berlin and New York: Mouton de Gruyter, pp. 75–111.
- Evans, Vyvyan. 2010. The Perceptual Basis of Spatial Representation. In *Language, Cognition and Space*. Edited by Vyvyan Evans and Paul Chilton. London and Oakville: Equinox, pp. 21–48.
- Fauconnier, Gilles. 1994. *Mental Spaces: Aspects of Meaning Construction in Natural Language*. Cambridge: CUP.
- Fauconnier, Gilles. 1997. *Mappings in Thought and Language*. Cambridge: CUP.
- Fauconnier, Gilles, and Mark Turner. 1998. Conceptual Integration Networks. *Cognitive Science* 22: 133–87. [[CrossRef](#)]
- Fauconnier, Gilles, and Mark Turner. 2002. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.
- Grady, Joseph. 1997. Foundations of Meaning: Primary Metaphors and Primary Scenes. Ph.D. Thesis, Dept. of Linguistics, UC Berkeley, Berkeley, CA, USA.
- Hampe, Beate. 2005. Image Schemas in Cognitive Linguistics: Introduction. In *From Perception to Meaning: Image Schemas in Cognitive Linguistics*. Edited by Beate Hampe and Joseph Grady. Berlin: Walter de Gruyter, pp. 1–12.
- Huddleston, Rodney, and Geoffrey Pullum. 2002. *Cambridge Grammar of the English Language*. Cambridge: CUP.
- Jackendoff, Ray. 2002. English Particle Constructions, the Lexicon, and the Autonomy of Syntax. In *Verb-Particle Explorations*. Edited by Nicole Dehé, Ray Jackendoff, Andrew McIntire and Silke Urban. Berlin and New York: Mouton de Gruyter, pp. 67–94.
- Johnson, Mark. 1987. *The Body in the Mind: The Bodily Basis of Meaning, Imagination and Reason*. Chicago: Chicago UP.
- Kohl-Dietrich, Dorothee, Constanze Juchem-Grundmann, and Wolfgang Schnotz. 2016. Conceptual Motivation as a Tool for Raising Awareness in the English as a Foreign Language Classroom-Does it Enhance Learning Outcomes? Insights from an Empirical Study. *GCLA* 4: 193–209. [[CrossRef](#)]
- Kruisinga, Etsko. 1925. *A Handbook of Present-Day English. Part II: English Accidence and Syntax*, 4th ed. Utrecht: Kemink en Zoon.
- Lakoff, George, and Mark Johnson. 1980. Conceptual Metaphor in Everyday Language. *The Journal of Philosophy* 77: 453–86. [[CrossRef](#)]
- Panther, Klaus Uwe, and Linda Thornburg. 2009. On Figuration of Grammar. In *Metonymy and Metaphor in Grammar*. Edited by Klaus Uwe Panther, Linda Thornburg and Antonio Barcelona. Amsterdam: John Benjamins, pp. 1–44.
- Poutsma, Hendrik. 1926. *A Grammar of Late Modern English*. London and New York: Longman.
- Rudzka-Ostyn, Brygida. 2003. *Word Power: Phrasal Verbs and Compounds; A Cognitive Approach*. Berlin and New York: Mouton de Gruyter.
- Smith, Logan Pearsall. 1923. *English Idioms*. Oxford: Clarendon Press.
- Taylor, John. 2002. Category Extension by Metonymy and Metaphor. In *Metaphor and Metonymy in Comparison and Contrast*. Edited by René Dirven and Ralph Porings. Berlin and New York: Mouton de Gruyter, pp. 323–47.
- Tsaroucha, Efthymia. 2018. A Cognitive Linguistics Approach to English Phrasal Verbs. Unpublished Ph.D. Thesis, Aristotle University of Thessaloniki, Thessaloniki, Greece. Available online: <http://ikee.lib.auth.gr/record/299055/?ln=en> (accessed on 25 June 2019).
- Turner, Mark. 1991. *Reading Minds. The Study of English in the Age of Cognitive Sciences*. Princeton: Princeton UP.
- Turner, Mark. 1996. *The Literary Mind*. Oxford: OUP.
- Tyler, Andrea, and Vyvyan Evans. 2005. *The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning and Cognition*. Cambridge: CUP.

