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MA Programme "Linguistics: Theory and Applications"

THE DIACHRONY OF PHRASAL VERBS IN ENGLISH AND GREEK

A HISTORICAL CORPUS-BASED APPROACH

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Declaration

This submission is my own work. Any quotation from, or description of work of others is acknowledged herein by reference to the sources, whether published or unpublished.

Georgia Valasidou

To Evangelos and Ioanna

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Abstract

As a unique characteristic of the English language, phrasal verbs have drawn researchers' attention over time, who have examined their historical development. It is well-established that the syntactic shift from Old to Middle English and the effect of phenomena, like grammaticalization, have prompted the emergence of phrasal verbs in English (see among others Thim 2012, Rodríguez-Puente 2013). The present MA thesis aims to describe the semantic development of phrasal verbs and search for the reasons behind the non-existence of phrasal verbs in the history of another (non-Germanic) language. Specifically, it examines the development of particles and investigates why the emergence of phrasal verbs in Greek was disallowed. In this context, phrasal verbs are defined as the verb-particle combinations perceived as a single semantic and lexical unit, with various semantic transparency degrees.

To examine the phrasal-verb particles' semantic development, data of various periods were collected from the Penn Parsed Corpora of Historical English through the *CorpusStudio2* search engine. We then examined up to 100 examples of the data from each period to observe the tendencies in particles' semantic development. The results showed a decrease in the literal meaning and an increase in the expression of aspectual and idiomatic meaning.

Furthermore, to investigate the evolution of particle-verb combinations in Greek, we collected data from the two Homeric poems (*Odyssey* and *Iliad*) through the Thesaurus Linguae Graecae corpus. Since the univerbation of particle-verb constructions occurred in Greek as early as the Mycenaean times, we chose to examine cases of 'tmesis' in Homer to explore the conditions under which the univerbation happened. Tmesis occurs when the preverbal particle exists separated from the verb, but they still form a semantic unit. Based on these data, we compared English and Greek to examine why phrasal verbs emerged in English but not in Greek. To answer this question, we focused on studying the differences in word order between Greek and English. The results suggest that changes in word

order from Old to Middle English and the effect of lexicalization prompted the development of phrasal verbs in English.

On the other hand, the sentence constituents' information load determined the word order in Ancient Greek. According to Bertrand (2014), this order bound the particle mainly in preverbal position. In this respect, the characteristics of the word order and the grammaticalization of particles discouraged the emergence of phrasal verbs in Greek.

Keywords: phrasal verb; particle; semantic change; syntactic change; contrastive analysis; English; Greek; compound verbs

Περίληψη

Τα φραστικά ρήματα (phrasal verbs), ως ιδιάζον χαρακτηριστικό της Αγγλικής, έχουν προσελκύσει κατά περιόδους την προσοχή πολλών ερευνητών, οι οποίοι εξέτασαν την ιστορική τους εξέλιξη. Είναι κοινώς αποδεκτό ότι η συντακτική αλλαγή από τις παλαιότερες περιόδους της Αγγλικής στις νεότερες και η επίδραση φαινομένων που σχετίζονται με τη γραμματικοποίηση, οδήγησαν στην εμφάνιση φραστικών ρημάτων στα Αγγλικά (βλέπετε μεταξύ άλλων Thim 2012, Rodríguez-Puente 2013). Η παρούσα διπλωματική εργασία στοχεύει να περιγράψει τη σημασιολογική εξέλιξη των φραστικών ρημάτων και να αναζητήσει τους λόγους της απουσίας τους από άλλες (μη-Γερμανικές) γλώσσες. Συγκεκριμένα, εξετάζει τη σημασιολογική εξέλιξη των μορίων (particles) και διερευνά τους λόγους που δεν ενθάρρυναν την εμφάνιση φραστικών ρημάτων στα Ελληνικά. Σε αυτό το πλαίσιο, τα φραστικά ρήματα ορίζονται ως συνδυασμοί ρήματος-μορίου που θεωρούνται ως ενιαία σημασιολογική και λεξική μονάδα, με διάφορους βαθμούς σημασιολογικής διαφάνειας.

Για να εξεταστεί η σημασιολογική εξέλιξη των μορίων που συμμετέχουν στο σχηματισμό φραστικών ρημάτων, συλλέχθηκαν δεδομένα από διάφορες περιόδους της Αγγλικής από τα σώματα κειμένων Penn Parsed Corpora of Historical English μέσω της μηχανής αναζήτησης *CorpusStudio2*. Στη συνέχεια εξετάστηκαν έως και 100 παραδείγματα των δεδομένων από κάθε περίοδο των Αγγλικών, για να παρατηρηθούν οι τάσεις στα σημασιολογικά χαρακτηριστικά των μορίων. Τα αποτελέσματα έδειξαν μείωση της έκφρασης κυριολεκτικής σημασίας και αύξηση της έκφρασης της αποψιακής και ιδιωματικής σημασίας.

Επιπλέον, για να διερευνήσουμε την εξέλιξη του συνδυασμού μορίων-ρημάτων στα Ελληνικά, συλλέξαμε δεδομένα από τα δύο ομηρικά έπη (*Οδύσσεια* και *Ιλιάδα*) μέσω του σώματος κειμένων Thesaurus Linguae Graecae. Δεδομένου ότι η ενοποίηση μεταξύ μορίων και ρημάτων είχε συμβεί στα Ελληνικά ήδη από τους Μυκηναϊκούς χρόνους, επικεντρωθήκαμε στην εξέταση περιπτώσεων όπου μαρτυρείται 'τμήση' στα ομηρικά έπη, με αποτέλεσμα το προρηματικό μόριο

(preverb) να διαχωρίζεται από το ρήμα, αλλά να διατηρείται η σημασιολογική ενότητα. Με βάση τις παραπάνω παρατηρήσεις, συγκρίναμε τα αγγλικά και τα ελληνικά δεδομένα σε σχέση με την εμφάνιση φραστικών ρημάτων. Τα αποτελέσματα υποδηλώνουν ότι η αλλαγή της σειράς όρων από τις παλαιότερες στις νεότερες περιόδους των Αγγλικών και η επίδραση της λεξικοποίησης προκάλεσε την εμφάνιση των φραστικών ρημάτων.

Από την άλλη πλευρά, όπως πληροφορούμαστε από τον Bertrand (2014), η σειρά των όρων στην αρχαία ελληνική πρόταση καθοριζόταν από το πληροφοριακό τους φορτίο και μάλιστα η σειρά αυτή δέσμευε την τοποθέτηση των μορίων κυρίως σε προρηματική θέση. Έτσι, η δέσμευση των μορίων πριν από το ρήμα και η γραμματικοποίηση οδήγησαν στον σχηματισμό σύνθετων ρημάτων στα ελληνικά, αποκλείοντας την ανάπτυξη φραστικών ρημάτων.

Λέξεις κλειδιά: φραστικά ρήματα, μόρια, σημασιολογική αλλαγή, συντακτική αλλαγή, αντιπαραθετική ανάλυση, Ελληνική, Αγγλική, σύνθετα ρήματα.

Contents

1

Introduction

1.1 Aims and scope of the thesis

Phrasal verbs (also known as particle-verbs) constitute one of the most idiosyncratic characteristics of English, as well as other Germanic languages (such as German, Dutch) that has drawn the attention of many scholars from time to time. Grammarians and linguists, as well as educators, have been involved in their study. The peculiarity of these constructions draws the interest of the researchers, who have tried to identify the conditions that caused the emergence of phrasal verbs, the strength of the connection between the verb and the particle, the particular characteristics of phrasal verbs that distinguish them from other verbal combinations, or the processes that affect the meaning conveyance of these constructions. The examination of the development of phrasal verbs draws the researchers' attention due to their uniqueness since such structures are not observed in non-Germanic languages.

Since the 18th century, grammarians have tried to establish rules that govern the use of phrasal verbs and classify the conditions under which their use is 'allowed' (Hiltunen 1983b). On the other hand, linguists have focused on describing and explaining how phrasal verbs originated and how their form and use changed in various English periods. However, the study of the development of particles contributing to the emergence of phrasal verbs has not drawn much attention. The main focus of the present study is to explore the history of phrasal verbs focusing on the semantic development of the particle's aspectual and idiomatic characteristics.

Moreover, "the idiosyncrasy and the particular Englishness of the construction type" (Thim 2012: 56) draws the interest of the present MA thesis. The idea of a comparative analysis of the development of phrasal verbs in English and their

absence in Greek originates from the observation of strong collocations in Greek, whose meaning is non-compositional (cf. *λαμβάνω υπόψη* 'to take into consideration'). This type of collocations shares some characteristics with phrasal verbs but cannot be analyzed as a phrasal verb, mainly due to the absence of features that would characterize one of the constituents a particle. A part of the present study will explain why phrasal verbs never emerged in the history of Greek.

The discussion of phrasal verbs in Greek focuses on examples collected from the two Homeric epic poems, *Odyssey* and *Iliad*. These examples contain particle-verb combinations that are not a subject to univerbation, and they have undergone 'tmesis', so they exist separately in the text, as in the example below:

1. *νήσῳ ἐν ἀμφιρύτῃ, ὅθι τ' ὀμφαλός ἐστι θαλάσσης,*

   νῆσος δενδρήεσσα, θεὰ δ' ἐν δώματα ναίει,

   Ἄτλαντος θυγάτηρ ὀλοόφρονος, ὅς τε θαλάσσης

   'in a sea-girt isle, where is the navel of the sea.

   'Tis a wooded isle, and therein dwells a goddess,

   daughter of Atlas of baneful mind.'

   (HOMERUS Epic. Odyssea {0012.002} Book 1 line 51)

Our purpose is to analyze such examples and identify the differences between Greek and English that did not allow the development of phrasal verbs in Greek.

The results of the present MA Thesis will help researchers gain valuable insight into the different meanings that particles developed in different periods and understand the conditions that caused the emergence of phrasal verbs. Corpus studies, comparative linguistics and second language teaching (contrastive approaches) may benefit from the present MA Thesis.

To summarize, the present MA thesis has a twofold aim; on the one hand, we try to describe how particles participating in the construction of phrasal verbs developed semantically from Old English to Late Modern English. On the other hand, we aim to examine what stopped the emergence of phrasal verbs in other, non-Germanic languages, as in the example of Greek history. For this purpose, we look at the development of particle-verb combinations in Greek and compare them with the development of phrasal verbs in English. We extracted data from several

sources: for the semantic analysis of particles, a study was carried out through the Penn Parsed Corpora of Historical English, while for the comparison of the particle-verb constructions in English with those in Greek, data were also collected from the Thesaurus Linguae Graecae corpus.

1.2 Outline of the thesis

Before moving on to the diachronic analysis of phrasal verbs in the corpus, defining and describing this category's characteristics is important. In Section 2, an account on the semantic development of phrasal verbs is provided. Moreover, section 2.4 includes preliminary information on Greek preverbs and their later development into prefixes and prepositions.

Section 3 focuses on the description of the corpora used for this research, along with their advantages and limitations. Sections 3.2.1 and 3.3.1 contain information on the methodology followed for the categorization and processing of the results.

Sections 4 and 5 aim to present the corpus results. Section 4 analyses the semantic characteristics of phrasal-verb particles and examines how they have developed diachronically. We also argue in favour of Neagu's (2007) view that particles' literal meaning is the source of all other meanings. However, we observe that there are particles that deviate from the expected semantic development. Section 5 focuses on the Greek data and examines the conditions under which the univerbation of particle-verb combinations occurred. In section 5.4, we suggest that word order differences between Greek and English and the effect of grammaticalization, caused the emergence of phrasal verbs in English but not in Greek.

Finally, Section 6 offers a summary of the main findings and provides some suggestions for future research.

2

Theoretical and historical background: Previous studies

2.1 Introduction

The present Section aims to provide a thorough description of the (semantic and syntactic) characteristics of phrasal verbs and describe their historical development, based on previous studies. The purpose of this literature review is to delimit the category of phrasal verbs that will be under investigation in the present study. Section 2.2 establishes a definition of phrasal verbs for this study and presents some of their syntactic and semantic characteristics. Section 2.3 deals with the development of phrasal verbs from a historical semantic point of view. The last section (2.4) touches upon the historical development of the Greek prepositional system, valuable to examine why the emergence of phrasal verbs never occurred in the history of Greek.

2.2 What are phrasal verbs?

Many scholars interested in examining phrasal verbs have proposed various definitions in their effort to grasp the subtle characteristics that distinguish this construction from other two-word verbal structures.[1] The main problem lying behind any effort to define phrasal verbs is the second element of the construction, the so-called 'particle'. Particles are elements homonymous with adverbs and prepositions, which makes any attempt to specify their distinctive features

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[1] Thim (2012: 10) provides a preliminary definition: "phrasal verbs are made up of two components: a verb and a particle which is typically homonymous with an adverb or a preposition".

difficult. Most researchers agree that phrasal-verb particles have an adverbial nature, meaning that they originate from adverbs (cf. Spasov 1966: 12, Brinton 1988: 275, Thim 2006: 214, Rodríguez-Puente 2013: 22), but form a closer union with the verb, ultimately acquiring different characteristics from adverbs.[2] The definition provided by McMichael (2006) is beneficial in grasping the essence of particles. While researching English prepositions, he states that "adverbial particles (or adverbs) are spatial grams[3] that essentially focus a state without necessarily lexicalizing the landmark to which it refers" (McMichael 2006: 44). This feature of particles is better illustrated in the following examples with the particle *down*, taken by McMichael (2006: 44):

2. *She knelt **down** and looked along the passage [...]*
3. *Take pen and ink and write it **down**.*

In the case of 2, it is easy to suppose that *down* refers probably to the floor or the ground (although it is not explicitly stated). In example 3, the landmark of *down* is more implicit and can take various interpretations. However, in both instances *down* is an adverbial particle since it focuses on the state reached after the action (i.e. in 2 the woman is kneeling on the floor/ground, and in 3 something becomes written).

After specifying what particles are, we can move on to establishing a definition for phrasal verbs. We argue that phrasal verbs can best be defined in the following sense, proposed by Rodríguez-Puente (2012):

> I consider as phrasal verb or verb particle combination any lexicalized combination of a verb and an adverbial particle which function semantically and lexically as a single unit, to varying degrees, independently of whether the meaning of the combination is transparent (i.e. inferable from the meaning of the individual parts), …, or non-compositional (i.e. non deductible from the parts). (Rodríguez-Puente 2012: 434)

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[2] For a particle to emerge from an adverb, the adverb shall not be a result of derivation (*nice>nicely*) or head of a following noun phrase (Rodríguez-Puente 2013: 22).

[3] "short grammatical morphemes with a semantic reference to space" (McMichael 2006: 54, originally found in Svorou 1995: 31).

This definition can explain phrasal verbs like the ones contained in the following examples:

4. *We **are going out** for dinner tonight.* (transparent meaning, 'go out of the house to an event')
5. *Jenny **broke up** as soon as Peter finished his joke.* (non-compositional meaning, 'started laughing')

Besides explaining the semantic relation that a verb and a particle have when forming a phrasal verb, this definition also characterizes phrasal verbs as 'lexicalized combinations', meaning that they function as a single unit and convey a single meaning. This semantic and lexical unity of phrasal verbs results from the particular characteristics they obtain, distinguishing them from other verbal constructions. These characteristics are specified in more detail by Rodríguez-Puente (2013: 55-57) and argue in favour of dealing with phrasal verbs as a single unit:

a) A single-word equivalent can replace them:
   Ex.: *The 2020 Olympic Games were **put off** due to the Covid-19 pandemic.*
   *The 2020 Olympic Games were **postponed** due to the Covid-19 pandemic.*
b) They can obtain derived words:
   Ex.: *The burglar could not believe his luck when he discovered the bank was extremely **breakinable**.* (Elenbaas 2007: 9)
c) They can coordinate with other verbs:
   Ex.: *Mary broke up with Peter and moved to Germany.*
d) Both elements can be elided together:
   Ex.: *I tided up my room and my sister the basement.*

2.2.1 The separability of phrasal verbs

Phrasal-verb particles can generally be split from the verb, and other constituents of the sentence may intervene between the verb and the particle. The phrasal verbs' separability is illustrated in the following examples:

6. *Take pen and ink and **write** it **down**.*
7. *She asked me to **pick** this book **up**.*
8. *After finishing a big project at work, I decided to **take** a few weeks **off**.*

The examples suggest that single- or multi-word phrases can intervene between the verb and the particle. Gardner & Davies (2018) conducted a corpus-based study on the separability of phrasal verbs. They observed that mostly noun phrases intervene between verbs and their allied particles. Specifically, in the case of 3-gramm phrasal verbs (a phrasal verb with only one intervening word between the verb and the particle, example 6) pronouns are almost the exclusive category of parts of speech that intervene in phrasal verbs (99.8%).

Bolinger (1971) suggests that the separation of phrasal verbs is possible only when the phrasal verb's object contains information that is already known to the listener or the reader. Furthermore, Jackendoff (2002:70) points out that "right-hand position is mandatory when the direct object is a non-stressed pronoun; left-hand position is mandatory when the object in a sufficiently heavy NP". This means that the phrasal-verb particle must follow the direct object only when it is an unstressed pronoun; otherwise, it must follow the verb directly.

2.2.2 The construction of meaning in phrasal verbs

Traditionally, phrasal verbs are considered to convey meaning in three ways: literally ("with exact equivalence, with the meaning of each individual word given exactly", Merriam-Webster), figuratively ("with a meaning that is metaphorical rather than literal", Merriam-Webster) or non-compositionally (meaning cannot be deducted from the parts of the phrasal verb). For example:

9. *When its dark outside I like **looking up** the sky for stars*. (literal)

10. *I can **look up** the doctor's phone number on the Internet.* (figurative)

11. *My little sister **has** always **looked up** to me.* (non-compositional)

As shown from the above examples, the same phrasal verb, *look up,* can acquire different meanings, depending on the context in which it appears.

Other researchers have proposed other senses that phrasal verbs can convey. Thim (2012) has suggested that verb-particle combinations can also create aspectual constructions, whose meaning is "fully transparent and readily understandable ad hoc formations are possible… But the particles in these constructions are not directional but aspectual, and they typically mark telic aktionsart[4]" (2012: 16-17). An example better illustrates this:

12. *My sister **used up** my notebook.*

In example 12, *up* is used to add a telicity to the action, since it implies no more empty pages in the notebook for its owner to use. Moreover, aspectual meaning is also conveyed in example 2, repeated here:

13. *She **knelt down** and looked along the passage.*

In the case of 13, *down* is used to emphasize the direction towards which the woman moved. It shows that her movement had an endpoint. It provides the verb with a telic aktionsart, although this meaning is already present to the verb *kneel*. Thim (2012) characterizes these phrasal verbs as conveying pleonastic meaning, "where the aspectual value of the particle is also part of the aktionsart of the verb alone" (Thim 2012: 19).

Rodríguez-Puente (2012) has proposed the existence of another semantic class of phrasal verbs, that is the class of "emphatic phrasal verbs" (2012: 440). She has suggested that this class contains phrasal verbs, whose particles intensify the

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[4] "Aktionsart refers to the objective temporal structure of situations" (Moser 2014: 117) meaning that situations naturally occupy a space in time. Vendler's (1957) categorization of situations based on Aktionsart is the most widespread cross-linguistically. He distinguished between States (atelic situations with no natural end point, e.g. *have*), Activities (atelic situations which require a change of state of the participants, e.g. *run*), Achievements (instant change of state, e.g. *find*) and Accomplishments (change of state that requires the interval of time, but reaches a natural end point, e.g. *build a house*).

meaning of the verb. This is shown in the following example, found in Rodríguez-Puente (2012):

14. *I feel also pretty sure that* **backed up** *by you, I could get an advance of £100 from my uncle which I would place in your hands for this affair.*

These six semantic groups of phrasal verbs (literal, figurative, non-compositional, aspectual, pleonastic, emphatic) should not be treated as discrete classes that do not overlap. As examples 9, 10 and 11 show, the same phrasal verb can belong in more than one semantic category.

Since phrasal verbs cannot be exclusively categorized into semantic classes, some researchers tried to identify the meanings that particles can convey, to understand the way phrasal verbs are listed in our lexicon. Jackendoff (2002) proposed that some categories of phrasal verbs are stored in the longterm memory as phrases (lexical items), whereas in other cases the meaning of the phrasal verb is constructed online, implying that the particles are stored as grammatical words ("bigger than affixes, smaller than phrases", Jackendoff 2002: 67). He proposes five categories of verb particle combinations:

1) Idiomatic verb-particle combinations (listed in the lexicon as complete units).
   Ex.: *My grandparents* **brought** *me* **up** *after my parent died.*
2) Directional particles (no need to list them in the lexicon).
   Ex.: *When its dark outside, I like* **looking up** *the sky for stars.*
3) Aspectual particles (listed as independent lexical items, free to combine with verbs that meet their selectional restrictions)
   Ex.: *My sister* **used up** *my notebook.*
   Ex.: *Bill* **keeps on** *sleeping.*
   Ex.: *John talked her through the plan.*
4) The time-*away* construction (lexically listed as a transitive verbal phrase with an open verb and object but a specified particle, *away*).
   Ex.: *Bill* **slept the night away**.
5) Idioms consisting of particles plus something other than the verb (stored as [V/N + -d [prt *out*]])
   Ex.: *I'm* **programmed out.**
   Ex.: *I'm* **coffeed out.**

2.3 The development of phrasal verbs

Phrasal verbs in the English language exist in texts written as early as the Old English period (OE: 850-1150 AD). During that period, a particle could occupy both pre- and postverbal positions, while also allowing various elements to be inserted between the verb and the particle (Elenbaas 2007). Hiltunen (1983a) observes that in the OE period, the preverbal position of the particle was generally more frequent than the postverbal one. However, towards the end of the OE period, the postverbal position of particles increased in frequency in main clauses. He also notices that the postverbal object is more frequently placed after the particle than in-between the verb and the particle (1983a: 105).

The establishment of the postverbal position of particles during the late OE – early Middle English period (ME: 1150-1500 AD) has often been associated with the loss of the Object (O) – Verb (V) word order during the same period (Fischer 1992). Thim (2012: 108) points out that during the OE period, preverbal particles are used when there is an OV word order, whereas postverbal particles are found in sentences with VO order. The following examples are taken by Thim (2012: 108):

15. *& micele here huþe mid him **aweg læddon***

    and much army booty with them away led:PL

    'and took much war-booty away with them.'

                                                      (*ChronE* 111.13 [943])

16. *& efsones he **let** him **ut** þurhc wærse red*

    and soon after he let him out through worse advice

    'and soon after, on worse advice, he let him out.'

                                                     (*ChronE* 276.12 [1140])

Based on this observation, the postverbal particle's establishment is considered a result of the VO word order's predominance from ME onwards.

It has also been suggested that the loss of OE prefixes has prompted the development of postverbal particles. Samuels (1972: 163-165) describes this replacement as a "push- and drag-chain" process. According to him, the lack of

stress in prefixes and the loss of their information content caused the prefixal system's eruption and created a gap which particles filled. Furthermore, the pressure of the new Norse and French words that became available, after the Viking invasions during the late 9th century, facilitated the whole process.[5]

During the ME period, phrasal verbs become a more unite verb-particle construction. Evidence of phrasal verbs participating in word formation processes with nominalizations support this suggestion, as observed by Elenbaas (2007) in the following examples:

17. *þe **doungoing** of þe sunne.* (cmearlps, 77.3405).

   'the going down (=setting) of the sun.'

18. *Ðat settest þe cloude þy **wendyng up**.* (cmearlps, 125.5458)

   'who appoints the clouds for your ascent.'

19. *whan þey had longe i-wope þe wrong of ther violent **out puttynge**.* (cmpolych, VIII, 95.3628)

   'when they had wept the injustice of her violent putting out (=expulsion) for a long time.'

Since the Early Modern English period (eModE: 1500-1700), phrasal verbs have become more and more syntactically stable. Claridge (2000: 155) notices that only adverbs and objects can be inserted between the verb and the particle in this period. Also, the nominalization processes continue to expand to more phrasal verbs. The importance of particles has as well increased in eModE. Claridge (2000) points out the existence of phrasal verbs with a particle as a central member of the compound. As illustrated in the example below, some particles had gained verbal force, in the degree that they had undermined the verb to a peripheral position (Claridge 2000: 231):

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[5] However, although the influence of the Scandinavian languages might have affected the development of phrasal verbs, their impact should not be considered significant, since evidence from other Germanic languages suggest that the phrasal verb system can be as well originated without external influence (Hiltunen 1983a, Lutz 1997, Blake 2002).

20. *If Truth doe prevaile, Diana must **downe**, and then farewell their profit.* (*RelA*1642)

As far as the semantic development of phrasal verbs is concerned, it seems that during OE and ME periods phrasal verbs are mostly literal "or only slightly extended in meaning" (Brinton 1988: 187). OE particles convey mostly directional meaning, but it is also possible to find some aspectual meaning. This is illustrated in the following examples from Rodríguez-Puente (2013: 114-115):

21. *Gif man cealf **of adrife**.* (*LawAf* 1 16)

'If someone drives off a calf.'

22. *þa oðre ða **brǽcon** þǽr **adune**.* (*ChronE* [Plummer] 1083.23)

'the others broke the doors down.'

Brinton (1988) suggests that the co-occurrence of both meanings prompted the development of pure aktionsart particles in later periods of English. Moreover, phrasal verbs' figurative usage becomes more frequent in ME (de la Cruz 1972, Brinton 1988). In eModE, an increase of the metaphorical meanings and the idiomatic and aspectual uses can be observed (Rodríguez-Puente 2013: 124), and an increase of emphatic verbs is observed during the Late Modern English period (LModE: 1700-1900). However, the frequency of all the semantic categories of phrasal verbs is much lower than the one found in Present-Day English (PDE).

Finally, although the frequency of phrasal verbs is thought to have gradually increased from OE to PDE, two studies (Konishi 1958; Spasov 1966) observe a slight decline in the existence of phrasal verbs during the mid-17th to the mid-18th century. This halt has often been explained in terms of prescriptivism. As Hiltunen (1983b) points out, since the 18th century, grammarians have tried to establish rules that govern their use and classify the conditions under which the usage of phrasal verbs is 'allowed'. This period has been characterized as "the great prescriptive period in the history of English" (Claridge 2000: 98). Phrasal verbs were criticized for being redundant, polysemous and 'American parasites' (Wild 2011). These views of phrasal verbs could have affected the frequency of their occurrence. However, since the 19th century, phrasal verbs continue to grow (Akimoto 1999).

2.3.1 The emergence of phrasal verbs through language change

The processes that affect the development of phrasal verbs have often become a matter of disagreement between scholars. There has been much discussion on whether phrasal verbs are a result of grammaticalization, lexicalization or idiomatization.

Hopper & Traugott (2003: xv) define grammaticalization as " the process whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions, and, once grammaticalized, continue to develop new grammatical functions". This process is also considered unidirectional, meaning that a lexical item follows a path towards becoming grammatical, moving from a major category (i.e. verb, noun) to a minor one (i.e. preposition, conjunction), and the less grammatical items become more grammatical diachronically.

Based on the above observations, Brinton & Traugott (2005: 123-129) claim that phrasal-verb particles are a result of grammaticalization, since, in the past, they used to convey spatial meaning. However, in association with some verbs, their spatial meaning is lost, and they become markers of aspect. They suggest that the development of such a sense is a result of a metonymic association between direction (physical movement) – goal (event movement) and location (physical movement) – continuation (event movement). This conclusion seems to explain the semantic shift of some particles, but it does not describe the development of verb-particle combinations into a unit.

Rodríguez-Puente (2013: 381), among others (Biber et al. 1999; Nevalainen 1999; Claridge 2000) views phrasal verbs as a result of lexicalization and idiomatization. Lexicalization is "a process by which an item or construction gains lexical content and loses grammatical properties" (2013: 320). As a result, syntactic constructions or word formations start to possess more meaningful content. On the other hand, "idiomatization may be defined as the process whereby an item or construction loses literacy of meaning and increases it idiomatic status" (2013: 328), meaning that they move from a concrete towards a more abstract meaning. She argues that lexicalization can explain phrasal verbs' syntactic fixity, whereas idiomatization affects the phrasal verbs' semantic aspects (2013: 362-378). She also argues that

those two processes should be examined as two separate clines (2013: 372), where phrasal verbs move from less to more syntactic cohesion as well as less to more semantic transparency. To identify the degree of lexicalization of a phrasal verb, Rodríguez-Puente (2013: 373-376) suggests that we should apply the syntactic tests mentioned above (section 2.2).

In his work, Thim (2012: 55-72) had moved towards a more innovative view of phrasal verbs, proposing that they should be seen as periphrastic word formations. He suggests that phrasal verbs are created in terms of compounding and derivation. They can be analyzed as compounds when they are compositional (i.e. combination of a verb and a spatial particle) and as derivations when the particle meaning has shifted to a non-spatial one (e.g. in aspectual combinations). However, unlike other Germanic languages, the particles are placed after the verb due to the unique serialization of English.

To account for the positional properties of phrasal verbs, which do not coincide with those of word formations, Thim (2012: 69-72) utilizes the view of the Construction Grammar, according to which "linguistic signs, i.e. conventional pairings of form and meaning, are the central elements of linguistic structure; such pairings are called constructions" (2012: 70). To explain the variation in the structural realization of some structures, Cappelle (2006: 18) coined the term 'allostruction'. Based on that, Thim (2012: 72) suggests that differences in phrasal verb positioning, like *I filled in the form* or *I filled the form in*, are allostructions of the same phrasal verb construction. However, the suggestion that particle placement should be viewed as a case of phrasal verb allostruction has not yet gained much popularity and is a matter that should be further examined.

Although a significant amount of research has been conducted on phrasal verbs, it seems that there is still a gap in the semantic examination of particles participating in their creation. This study aims to provide a quantitative and qualitative account of the history of phrasal verbs, focusing on the development of aspectual and idiomatic meanings overtime. The research questions are formed as follows:

RQ1: How did the semantic characteristics of particles developed over time?

RQ2: What is the relationship between semantic characteristics of particles and phrasal verbs in different English periods?

2.4 Phrasal verbs in non-Germanic languages

Phrasal verbs are a characteristic of Germanic languages, mainly English, German and Dutch (Booij & Van Kemenade 2003). In English, which is the focus of this study, the particles participating in the construction of phrasal verbs are considered to originate from adverbs that lost their adverbial use and have come to form a close lexical and semantic unit with the verb (see above McMichael 2006). However, particles like *on* or *in*, that are homophones with prepositions of the English language, are also frequently associated with verbs, causing a great amount of discussion on whether there should be a distinction between adverbial and prepositional phrasal verbs:

23. *The teacher told us to look up the word definitions in the dictionary (*adverbial phrasal verb)
24. *The nanny is looking after the baby* (prepositional phrasal verb)

This distinction, however, will not be a subject of the present dissertation.

Since phrasal verbs have been characterized a Germanic, and especially an English, feature, it is interesting to examine if phrasal verbs have ever developed in a non-Germanic language. The long-attested history of Greek and the plethora of changes in the verbal system make Greek an ideal subject for such an investigation.

It has been observed that in Greek, prepositional phrases can develop into adverbs. For instance, the Ancient Greek prepositional phrase ὑπ' ὄψιν ('in front of') has developed in the one-word adverb *υπόψη* in Modern Greek, often associated with the verbs *λαμβάνω* or *έχω*, meaning 'to take into consideration'. Although the meaning of this verb-adverb combination is non-compositional, this combination is treated as a strong collocation and not as a phrasal verb in Greek, since *υπόψη* cannot be characterized a particle. Based on this observation and in order to explore the reasons behind the absence of phrasal verbs from Greek, we need to examine why the development of adverbial particles was disallowed. To do that, we should focus on how the Greek prepositional system has developed.

Greek is typologically categorized as a fusional language, meaning that it uses inflectional morphemes to signify different grammatic, syntactic and semantic characteristics. In the nominal system of Ancient Greek, case was responsible for conveying different semantic features, while genitive, accusative and dative also created adverbial meaning (Bortone 2010: 110-115). Due to the central role of cases, prepositions of Classical Greek seem to be added to reinforce the meaning of a case (Bortone 2010: 16). However, over time cases lost their semantic value, causing an increase in meaning conveyed by the associated prepositions. Since Hellenistic Greek, the case government by prepositions is motivated syntactically rather than semantically. So, prepositions became the main category to employ adverbial meaning, while cases were used to "disambiguate between various non-spatial, abstract meanings of the prepositions that assign them" (Seržant & Rafiyenko 2020: 31).

The source of prepositions has often drawn the interest of researchers[6]. According to Bortone (2010), a possible source for Ancient Greek prepositions is the noun system. He suggests as evidence for that claim the addition of endings, which are considered to be nominal case markers, to some prepositions, as in the following example:

25. *ἐν/ ἐνί*   'in'

He also observes that prepositions could also take suffixes with local meaning, often associated with nouns denoting location:

26. *οἴκο**θεν*** 'from home'   *< οἶκος*   'home.'

    *πρόσ**θεν*** 'from near'   *< πρός*   'towards.'

Based on these observations, Bortone (2010: 113) suggests that prepositions originate from adverbials.

The origin of the Prepositional Phrase in Ancient Greek has also raised much discussion. Most researchers argue that the Adposition (pre- and postpositions) – Noun word order in Ancient Greek derives from the VO or Possessum-Possessor word orders (Svorou 1994: 90). More recent studies, however, reject this source-

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[6] It has been claimed that prepositions can be originated from verbs, adjectives, univerbation (conversion of a phrase into a single word) or borrowing from other languages.

oriented approach. Seržant & Rafiyenko (2020) do so by retracting evidence from the development of Ancient Greek prepositional phrases. They argue that the creation of the Ancient Greek prepositional phrases correlates with the Verb-Object and Noun-Genitive (possessum-possessor) word orders but does not derive from them, since they developed at merely the same time. They favour an explanation based on a "harmonic ordering of heads and dependents" (2020: 2) to explain the parallel development of the above constructions.

Seržant & Rafiyenko (2020: 12), who aim to explain the emergence of adpositions (in Ancient Greek there was the ability for both pre- and postnominal positions), suggest that the semantic inter-dependency of adverbials and nouns which were often adjacent to each other were able to facilitate the creation of syntactic constituents like prepositional phrases. They provide the decrease of separability between the preposition and the dependent Noun Phrase, the loss of different prepositional allomorphs and the loss of case distinction over time as evidence for the increase of constituency.

The increase of constituency between prepositions and the associated noun phrases resulted in some cases to the deviation of some prepositional phrases from their original meaning. The issue of ὑπ' ὄψιν mentioned above is an example of this process, as it originally meant 'under the view', but over time it also developed other meanings, combined with various verbs. Prepositional phrases like this one can still be found in Modern Greek, due to the influence of Katharevousa (the "purist" movement which supported that the spoken variety of Greek was a "bad" offspring of the Ancient forms of the language, dividing into two opposed groups the scholars, politics and journalists for about two centuries, 18th-20th), but are considered one-word adverbs, *υπόψη.*

The Proto-Indo-European adverbials, which are considered the source of prepositions (see Bortone 2010 above), would also associate with verbs. In Ancient Greek, they gradually lost their adverbial meaning and developed into preverbs, which are "morphemes that appear in front of a verb and form a close semantic unit with that verb" (Booij & Van Kemenade 2003: 1). The focus of the present MA thesis will be on preverbs, to examine the reasons that did not allow the

development of preverb-verb combinations into phrasal verbs in Greek. Consequently, the following research questions are formed:

RQ3: Which features of the English language promoted the development of phrasal verbs?

RQ4: Why are phrasal verbs absent from the Greek language? Is there a period of Greek when phrasal verbs occurred in the language?

The above studies suggest a correlation between the VO word order and the Preposition-Noun phrase in Greek. We also mentioned that the shift from the OV to the VO word order is considered responsible for developing phrasal verbs in English. Based on these observations, we hypothesize that the absence of phrasal verbs in Greek results from differences in word order and the effect of different language change processes.

2.5 Summary

In Section 2, we have shown that defining phrasal verbs is not an easy task due to the difficulty of defining the second element, the particle. We have also provided information about the syntactic characteristics of phrasal verbs and the meanings they convey. Based on the discussion of previous studies, we specified the research questions of this study, which are to examine the development of the semantic characteristics of particles in English and explain what caused the emergence of phrasal verbs in English but not in Greek. In the following sections, we try to identify how phrasal verbs emerged in English, focusing on syntactic and semantic changes of the English particles. Finally, we examine the reasons behind the absence of phrasal verbs in Greek.

3

Data collection and methodology

3.1 Introduction

Section 3 discusses the data collected for examining the semantic development of particles and the development of preverbs in Greek. Section 3.2 describes the Penn Parsed Corpora of Historical English employed to collect particles and specifies their adequacy for the present research and their limitations. We also provide information about the methodology followed for categorizing the data and extracting the results. Section 3.3 describes the Thesaurus Linguae Graecae corpus used to extract the Ancient Greek data, and the methodology followed for the examination of the data.

3.2. Penn Parsed Corpora of Historical English

The Penn Parsed Corpora of Historical English include three corpora, containing texts and text samples of British English prose, covering different periods of English language history, from early Middle English to World War I (1914). The three corpora included are:

- the Penn-Helsinki Parsed Corpus of Middle English, second edition (PPCME2)
- the Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME)
- the Penn Parsed Corpus of Modern British English, second edition (PPCMBE2).

In order to include in our research data from the Old English period as well, we also used the York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE).

The project of Penn Parsed Corpora of Historical English started by Antony Kroch, Ann Taylor, and Beatrice Santorini in 2000, with the release of PPCME2. In 2016 the corpus was released for the fourth time. This version was used for the present research. It contains roughly 1.2 million words of syntactically annotated running text. The release of the PPCEME by Anthony Kroch, Beatrice Santorini and Lauren Delfs in 2004 followed. This corpus consists of over 1.7 million words of parsed texts. In 2016 the release of the PPCMBE2 followed, by Antony Kroch, Beatrice Santorini and Ariel Diertani, containing about 2.8 million words of syntactically annotated text samples. Finally, the YCOE used in this research is considered a "sister-corpus" to the PPCME2, following the same form for syntactical annotation of the 1.5 million-word text samples. It was created by Ann Taylor, Anthony Warner, Suzan Pintzuk, and Frank Beths in 2003. All the above corpora are a product of the effort made by the University of Pennsylvania and the University of York to create syntactically annotated corpora for all the stages of English language history.

The texts included in the above corpora are categorized based on their author and the period they were written. In cases of texts for which the earliest manuscript found is from a later period than the one they were originally written in, two digits are used to designate them. Based on these, the following Table distributes the periodization of texts followed in the corpora.

Table 1 Periodization in the corpus (from Kroch, A. et al. 2016)

Period Name	Manuscript date	Period Name	Manuscript date
O1	450-800	M1	1150-1250
O12	450-950	Mx1	1150-1250
O2	850-950	M2	1250-1350
O23	850-1050	M23	1250-1420
O3	950-1050	M3	1350-1420
O14	450-1150	M24	1250-1500
O24	850-1150	M34	1350-1500
O34	950-1150	M4	1420-1500
O4	1050-1150	Mx4	1420-1500

Period Name	Manuscript date	Period Name	Manuscript date
E1	1500-1569	B1	1700-1769
E2	1570-1639	B2	1770-1839
E3	1640-1710	B3	1840-1914

The Penn Parsed corpora are very useful for diachronic research, as they cover a very large timespan of English texts, as seen in the Table above, allowing the implementation of comparative analysis in the sort that is attempted in the present study. Every period of the history of English is represented sufficiently, enabling us to observe the development of the meaning of the particles successively. Moreover, as mentioned above, the corpora are syntactically annotated, which is important for examining the semantic development of particles. The syntactic

annotation facilitates the collection of particles for examination and the distinction of particles associating with verbs to create phrasal verbs and homonymous prepositions, which would otherwise be a very time-consuming process (Rodriguez-Puente 2013: 154). Of course, the study of the semantic development of the particles required a careful qualitative examination of the data. The syntactic annotation though helped distinguish particles from the homonymous prepositions, making the data more quickly accessible.

However, there are a few characteristics of the corpora that affect the results of the research. First, as mentioned earlier, the data are collected only from the British English prose of different periods, which does not allow us to make any comparisons between British and American English or draw conclusions about the English language's general tendencies. So, the results of the present research concern only British English. Furthermore, there is no equal representation of each period in the data. In order to deal with this problem and obtain a more realistic view of the development of phrasal verbs, normalized results are also presented, which demonstrate more clearly the tendencies of British English.

3.2.1 Methodology of research

The search for phrasal-verb particles was carried away automatically using the *CorpusStudio2* engine (Randall et al., 2005), which supports working with the syntactically annotated Penn corpora. In order to retract the results for this research, the following queries were used:

Figure 1 Query 1

```
Text of the query:
  1   node: IP-MAT*
  2   add_to_ignore: \**
  3   remove_nodes: t
  4   print_indices: t
  5   define: OE+MEU.def
  6
  7   query:
  8   (matrixIP iDoms finiteverb)
  9   AND
 10   (matrixIP iDoms RP)
 11   AND
 12   (RP precedes finiteverb)
```

(Project is locked)

Figure 2 Query 2

```
Text of the query:
  1   node: IP-MAT*
  2   add_to_ignore: \**
  3   remove_nodes: t
  4   print_indices: t
  5   define: OE+MEU.def
  6
  7   query:
  8   (matrixIP iDoms finiteverb)
  9   AND
 10   (matrixIP iDoms RP)
 11   AND
 12   (finiteverb precedes RP)
 13
```

(Project is locked)

The queries above search for independent sentences (matrixIP) that include (iDoms) finite verbs and particles (RP). The first query aims for sentences in which

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the particle precedes the verb and the second for ones where the particle follows it. We focused our research only on independent sentences, and we researched for particle and finite-verb combinations.

CorpusStudio2 engine automatically extracts the corpora results and provides examples of particle use for every period. For this research, we examined the first 100 results provided by the corpus to conduct a qualitative and comparative examination of particles' semantic characteristics. These examples were used for studying the semantical development of phrasal verbs. The relevant examples were then stored in a Microsoft Excel database. Different worksheets were created for each particle to facilitate the creation of Tables and graphs to represent the tokens. Table 2 is an example of the coding system in the Excel database.

Table 2 Sample of coding of the data

	A	Particle	Verb combination	Verb in PDE	Example	Period	Meaning
2	1	down	dio.dh	did	& ealle þeah biođ ofdı	OE	L
3	2	down	stigon	climb	& englas stigon up &	OE	L
4	3	down	hnipode	bow	Be đam is awriten đæt	OE	A
5	4	down	astig	climb	he cwæđ: Astig eft ofd	OE	L
6	5	down	w.aes gewended	was turned	& him þæt heafod wa	OE	L
7	6	down	wenda.th	turn	he cwæþ, Wendaþ mi	OE	L
8	7	down	beah	bow	He đa beah adun,	OE	L
9	8	down	astih	climb	Đa cwæđ God to Mc	OE	L
10	9	down	feoll	fell	and feoll adune færlice	OE	A
11	10	down	feol	fell	and feol adune sona tc	OE	A
12	11	down	fleo.dh	flow	and ure blod fleođ to	OE	L
13	12	down	stih	climb	Stih nu ondun, þæt þ	OE	L
14	13	down	wear,dh aworpen	were rejected	& þa weard se ylca G	OE	F
15	14	down	hangode	hang	& swa he hangode adı	OE	L
16	15	down	feoll	fell	For þam slege he feol	OE	A
17	16	down	l.aet	let	læt þine hand ofdune.	OE	L
18	17	down	let	let	Þa let he hi sona ofdu	OE	A

The first three columns of the database include the particle, the original verb and the PDE translation of the verb combined with the particle in the examples. The following column contains the examples obtained from the corpus. Some context

is also provided to comprehend and extract the meaning of the verb-particle combinations. Different colors indicate which examples carry a figurative/non-compositional, aspectual/emphatic, or literal meaning. The fifth column includes information about the period from which the examples were extracted, and the final column is for coding whether a verb-particle combination is literal or not.

For the purposes of the present research, we chose to examine the semantic development of the following nine particles:

> *about, by, down, in, of/off, on, out, over, out*

The above particles were chosen due to their occurrence diachronically in the corpus, from the OE to the LModE period. Other particles, like *forđ* (forth, forward) or *onwæg* (away), although very productive during OE and ME, lost their productivity as moving on to more recent periods of English and were excluded from the present research.

3.3 The Thesaurus Linguae Graecae

To examine the existence or absence of phrasal verbs in the Greek language, we used the Thesaurus Linguae Graecae online corpus (TLG). The project started in 1972 by the University of California, Irvine, intended to create a large digital corpus of Greek literary texts. It covers a large period of written Greek texts, beginning from Homer (8 c. B.C.) until the fall of Byzantium (1453 A.D.). The corpus in its initial version was released on magnetic tapes and in CD ROM. Since Spring 2001 it is available online for researchers. The TLG team has created its own search engine to access the corpus online. In its most recent version, the corpus contains more than 110 million words from over 10.000 works from 4.000 authors. The texts are categorized by author and information about the period of the text composition are provided. The following Table contains information about the periodization of the Greek language.

Table 3 Periodization of the Greek language (from Christidis, A. F. 2014)

Period	Duration
Ancient (Archaic and Classical)	8th-4th c. B.C.
Hellenistic	4th c. B.C.-4th c. A.D.
Medieval	5th-15th c. A.D.
Modern	16th c. A.D.-Present

The large time span of data covered by the corpus makes it appropriate for the present research, to comparatively examine the preverbs' development. Various Greek periods are represented in the corpus sufficiently, allowing a detailed examination of the verbal system development. Moreover, the results collected are presented in a large context, which facilitates examining the data's semantic characteristics.

3.3.1 Methodology of research

The collection of data for this research was struggling, because, since the Mycenaean times, the preverbal particles had unified with the verbs they accompanied. As a result, there are no written data from when the separate form of particle-verb combinations existed. However, it is possible to find preverbal particles separated from their associated verbs in the Homeric poems, a phenomenon called 'tmesis'. This phenomenon is thought to be an archaism. For this research, we decided to focus on preverbal particles existing in tmesis, to examine what caused the univerbation of the particles and the verbs in Ancient Greek. The following four particles are under the scope of our research.

     ἐν, ὑπό, ἐπί, ἐκ

We searched for the above preverbal particles through the online TLG search engine. This search engine allows proximity research. The corpus also contains

information about the parts of speech and some grammatical characteristics of each word. This feature allowed us to research for verbs preceded by the above particles. Our research included verbs or other verbal forms (infinitives or participles) in every tense, combined with the above particles, to examine the semantic and syntactic association between them in Homer's language. The data collected were then downloaded in PDF files.

To extract the relevant to the present study results, a thorough examination of the data followed. The data collected from the TLG also contained occasions where the particle had rather an adverbial than preverbal use and maintained its separate meaning. The examination of the data aimed to exclude such examples from our results, to focus the research only on particle-verb combinations with close semantic association.

3.4 Summary

This Section opened with a description of the Penn Parsed Corpora of Historical English used in the present MA Thesis to analyze the semantic development of particles. Next, we were concerned with some methodological issues regarding the extraction of data and their classification. Section 3.3, finally, provided a description of the Thesaurus Linguae Graecae corpus and the methodology followed for the analysis of the results. In the following two Sections (4 and 5), we will focus on the presentation and analysis of the most significant results.

4

The development of English particles

4.1 Introduction

The total number of tokens collected from OE until 1914 was 6,714. From these, we examined 1,348 examples containing the relevant particles of this research, for the retraction of their semantical meaning in each period. In the following sections, the most pertinent findings concerning the semantic characteristics of the particles are presented.

4.2 The position of the particle

Before moving on to the semantic analysis of particles and phrasal verbs, it is essential to examine first the development of the position of the particles participating in phrasal verbs over time. For that reason, we researched for phrasal verbs with both pre-verbal and postverbal particles. The following Tables (4 and 5) contain the number of phrasal verbs found in the corpus in different periods.

Table 4 Verb-Particle Phrasal verbs in the corpus

Description	SubCat	OE	ME	eModE	LmodE	Total
Number of main clauses		116635	78751	87804	52951	336141
Number of subclauses		98796	71562	101300	48459	320117
Number of words		1516376	1156249	1820696	999698	5493019
Verb-particle phrasal verbs	(all)	**1599**	**1036**	**2147**	**1466**	**6248**

Table 5 Particle-Verb Phrasal verbs in the corpus

Description	SubCat	OE	ME	eModE	LmodE	Total
Number of main clauses		116635	78751	87804	52951	336141
Number of subclauses		98796	71562	101300	48459	320117
Number of words		1516376	1156249	1820696	999698	5493019
Particle-verb phrasal verbs	(all)	**593**	**15**	**43**	**15**	**666**

To better understand the results presented above, the following Table with normalized data to 100 is provided.

Table 6 Normalized data for particle position

| Particle Position		OE	ME	eModE	LModE	Total
Verb-Particle Phrasal Verbs		**73**	**98**	**98**	**99**	**90**
Particle-Verb Phrasal Verbs		27	2	2	1	10

From the above Tables (4, 5 and 6) it is observed that verb-particle order has increased in frequency since the OE period. Moreover, particles in preverbal position were more frequent during OE but decreased in the following periods. However, it is observed in the data that the particle's postverbal position has been the most prominent one in all periods of English. This observation contradicts Hiltunen's (1983a: 105) suggestion that during the OE period, the particle's preverbal position was generally more frequent than the postverbal one. The above results show a tendency for a postverbal particle position throughout all English language periods. The most determining period of English for establishing the particle's postverbal position seems to be the eModE period when the use of verb-particle combinations was generally increased, and there is a clear preference for the postverbal position of the particle.

4.3 The development of the semantic characteristics of the particles

In the following sections, the study of the emergence of the particles' different semantic features is attempted. Due to particles' more frequent existence in postverbal positions (as shown in the Tables above), we examine examples with

verb-particle word order. The following Figure illustrates the distribution of the nine particles under investigation in different periods of English.

Figure 3 Frequency of particles in different English language periods
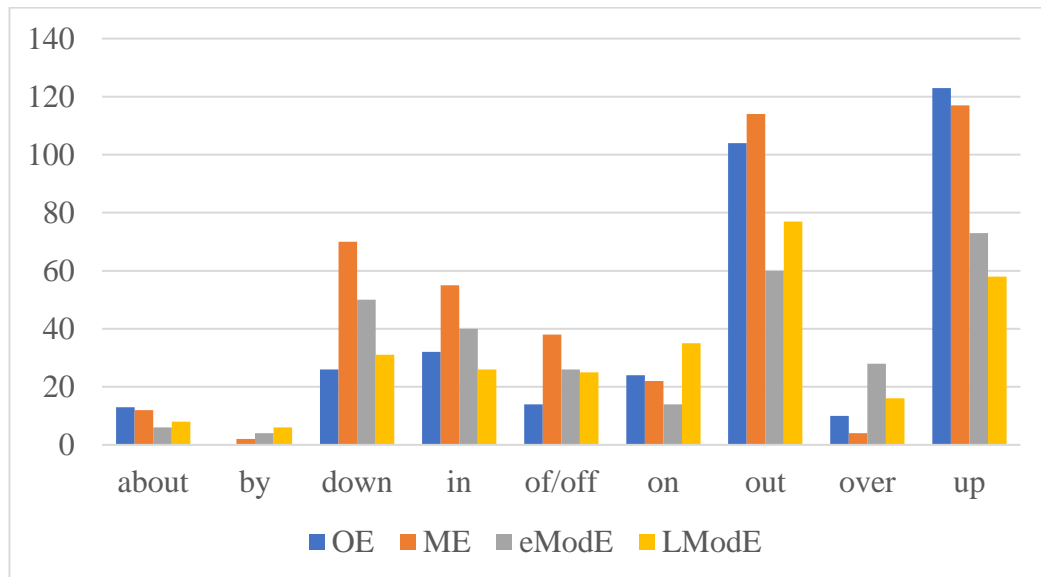
In Figure 3, it is shown that the most prominent particles diachronically are *out* and *up*, whereas the frequency of *about* and *by* remains relatively low in all periods of English language.

Let us now turn onto the different semantic characteristics developed by particles in various English language periods.

4.3.1 About

The following Table illustrates the different types of meanings conveyed by *about* from the 38 examples examined from the corpus.

Table 7 Types of meanings of *about* in the corpus

Meaning	OE	ME	eModE	LModE
Literal	12	5	4	3
Figurative/Non-compositional	0	2	1	4
Aspectual/Emphatic	0	4	1	1

In order to gain a better perspective of the meanings conveyed at each period by the particle, it is useful to examine the normalized results provided in the diagram below:

Figure 4 Development of the meanings of *about* in normalized data
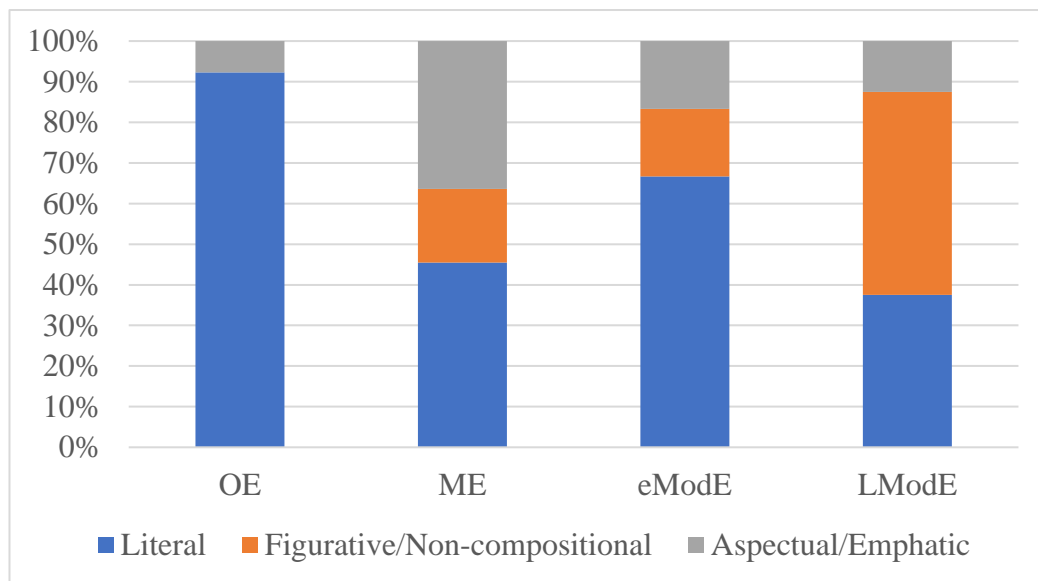
In Table 7 and Figure 4 above, it is shown that throughout time *about* mostly preserves its literal sense, meaning 'near, around a place', as shown in the following examples from OE:

27. *& þa þe suð **ymbutan foron**. **ymb sæton** Exancester.*
  '& that they **travelled about** the south. They **settled about** Exancester.'

28. & **besætt** þone castel **abutan.** mid swiđe mycele here fulle six wucan.

'& and **waited about** that castle filled with six priests with a great army.'

In the examples 27 and 28 above, the meaning conveyed by the adverbial particle is literal, specifying the area near which the Danish settled down (example 27) and the area near which the army was waiting (example 28).

Since the ME period *about* started also obtaining an emphatic role, to enhance the meaning conveyed by the verb, as illustrated in the following example:

29. *I was wandryngge aboute wit Caym acursed:*

'I **was wandering about** with cursed Caym:'

At the same period, we also find it conveying figurative or even non-compositional meaning, as shown below:

30. *Trewly I schuld neuer **bryng** it so **aboute** for ouġt þat I couþ do or sey.*

'Truly I should never **bring** it so **about** for anything that I could do or say.*'*

31. *but fyrst I **wil go about** to mark and appoynte out by my wordes,*

'But first I **will go about** to mark and point out by my words'

that false felycytie, that is better knowen to the, that after thou haste sene her, when thou hast turnyd thy eyes on the contrarye parte, that is to saye: from false felicitie vnto trewe felicitie, thou mayst the better knowe the similytude and beawtie of the same trew felicitie.

In example 30 the phrasal verb has obtained a figurative meaning, used in the sense of 'mention'. In example 31, *go about* is a fully idiomatic, non-compositional phrasal verb meaning 'to carry out an activity'.

From eModE onwards, the use of *about* for the creation of figurative and non-compositional meaning increased. By the late eModE and early LModE periods, an increasing number of verbs is combined with *about.* Most combinations appear

for the first time, and *about* is added to the verb to broaden its meaning. The following examples are illustrative of the phrasal verbs that can be found during this period in the data:

32. *They **went about** to perswade the World of it, with great Zeal, though they knew they were to get nothing by it, but Reproach and Sufferings. (=*start dealing with)

(BURNETROC-E3-P1,76.217)

33. *I **dabbled about** with letters all morning. (=*got involved with*)*

(BENSON-190X,112.222)

34. *and much rough horse-play **was going about.** (=was happening)*

(BRADLEY-1905,214.238)

The examples above show that in the LModE period, phrasal verbs' creation with *about* conveying non-compositional meaning has become more productive. *About* seems to indicate 'the occurrence of an action', whether this action is a movement or the subject's involvement in a situation.

4.3.2 By

The development of the semantic meaning of *by* is of particular interest. Firstly, no examples of *by* were found during the OE period in the corpus. As shown in the following Table, the frequency of *by* remains relatively low during all other English periods.

Table 8 Types of the meaning of **by** in the corpus

Meaning	ME	eModE	LModE
Literal	0	0	0
Figurative/Non-compositional	2	1	2
Aspectual/Emphatic	0	3	3

As seen in Table 8, another characteristic that differentiates *by* from all the other particles under examination is that no literal meaning is found to be conveyed when associated with verbs. Since ME it can be found in figurative combinations like the one in the following example:

35. *we **ben holden bi** as shepe of slaġtter.*

(CMEARLPS,54.2326)

A figurative meaning can be created with *by* in later periods as well, as seen from the following example from LModE:

36. *the years **flew by** in calm tranquillity, happy in our mutual confidence, happy in our entwined affection.*

(BROUGHAM-1861,7.205)

Moreover, in eModE and LModE, it is associated with the verb *pass* or verbs with a similar meaning, to emphasize the action of 'passing':

37. *Bedloe accidentally **passed by**, not knowing any thing concerning him:*

(BURNETCHA-E3-P2,2,191.288)

38. *Mortals promenading homewards, in the fall of the day, **saunter by**, from Chaillot or Passy, from flirtation and a little thin wine; with sadder step than usual.*

(CARLYLE-1837,1,150.371)

4.3.3 Down

As shown above in Figure 3, *down* is a particle found quite frequently in the corpus data. It also develops literal, aspectual/emphatic, and figurative or non-compositional meaning during all English periods. The Tables below contain the number of examples found in the corpus conveying different meanings in each English language period.

Table 9 Types of the meaning of *down* in the OE corpus

Meaning	Raw numbers	Normalized per 100
Literal	15	57.69
Figurative/Non-compositional	1	3.85
Aspectual/Emphatic	8	30.77

Table 10 Types of the meaning of *down* in the ME corpus

| Meaning	Raw numbers	Normalized per 100
Literal	20	28.57
Figurative/Non-compositional	7	10
Aspectual/Emphatic	43	61.43

Table 11 Types of a meaning of *down* in the eModE corpus

Meaning	Raw numbers	Normalized per 100
Literal	21	42
Figurative/Non-compositional	4	8
Aspectual/Emphatic	25	50

Table 12 Types of the meaning of *down* in the LModE corpus

Meaning	Raw numbers	Normalized per 100
Literal	14	45.16
Figurative/Non-compositional	6	19.35
Aspectual/Emphatic	11	35.49

In order to have a better picture of the development of the meaning of *down*, the following Figure illustrates the frequency of the different meanings in different periods based on the normalized results of the data.

Figure 5 Frequency of the meanings of *down* in normalized data
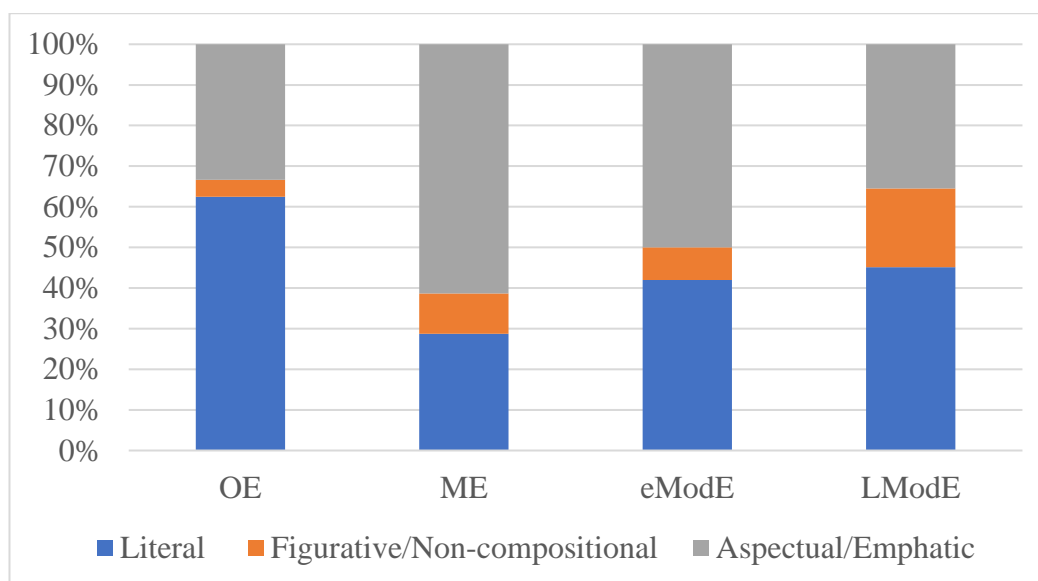
As the above Tables and Figure 5 show, the literal meaning conveyed by *down,* although very frequent during the OE period, gave its place to its emphatic meaning in ME. Examples like the ones below are very frequently found in the ME corpus:

39. *and when he fonde all sothe þat þe monk told, þen he **knelyd don**,*

    'and when he found to be true all that the monk told, then he **kneeled down.**'

    (CMMIRK,75.2027)

40. *In his tyme þe cherch of Lateranense **fel down,***

    (CMCAPCHR,89.1729)

However, the conveyance of emphatic meaning started to decrease again from eModE onwards and *down* started conveying literal meaning again more frequently. We also observe that the creation of figurative meaning is more frequently found in the LModE period. Verb-particle combinations like the ones below are more frequently found in this period:

41. *and in that case I will cheerfully **throw** the business **down** a while, and walk off with you to Scotland; hoping to be ready for the next publishing season.*

    (CARLYLE-1835,2,291.535)

42. *I read over what I have written about Eton-*

    *perhaps I ought not even to **put** it **down**-*

In the examples above, the phrasal verbs with *down* seem to convey a partly idiomatic meaning in the sense of 'neglect' (example 41) and 'mention' (example 42).

4.3.4 In

The data examination revealed that in over 80% of the cases *in* is used to create literal meaning, as shown in Table 13:

Table 13 Types of meaning of ***in*** in the corpus

Meaning	OE	ME	eModE	LModE	Total frequency of meaning (per 100)
Literal	29	44	32	18	80.3
Figurative/Non-compositional	1	6	5	5	11.5
Aspectual/Emphatic	2	6	3	3	8.2

In is expected to convey literal meaning more frequently, since in 68 examples out of the total 152 examined, it is associated with verbs meaning 'go' or 'come'. The emergence of emphatic meaning is witnessed more frequently in ME:

43. *But it is now **enclosed in** with the toun wall.*

(CMMANDEV,49.1219)

However, in the same period, the emergence of figurative and idiomatic meaning is also witnessed:

44. *Than **entyrs in** vayne glorie.*

'Then glory enters in veins.'

<div align="right">(CMROLLTR,20.463)</div>

45. *This man repaired þe cherch of Seynt Praxede,*

 *and **set in** monkis of Grece*

 'and established Greek monks'

<div align="right">(CMCAPCHR,85.1594-5)</div>

Idiomatic meaning of phrasal verbs with *in* also occurs in examples 46 and 47 below, collected from the eModE and LModE data, respectively:

46. *There was also a proviso **put in** excepting nine ladies about the queen.*

<div align="right">(BURNETCHA-E3-P2,2,176.26)</div>

47. *We had a long mixed vague talk;*

 *but **I knocked a few nails in**, I think.*

<div align="right">(BENSON-190X,113.251)</div>

In example 46 *put in* is used in the sense of 'submit' whereas in example 47, we observe the creation of a highly idiomatic phrase.

4.3.5 Of/Off

The corpus study revealed the existence of two allomorphic variations for the lexicalization of *off*. Until the middle ME period, only the *of* variation can be found in the corpus. From ME until late eModE both variations could occur; however, the one-*f* variation was the most prominent. Since late eModE, the orthography is fixed in the PDE form, *off*.

Table 14 below contains the different types of meaning found in the corpus conveyed by the association of *off* with different verbs in raw numbers.

Table 14 Types of meaning of *of/off* in the corpus

Meaning	OE	ME	eModE	LModE
Literal	8	4	5	9
Figurative/Non-compositional	0	13	9	10
Aspectual/Emphatic	8	21	12	6

In order to get a better perspective of the meaning development of *off,* the following diagram of the normalized data is provided.

Figure 6 Frequency of the meanings of *off* in normalized data
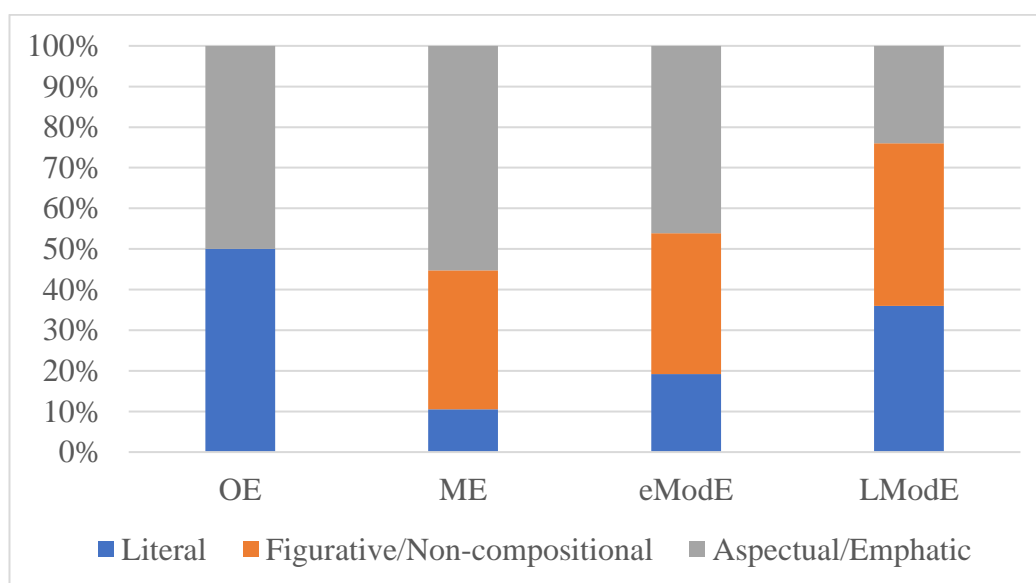

Table 14 and Figure 6 show that figurative/idiomatic meanings can be conveyed by *off* only after the OE period. In OE, the occurrence of literal and aspectual/emphatic meanings is equally distributed in the data. However, although the aspectual/emphatic meaning is still conveyed very frequently in ME, the literal meaning is low in frequency in the same period. The emergence of idiomatic meaning in ME can be seen in the following example:

48. *Also when þou hase bene besye owtwarde a while with thi seruauntes, or with*
*oþer mene profitably, þou sall **breke offe**, and com agayne to þi prayers and*
thi deuocyon, after Godd gyfs þe grace;

'Also when you have been preoccupied a while outwards with your servants,
or with other men profitably, you shall **terminate** it, and come again to your
prayers and your devotion, after God gives the grace;'

(CMROLLTR,30.635)

In eModE, more phrasal verbs with idiomatic meaning can be found, like 'put off'
(to delay), 'come off' (to appear) and 'shake off' (to disassociate from a rumor').

In Figure 6, we can also observe that as the conveyance of figurative/idiomatic
meaning increases in eModE and LModE, the frequency of aspectual/emphatic
meanings decreases. During the OE and ME periods, *off* was frequently associated
with verbs describing war acts to create emphatic meaning, as 'cut off', 'smite off',
'strike off'. In the following periods, such verbs in the corpus are reduced, so does
the presence of aspectual/emphatic meanings of *off*.
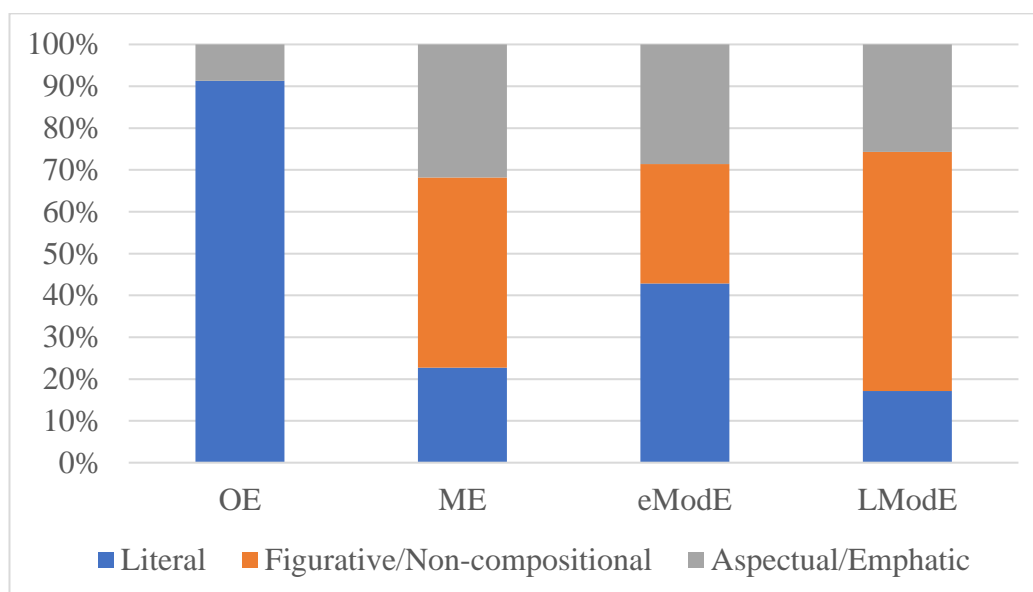
4.3.6 On

In Table 15 and Figure 7, the different meanings conveyed by *on* in the corpus are
included, in raw and normalized numbers, respectively.

Table 15 Types of meaning of ***on*** in the corpus

Meaning	OE	ME	eModE	LModE
Literal	21	5	6	6
Figurative/Non-compositional	0	10	4	20
Aspectual/Emphatic	2	7	4	9

Figure 7 Frequency of the meanings of *on* in normalized data

As in the case of *off* above, *on* does not convey figurative or idiomatic meaning at all in OE. More than 90% of the meaning given is literal. In ME the existence of non-compositional meaning with *on* increases in the corpus. This increase results from the frequent association of *on* with the verb 'fangen', meaning 'to begin, to start':

49. *swiđe he awundrede him of hire wliti westum ant swider of hire words & **feng on** þus to speokene*
   'he was very much astonished of her beautiful shape that intervened in her words and **stared** thus to speak.'

   (CMKATHE,23.65-6)

However, as seen in the diagram above, LModE is when the development of figurative meaning with *on* really takes off. When used emphatically, it adds the sense of continuance in the action described by the verb, as in the following example:

50. *Then P. L. and I **walked on**, and had a long talk about relations with other people- very interesting.*

   (BENSON-190X,139.928-9)

In this period, it is also very frequently associated with 'go' to create the meaning of 'continue'.

51. Time **went on** this day in a calm, agreeable way.

<div align="right">(BOSWELL-1776,46.352)</div>

4.3.7 Out

Out is the second most frequent particle found in the corpus. As shown in Table 16 and Figure 9 below, the meanings conveyed by *out* with time have gone through a great amount of variation, resulting in an almost equal distribution of literal, figurative, and emphatic senses in LModE.

Table 16 Types of meanings of *out* in the corpus

Meaning	OE	ME	eModE	LModE
Literal	60	67	14	24
Figurative/Non-compositional	6	12	23	25
Aspectual/Emphatic	37	35	23	28

Figure 8 Frequency of the meanings of *out* in normalized data
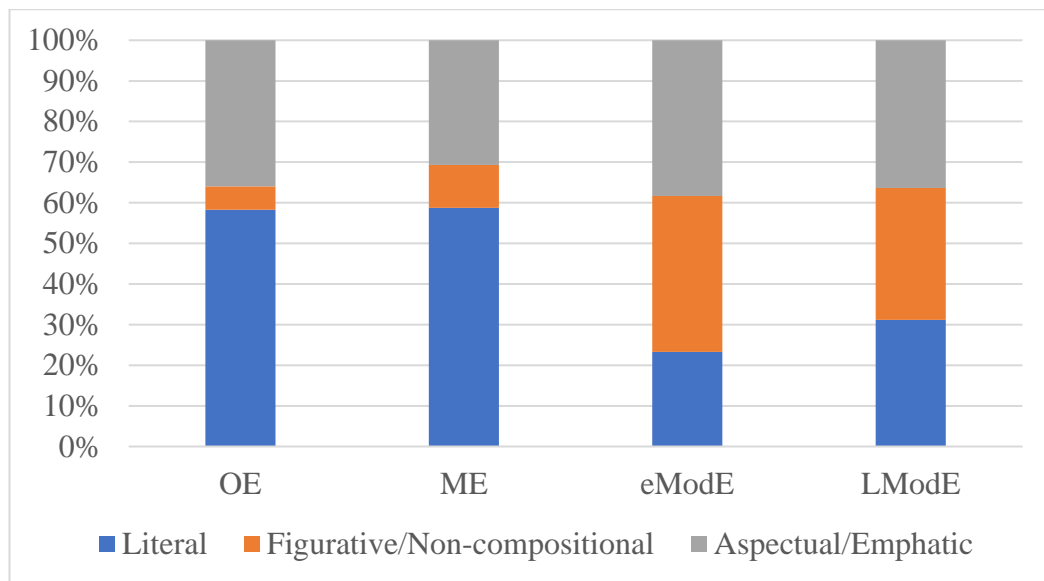
In the above Figure, we can observe that *out* used to convey mainly a literal or aspectual/emphatic meaning in OE and ME. In order to create literal and emphatic meaning, *out* is associated with verbs of movement, such as 'go', 'come', 'bring', 'spit', 'drive'. Since eModE, the literal combinations found in the corpus are reduced, and the figurative ones are significantly increased. In this period, we find the following non-compositional combinations in the corpus:

a. *to break out*:   to present
b. *to cast out*:   to expel
c. *to be cut out*:   to be suited for a work
d. *to give out:*   to reveal
e. *to fall out:*   to happen

A unique combination also found in eModE is the one in the following example:

52. *and because I have lately shewn to thee, with a full Pace, the Figure of true Happiness, and also in what it is placed, and all things being run through which I think necessary to be premised, I shall now* **chalk out** *to thee that direct way which will lead thee again to thy own Habitation.*

(BOETHPR-E3-P2,161.333)

In this example, 'chalk out' is an ad hoc combination, suggesting that since eModE *out* has already been established as a figurative particle. In eModE, it is also used to reverse the meaning of the associated verb, as in the example below:

53. *but he maye well **lode oute** his dounge before none, and lode heye or corne at- after none:*
    'but he may well **load out** his garbage in front of no one, and load hay or corn at after no one:'

(FITZH-E1-P2,32.178)

During LModE more combinations with *out* preserve a non-compositional meaning, most of which can still be found in PDE. Such combinations are 'set out' (to start a journey), 'come out' (to be presented), 'turn out' (to result), 'carry out' (to fulfil) and others.
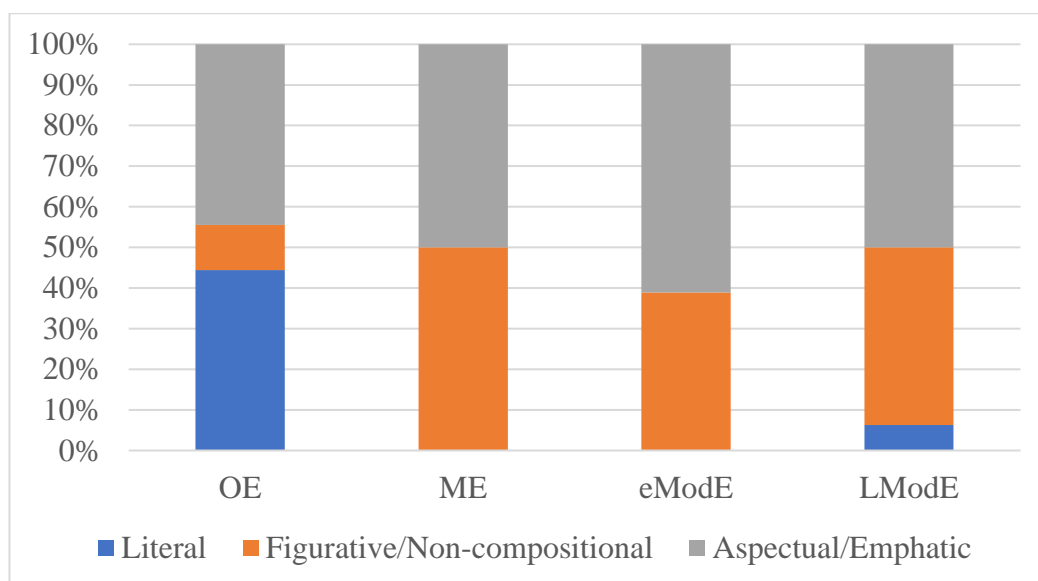
4.3.8 Over

The development of the meaning of *over* is of particular interest, as shown in the following Table and diagram.

Table 17 Types of meanings of *over* in the corpus

Meaning	OE	ME	eModE	LModE
Literal	4	0	0	1
Figurative/Non-compositional	1	2	7	7
Aspectual/Emphatic	4	2	11	8

Figure 9 Frequency of meanings of *over* in normalized data

As shown in Figure 9, *over* preserves a highly aspectual/emphatic meaning throughout every period of English. In OE, *over* is frequently combined with *singan* 'sing' in the corpus to convey the meaning of 'sing again'. Since ME, the conveyance of idiomatic/figurative meaning increases. However, the examples from ME in the corpus are not enough to draw any conclusions. In eModE, the idiomatic meaning of *over* remains frequent. The following examples are representative of the phrasal verbs found in this period.

54. *and therefor the delivery was **put over** a day.* (was delayed)

([EDWARD-E1-H,256.23])

55. *and so shal he **mucke** all his landes **ouer** at euerye seconde falowe.*

    'And so he shall **make over** all of his lands to every second fellow.' (transfer)

(FITZH-E1-P2,27.32)

In LModE, *over* is associated with *look* to create the meaning of 'oversee'. It can also be frequently found combined with the verb *to be*, to indicate the termination of action.

4.3.9 Up

Up is the particle most frequently found in the corpus. Table 18 and Figure 10 illustrate the frequency of different *up*-meanings in different English periods.

Table 18 Types of meanings of **up** in the corpus

Meaning	OE	ME	eModE	LModE
Literal	55	33	17	14
Figurative/Non-compositional	6	15	15	19
Aspectual/Emphatic	60	68	41	25

Figure 10 Frequency of meanings of **up** in normalized data
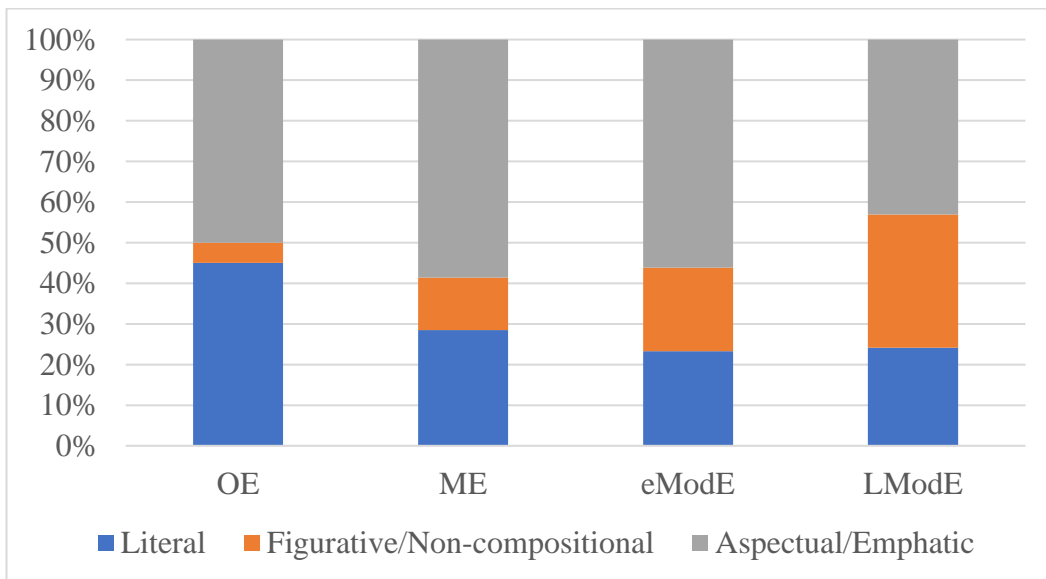
As shown above, *up* is mostly used emphatically throughout all English periods. It is often combined with verbs meaning 'lift', to emphasize the direction of the movement. We can also observe that from OE to LModE, the non-compositional meaning of *up* has steadily increased, whereas the conveyance of literal meaning

has been significantly reduced. In ME, we can frequently find the phrasal verb 'give up' in the corpus, with the meaning of 'quit'.

In eModE *up* broadens its meaning also to indicate the termination of the action. This development is observed in examples like the one below:

56. *and **eate up** all, to the wonder of the beholders, who never knew him eate so much before, but drink ten times more.*

<div align="right">(ARMIN-E2-H,14.214)</div>

From eModE onwards, the creation of new idiomatic phrasal verbs is quite frequent. In the corpus, we find the phrasal verbs 'set up', 'make up', 'keep up' and 'take up'. Moreover, in LModE, *up* also occurs in idiomatic expressions, like the one in the following example:
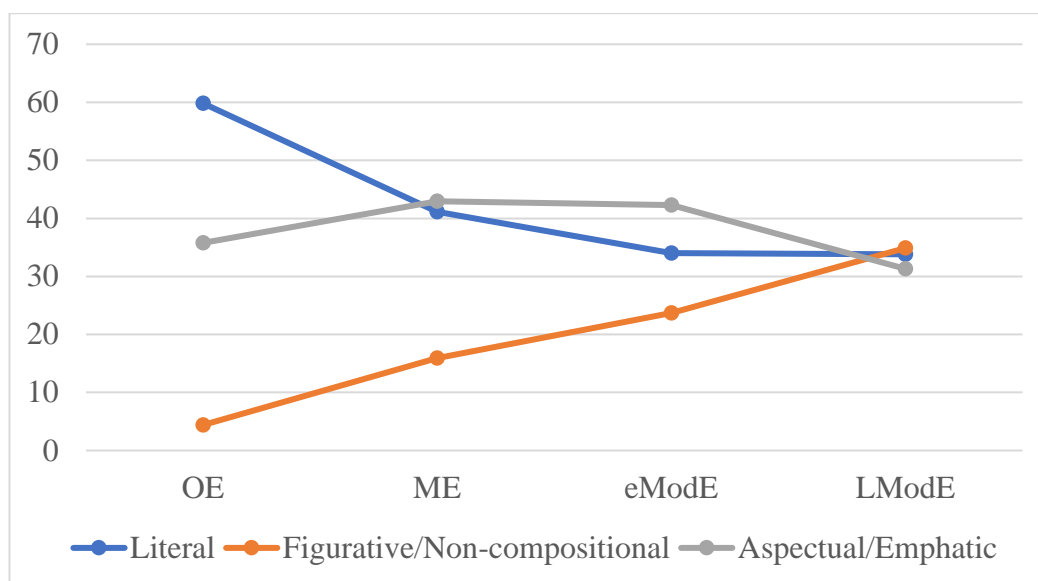
57. *But **I have made up my mind**, at last* (have reached a decision)

<div align="right">(BROUGHAM-1861,17.601)</div>

4.4 Discussion of the results

The following diagram has been composed based on the semantic characteristics of the nine particles discussed in this study. It illustrates the general tendencies observed in the data.

Figure 11 Frequency of particle meanings in the data

The findings above suggest that there has been a gradual development of the figurative/non-compositional meaning of particles. From the data collected, 60% convey a literal meaning in OE, while the percentage of non-compositional meaning remains lower than 10%. From ME onwards, more and more data get a non-compositional sense gradually, while at the same time, the particles are used with their literal meaning less frequently.

The results also suggest that the conveyance of aspectual/emphatic meaning is present and significant from OE. In ME and eModE, the occurrence of aspectual meaning is more frequent than before. The ME data also suggest that literal and aspectual meanings are in equal distribution at this period. This observation partly agrees with Hiltunen's (1983a) suggestion that aspectual meaning of particles had not been established until late ME. However, in LModE, the frequency of aspectual meaning is again reduced.

It is also worthy of attention that in LModE, the different particle meanings seem to be in an approximately equal distribution. As the use of particles with their literal meaning declined, the non-compositional meaning of particles increased. This development could be interpreted as if the literal meaning of particles gave its place to the figurative/non-compositional one. Such an observation is more straightforward for particles such as *out* and *up*. Grady (1997: 296-297),

researching metaphors, argues that *out* and *up* are used figuratively to indicate the perception of an object's properties or access to awareness. According to these observations, it is easy to conclude that the movement of an object "out" or "up" makes it fall under our attention. Consequently, these particles started being used in the metaphoric sense of 'present, reveal'. This observation is in line with Neagu, who also points out (in her study on the development of different meanings of the particles *up* and out) that the "figurative related meaning of the particles derived from a central/prototypical locative meaning" (2007: 136).

In most cases examined above, we observe that the particles convey figurative and aspectual meaning more frequently as we move closer to PDE, as earlier studies have suggested (de la Cruz 1972, Brinton 1988, Rodríguez-Puente 2013). However, the particles *down* and *off* seem to be exceptions of this rule. In case of *down,* we notice a significant reduction of literal meanings from OE to ME, while at the same time, aspectual/emphatic meanings increased. The picture changes again from eModE onwards when literal combinations start to rise again. This increase is a result of the types of meaning associated with *down* during those periods. In ME *down* is more frequently associated with verbs like "fall, lay, kneel, bow, sit", who's meaning already explains that the movement's direction is towards the ground, so the particle has an emphatic role. In eModE and LModE, *down* is associated frequently with motion verbs like "go, come, send, get" conveying a literal, directional meaning.

The case of *off* is similar to *down.* In ME, *off* is more frequently associated with verbs meaning "cut, smite", describing acts of war, acquiring an aspectual meaning. However, in LModE, we find *off* related to verbs like "go, drive" where it is used with its literal meaning.

The above observations are based on a study of some only examples of the data. Further investigation is needed to verify them.

4.5 Summary

This Section has provided an account of the development of English particles frequently found in phrasal verbs, based on our results from the Penn Parsed Corpora of Historical English. The Section opened with a comparison between the data to argue that the most frequent particle position in main clauses has been the postverbal one diachronically, contradicting Hiltunen (1983a). We then moved on to examine the semantic development of nine particles existing diachronically in the corpus, namely *about* (4.3.1), *by* (4.3.2), *down* (4.3.3), *in* (4.3.4), *off* (4.3.4), *on* (4.3.6), *out* (4.3.7), *over* (4.3.8), *up* (4.3.9). We argued that the results agree with the suggestion that in earlier periods of English particles used to convey literal meaning more frequently and that the emergence of aspectual/emphatic meaning can be placed in the ME period. In contrast, figurative/idiomatic meanings develop mostly from eModE onwards (de la Cruz 1972, Brinton 1988, Rodríguez-Puente 2013).

Finally, in section 4.4, we agree with Neagu (2007) that figurative meanings emerge from the literal meanings of particles, on the basis of examination of the particles *out* and *up*. Moreover, we point out that the particles *down* and *off* show a deviation from the expected meaning development, as their aspectual/emphatic meaning decreased in LModE, while their literal meaning increased. These results, however, might have been affected by the particular examples examined, and further research is needed to verify them.

5

Absence of phrasal verbs in the history of Greek

5.1 Introduction

We have examined the semantic development of particles in English and how and when they started deviating from their literal meaning. In this Section, we focus on Greek and try to examine the reasons behind the absence of phrasal verbs comparatively. This has proven to be a challenging task since even in the earliest Greek written documents of the Mycenaean times, the univerbation of particles and verbs has occurred, as observed repeatedly in several studies (see among others Horrocks 1981, Bortone 2010, Haug 2013). For that reason, our focus will turn towards tmesis, the phenomenon of separation between a preverbal particle (prepositions and preverbs) and its associated verb, frequently occurring in Homeric epic poems. This phenomenon is considered a representation of an earlier form of Greek, so it provides valuable data to examine why univerbation occurred.

Section 5.2 contains an introduction on the positions where we can find preverbal particles in Homer and adds specific remarks on the phenomenon of tmesis. Section 5.3 presents the results collected from our research on the TLG for tmesis with the particles *ἐν, ὑπό, ἐπί* and *ἐκ*. Finally, section 5.4 compares Greek and English, to specify the processes both languages underwent, causing the emergence of phrasal verbs in English and the univerbation of verbs and particles in Greek.

5.2 Preverbal particles in Homer

As mentioned earlier in Section 2, in early stages of Ancient Greek, prepositions could occupy both prenominal and postnominal positions since the nominal case conveyed the adverbial meaning and they were used as independent adverbs (Bortone 2010). However, the case is not the same when it comes to the position of particles. The independent particles of adverbial origin developed into preverbs "that in the course of the history of Greek coalesced with verbs to form compound verbs" (Haug 2013). Although this process seems to have been completed even before the Mycenaean period, when the earlier written documents of Greek are dated, there are instances where we can observe that preverbs can still be separated from the associated verbal root. This separation is frequent in the Homeric poems, which although they are intermediate between the Mycenaean and Classical periods, they represent an earlier stage of the Greek language concerning the use of preverbal particles.

The above phenomenon caught the grammarians' attention, who called it tmesis (which we might say is an anachronism, since the independent existence of the verb and the particle preceded the compound). More recently, linguists are becoming increasingly interested in this phenomenon, and try to explain it in terms of dating or word order. For some scholars, tmesis is considered an archaism in Homer since it represents a language stage earlier than Mycenaean (Horrocks 1981). Others suggest that it might result from the 'free' word order of Greek, arguing that the preverbal particle placement is determined by the pragmatic elements of the verb (Bertrand 2014).

Based on the above, we observe that there are four types of preverbal particle position in Ancient Greek, as classified by Budd (2007: 36-39):

1. Preposed before a Noun Phrase:
   ἐπί χέρσου
   'on the shore'
2. Postposed after a Noun Phrase:

ὅσσα τε γαῖαν ἔπι πνείε

'whatever on the earth breathes'

3. Tmesis (belonging with a verb but separated from it)

   ἐπὶ δ' ἤνεον ἄλλοι ἑταῖροι.

   'and the rest of the comrades gave assent'

4. Preverb

   κεφαλῇ δ' ἐπέθηκε καλύπτρην

   'on her head she put a veil'

According to the aims of the present study, we are interested only in the third type of preverbal particle position.

From Classical Greek onwards, preverbs occur in tmesis less frequently, and the univerbation of verbs and particles is completed. The reason of studying tmesis in the present study is to explain what caused the prefixation of verbs in Greek and disallowed the maintenance of the separate forms of verbs and particles, which would be similar to the phrasal verb constructions in English. Since tmesis is considered to represent an earlier stage of the Greek language, it provides the appropriate base to study the development of the particle + verb construction into compound verbs and contrast it with the development of phrasal verbs in English.

As mentioned before, we focus on four preverbal particles of Ancient Greek found in Homer, namely *ἐν, ὑπό, ἐπί* and *ἐκ*.

5.3 Data from the Homeric poems

The TLG corpus study yielded a total number of 1,845 tokens of the above particles preceding a verb in both Homeric poems (*Odyssey* and *Iliad*), which is sufficient to permit the intended analysis in a satisfactory level. In the sections that

follow, we present the most relevant findings concerning this research's comparative purpose.

5.3.1 Instances of tmesis in the Homeric poems

The following Table contains all the instances in *Odyssey* and *Iliad,* where the preverbal particle and the verb seem to be strongly associated, though separated in the text.

Table 19 Frequency of tmesis in Homer

	Frequency of tmesis	
Preverbal Particle	Odyssey	Iliad
ἐν	17	20
ὑπό	4	6
ἐπί	8	1
ἐκ	8	8

As shown in Table 19 above, tmesis is not that frequent in Homeric poems, except the case of ἐν, which seems to occur separately from its associated verb often. We should specify at this point that we did not take into consideration in this research the cases where the preverbal particle would affect the case of the following direct

object, or those that have any indication of an adverbial use. The above results contain only those instances where the verb and the preverb are closely associated, conveying a unified meaning.

Let us now focus on some instances of tmesis found in the data requiring a closer examination.

To begin with, verbs with *ἐν* as a prefix already existed in the Homeric times, as the following example shows:

58. *ἐν δ' ὑπέρας τε κάλους τε πόδας τ' **ἐνέδησεν ἐν αὐτῇ**,*

    'And he made fast in the raft braces and halyards and sheets,'

              (HOMERUS Epic. Odyssea {0012.002} Book 5 line 260)

From example 58 above we understand that the verb *ἐνδύω* conveys already a unified meaning, so the prepositional phrase that follows is necessary to specify the direction of the verbal action. The occurrence of tmesis in cases where the preverb and the verb acquire a unified meaning is more prominent in examples like the following one:

59. *πὰρ δ' ἐτίθει σπλάγχνων μοίρας, **ἐν δ' οἶνον ἔχευεν***

    ἐν δέπαϊ χρυσέῳ, καί μιν πρὸς μῦθον ἔειπεν·

    'Beside him he set portions of the entrails and poured wine in a cup of gold,'

              (HOMERUS Epic. Odyssea {0012.002} Book 20 line 260)

In the example above, we observe tmesis between *ἐν* and *ἔχευεν*, caused by the insertion of the direct object of the verb, *οἶνον*. The fact that the particle + verb combination is interpreted as a separated compound verb is verified by the existence of a prepositional phrase immediately after the verb, to indicate the verbal motion direction.

The preverb *ἐπί* is also found separated from its associated verbal root, especially in *Odyssey*, as shown below:

60. *αὐτὰρ ἐγὼν αὐτοῦ μένον ἔμπεδον, ὄφρ' **ἐπὶ μήτηρ***

    ἤλυθε *καὶ πίεν αἷμα κελαινεφές·*

'but I remained there steadfastly until my mother came up and drank the dark blood.'

<div align="center">(HOMERUS Epic. Odyssea {0012.002} Book 11 line 152)</div>

In this example, the preverb is separated from the verb due to the subject's insertion between them. There are also cases were *ἐπί,* and its associated verb not only convey a unified meaning but also acquire a metaphorical sense as well:

61. *ὣς ἔφατ' Εὐρύλοχος, **ἐπὶ** δ' **ᾔνεον** ἄλλοι ἑταῖροι.*
    'So spoke Eurylochus, and the rest of the comrades gave assent.'

<div align="center">(HOMERUS Epic. Odyssea {0012.002} Book 12 line 294)</div>

In example 61, *ἐπὶ* is associated with the verb *αἰνέω*, which originally means 'to praise'. However, the separated compound acquires the metaphorical meaning 'to agree, to give assent'.

The development of a metaphorical meaning can also be attested in the following particle-verb combination with *ὑπό*:

62. *τῶι δ' ὁ γέρων Πρίαμος **ὑπό** τ' **ἔσχετο** καὶ κατένευσεν*
    δωσέμεναι· ὃ δὲ μάρναθ' ὑποσχεσίηισι πιθήσας.
    'To him the old man Priam promised that he would give her, and bowed his head thereto, and Othryoneus fought, trusting in his promise.'

<div align="center">(HOMERUS Epic. Ilias {0012.004} Book 13 line 368)</div>

In the above example we observe that the meaning conveyed by the phrase *ὑπό τ' ἔσχετο* should be rather characterized a non-compositional one, since *ὑπό* means 'under' and *ἔχω* means 'to have', but in combination, they mean 'to promise'. In the following line, we observe the existence of the noun *ὑποσχεσίηισι*, which indicates that the univerbation of the particle and the verb had already been completed by the Homeric times and was productive enough to give other parts of speech, as nouns. However, the verbal form is used with tmesis.

Finally, *ἐκ* is used primarily in combination with motion verbs to express separation, dislocation, as shown in the following example:

63. *ἐκ δ' ἔλασεν σιάλοισιν ἐοικότας ἐννεώροισιν.*

'and drove them out in the form of swine of nine years old.'

(HOMERUS Epic. Odyssea {0012.002} Book 10 line 389)

However, it can also combine with verbs to create metaphorical meaning, both in *Odyssey* and in *Iliad*:

64. *τοῦ μ' ἔκ φασι γενέσθαι, ἐπεὶ σύ με τοῦτ' ἐρεείνεις.*

'they say that I am sprung, since thou askest me of this.'

(HOMERUS Epic. Odyssea {0012.002} Book 1 line 220)

65. *ὅς τίς κε τλαίη—οἷ τ' αὐτῶι κῦδος ἄροιτο—*

νηῶν ὠκυπόρων σχεδὸν ἐλθέμεν ἔκ τε πυθέσθαι,

ἠὲ φυλάσσονται νῆες θοαί, ὡς τὸ πάρος περ,

'to the man whosoever will dare—and for himself win glory withal—

to go close to the swift-faring ships, and spy out

whether the swift ships be guarded as of old,'

(HOMERUS Epic. Ilias {0012.004} Book 10 line 308)

In example 64 above, we observe that the combination of *ἔκ* with the verb *γίγνομαι* causes the development of the metaphorical meaning 'to be sprung'. In example 65 as well *ἔκ* in association with *πυνθάνομαι* conveys the meaning of 'spy out'.

The results and the examples analyzed so far have shown that even under the influence of tmesis, preverbal particle-verb combinations can still employ metaphorical and non-compositional meanings. This ability is similar to the phrasal verbs' semantic characteristics. However, in the following periods of Greek, preverbal particles became prefixes when associated with verbs. In the following section, we explain what caused the univerbation of particle-verb combinations in Greek in contrast to the development of phrasal verbs in English.

5.4 Presence of phrasal verbs in English vs absence in Greek

To explain the development of phrasal verbs in English and the univerbation of particles and verbs in Greek, we should examine the differences in the word order between the earlier stages of the two languages and the influence of language change processes, which affected the development of the two grammars. The following two sections are dealing with these phenomena.
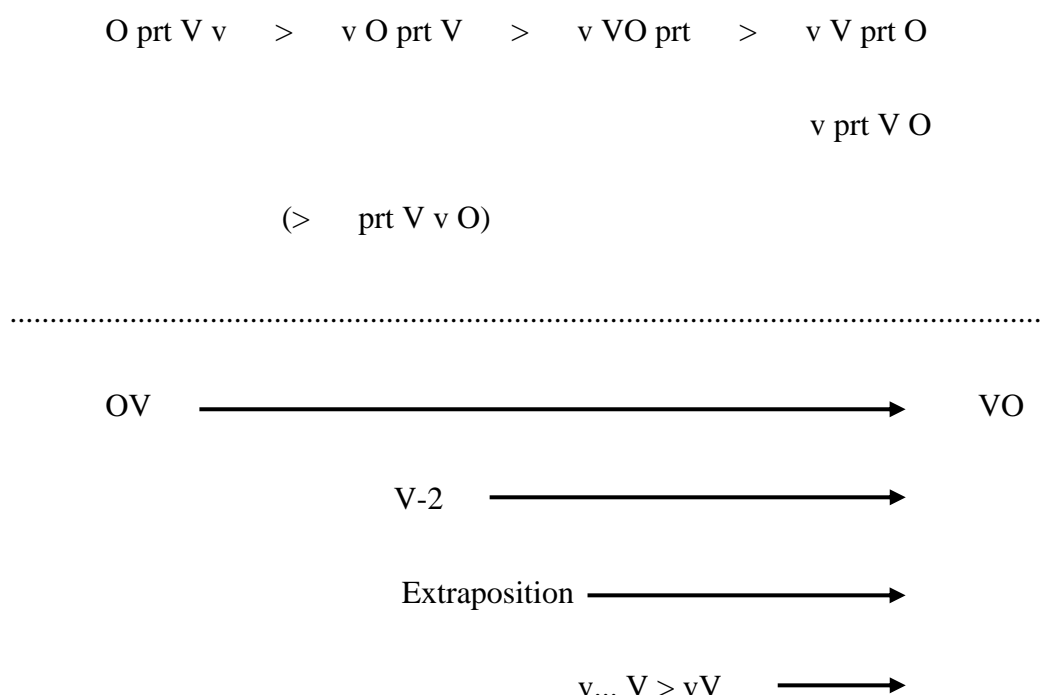
5.4.1 The differences in word order between Old English and Ancient Greek

As mentioned before in Section 2, the emergence of the particles' postverbal position in English and the development of phrasal verbs have often been attributed to the word order shift that happened from OE to ME onwards (Hiltunen 1983a, Fischer 1992, Thim 2012). The OE word order was not entirely free nor fixed and restricted as the PDE word order is. There was a tendency for a final position of the verb (especially in subordinate clauses), but research has shown that in main clauses VO order is also observed (Denison 1987).[7] However, from ME onwards the OV order becomes very rare, and the English language moves towards the more fixed pattern of SVO word order as in PDE. This tendency can also be justified by the loss of inflectional morphology after OE, which prompted the emergence of fixed word order (Lavidas 2009: 247).

The changes in the word order have affected the position of the particle in respect with the verb. The following Figure taken by Thim (2012: 104) describes the positional changes occurring from OE to ME, focusing on the particle position.

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[7] The verb could also occupy an initial position in the sentence, forming a VSO word order as well (Lavidas 2009: 243).

Figure 12 Positional changes and their causes (Thim 2012: 104)

O prt V v   >   v O prt V   >   v VO prt   >   v V prt O

v prt V O

(>   prt V v O)

....

OV ——————————————▶ VO

V-2 ————————————▶

Extraposition ————————▶

v... V > vV ————▶

As seen in the above Figure, the particle seems to have undergone a positional change, from a preverbal position in OE to a postverbal one in later English stages. However, this positional change is not strictly related to the different English periods as in each clause's word order. The shift from a verb-final order, occurring more often in the OE subordinate clauses, to a VO word order, caused the particle position change.
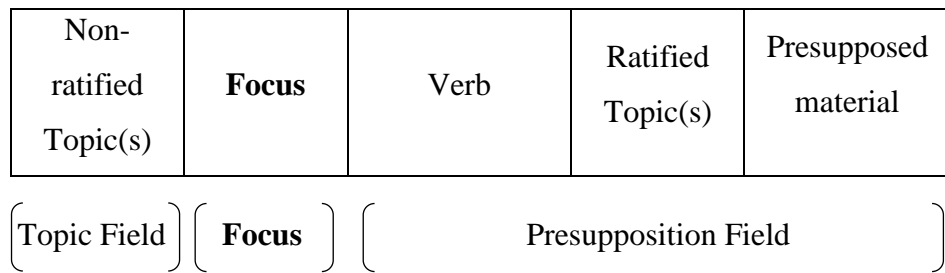
This suggestion coincides with our results in Section 4, where we observed that the particles' postverbal position was more frequent even in OE. However, our research included results only from main clauses of OE, where the VO word order was already used. The expansion of the VO order in subordinate clauses caused the particles' fixed postverbal position. As Thim (2012: 115) observes though, "throughout the history of English the position of the particle has remained essentially fixed, and what appears as positional shifts of the particles is really epiphenomenal to positional changes of other elements of the clause, most notably

the finite verb". Figure 12 can verify this observation: the particle remains relatively steady throughout the shifts in the verbal position.
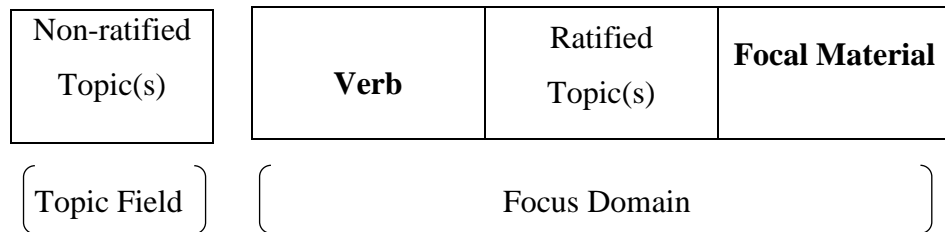
Ancient Greek has also been characterized as a 'free' word order language, mainly due to each rich morphology that allowed the sentence constituents' placement in various positions. However, the research of Dik (1995) and Matić (2003) support that the word order in Ancient (in particular Homeric) Greek depends on the informational/pragmatic function of the clause elements. Figure 13 below – taken from Bertrand (2014: 13) – schematically presents the two possible construction in Ancient Greek.

Figure 13 The two focus constructions in Ancient Greek (Bertrand 2009: 13)

a. Narrow focus construction:

Non-ratified Topic(s)	**Focus**	Verb	Ratified Topic(s)	Presupposed material

Topic Field	**Focus**	Presupposition Field

b. Broad focus construction

Non-ratified Topic(s)	**Verb**	Ratified Topic(s)	**Focal Material**

Topic Field	Focus Domain

From the above Figure, we understand that the initial position of Ancient Greek clauses was occupied by a topic field, containing non-ratified topics[8] followed by a focus domain. In a narrow focus construction, there was a single restricted focal element followed by the (presupposed) verb and other presupposed material. In a

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[8] "expressions whose referents are presented as new Topics or renewed Topics" (Bertrand 2014: 14)

broad focus construction, the verb was included in the focal domain along with other focal material.

Based on the above observations on the Homeric Greek word order, Bertrand (2014) suggests that there are cases where the verb in the constructions analyzed above is preceded by a negative or a preverbal particle. Since they form a prosodic unit with the following verb, he suggests the term 'Verbal Complex' (2014: 16) to describe such constructions. He then argues that the close relationship between the verb and the preceding preverbal particle allows only initial positions for its placement. He suggests that there are three types of preverbal particle placement: a) in the Verbal Complex, creating a compound verb, b) after external tmesis, when the preverbal particle is separated from the verb and occupies an initial position in the clause, and c) after internal tmesis when the preverbal particle forms a unit with the verb and stays inside the Verbal Complex, but other elements are inserted between them.

In this respect, we can conclude that the word order differences between the two languages dictated the particles' position in the sentence. We saw that the change of English OV into VO caused the verb placement before the particle. On the other hand, the semantic and prosodic unit created by the particle and the verb in Greek allowed the particle placement only in an initial position. The following section examines how lexicalization and grammaticalization caused the emergence of phrasal verbs in English and prefixed verbs in Greek.

5.4.2 The effects of lexicalization and grammaticalization

As discussed in the previous section, the English word order became fixed from ME onwards, with the particle being in a postverbal position. The further development of these verb-particle combinations into phrasal verbs resulted from the influence of the processes of lexicalization and idiomatization, as suggested by Rodríguez-Puente (2013). As mentioned in Section 2, according to her, the fixed

syntactic positioning of verbs and particles causes an increase of the content carried by the construction and results in the creation of new contentful forms which acquire unpredictable formal and semantic characteristics. The degree of lexicalization varies between the verb-particle combinations and, consequently, the more lexicalized a phrasal verb becomes, the greater syntactic fixity it shows.

In parallel, idiomatization affects phrasal verbs' creation as they move from expressing concrete to conveying more abstract meanings. The results from our data in Section 4 verify this view, since we observed an increase in the metaphorical/non-compositional meanings from ME onwards, while the literal combinations decreased. For the development of phrasal verbs, lexicalization causes the modification of the verb-particle combinations into the verbal class elements, whereas idiomatization causes the combination's semantic shift. Grammaticalization seems to have affected only the particles used to add an aspectual meaning to their associated verb, like *eat up*, which still have undergone lexicalization, forming a single lexical unit with the verb.

On the other hand, the evolution of preverbal particles into prefixes and the creation of compound verbs in Greek resulted from grammaticalization. As stated before, the preverbal particle associated with a verb were restricted to occupy initial positions in the clause or the 'Verb Complex'. The two elements (verb and preverb) initially kept their independent semantic value. However, with time, they started developing a synthetic meaning, more potent from the one conveyed by the separate parts. The two elements started being interpreted as a single semantic unit, and the verb, which carried a heavier informational load was perceived as the dominant part of the construction (as in the case of *ἐπὶ δ' ἤνεον* in example 61 above). The preverbal particle consequently lost its semantic independence, and a compound verb was created. The grammaticalization was completed by incorporating the two elements in a single word (Marquet 2017).

To verify that the univerbation of verbs and preverbal particles resulted from the grammaticalization of preverbs, we can look at examples like 59 and 63 mentioned in the previous section, repeated here for convenience:

66. *πὰρ δ' ἐτίθει σπλάγχνων μοίρας, ἐν δ' οἶνον ἔχευεν*

ἐν δέπαϊ χρυσέῳ, καί μιν πρὸς μῦθον ἔειπεν·

'Beside him he set portions of the entrails and poured wine in a cup of gold,'

(HOMERUS Epic. Odyssea {0012.002} Book 20 line 260)

67. ***ἐκ** δ' **ἔλασεν** σιάλοισιν ἐοικότας ἐννεώροισιν.*

'and drove them out in the form of swine of nine years old.'

(HOMERUS Epic. Odyssea {0012.002} Book 10 line 389)

In the above examples, we observe that the particles *ἐν* and *ἐκ* have lost their semantic content and convey a rather aspectual or emphatic meaning. In example 66, *ἐν* is used emphatically, since the prepositional phrase that follows the verb specifies the direction of the verbal action, and the preverb only emphasizes the verbal action. In example 67, *ἐκ* acquires an emphatic meaning as well, since we could already retract the direction of the verbal movement from the meaning of the verb *ἔλασεν,* which means 'to drive, to send away'. Examples like these, where preverbal particles lose their semantic meaning and instead emphasize the verbal meaning, provide evidence favoring grammaticalization. Furthermore, the fact that preverbal particles developed from a major grammatic category (Adverbials) into a minor one (prefixes) supports the treatment of this development as a result of grammaticalization (Hopper & Traugott 2003).

To summarize, the emergence of phrasal verbs in English and their absence from Greek can be explained by examining the word order differences of the two languages and the contrast between lexicalization in English vs grammaticalization in Greek. Phrasal verbs in English emerged due to the establishment of verb-particle word order and the lexicalization and idiomatization processes. However, the establishment of the particle-verb word order in Greek prevented the emergence of phrasal verbs, and a grammaticalization process further caused the emergence of compound verbs.

5.5 Summary and conclusions

In the present Section, we aimed at explaining why the development of phrasal verbs in English was allowed, but their emergence in Greek was blocked. The Section begins with our suggestion that due to lack of Greek written documents from the pre-Homeric period, when the preverb and the verb still existed separately, the best way to examine the emergence of compound verbs emergence is to focus on the cases of tmesis found in Homer. In 5.3, we presented the results obtained from our study of the data from the TLG corpus with regard to the particles *ἐν, ὑπό, ἐπί* and *ἐκ*. We observed that although they are separated from the verbal root they are associated with, they still form a semantic unit with the verb, conveying often metaphorical meaning. Finally, our contrastive discussion of Greek and English revealed that the origin of phrasal verbs in English could be found in the change from an OV to a VO word order and the effect of lexicalization. On the other hand, we argue that the requirement of Ancient Greek for placing the preverbal particle in an initial position and a grammaticalization process blocked the emergence of phrasal verbs in Greek and prompted the development of compound verbs and the change of preverbs into prefixes.

6

Conclusions

The present MA thesis offered a corpus-based analysis of phrasal-verb particles and described their semantic development from OE to LModE. It also contrastively examined data from Greek with regard to the existence of phrasal-verb-like constructions in Homeric poems. We explained the reasons that led to the emergence of phrasal verbs in English but not in Greek. The present Section summarizes the main findings and makes suggestions for further research.

Section 1 opened with the presentation of the aims and scope of the MA thesis and offered a theoretical background on phrasal verbs. Section 1.1 recognized the uniqueness of phrasal verbs as a construction, which has drawn the interest of grammarians, linguists, and educators. It also justified the value of contrasting English and Greek regarding the emergence of phrasal verbs. It finally specified the present study's twofold aim: the semantic development of English particles and the reasons of non-availability of phrasal verbs in Greek.

Section 2 continues with a more thorough analysis of phrasal verbs. In section 2.2, a definition of particles and phrasal verbs is provided, and some characteristics of phrasal verbs are introduced. Section 2.2.1 touches upon the separability of phrasal verbs and gives information on the elements that can intervene between a verb and a particle. Section 2.2.2 presents the different meanings constructed by phrasal verbs, namely literal, figurative/ non-compositional and aspectual/emphatic. Section 2.3 presents the most prominent views on the change in English that caused the emergence of phrasal verbs and discusses the language change processes that researchers consider having affected the development of phrasal verbs. These are the processes of grammaticalization, lexicalization and idiomatization. The last part of section 2 (2.5) discusses the evolution of preverbs into prepositions in Greek and the further development of the prepositional system. Based on the above remarks, we formed the thesis's research questions concerning

the semantic characteristics of phrasal verbs and the absence of phrasal verbs from Greek.

Section 3 portrays a description of the main characteristics of the Penn Parsed Corpora of Historical English and the Thesaurus Linguae Graecae used for this study. Both corpora are justified as appropriate for this research due to the large time span their data represent and their periodization, making the data processing easier. The methodology of the corpus analysis is also described in Section 3. The search in the Penn Parsed corpora was conducted through the *CorpusStudio2* search engine, and in the TLG online, through the corpus's search engine. The results were stored in a *Microsoft Excel* database to facilitate their coding according to various parameters and the extraction of Tables and graphs.

Section 4 focused on the presentation of the semantic development of particles through different periods of English. In the first part of the Section, we argue that the most frequent particle position in main clauses has been the postverbal one diachronically. We then moved on to examine the semantic development of particles found diachronically in the corpus, namely *about* (4.3.1), *by* (4.3.2), *down* (4.3.3), *in* (4.3.4), *off* (4.3.4), *on* (4.3.6), *out* (4.3.7), *over* (4.3.8), *up* (4.3.9). We suggested that in earlier periods of English, particles used to convey literal meaning more frequently and that the emergence of aspectual/emphatic meaning can be placed in the ME period, while figurative/idiomatic meanings develop mostly from eModE onwards. In section 4.4, after examining the semantic development of the particles *out* and *up,* we agree with Neagu's (2007) suggestion that the literal meaning of particles is the source for the emergence of figurative ones. Moreover, we point out that the particles *down* and *off* show a deviation from the expected development, as their aspectual/emphatic meaning decreased in LModE, while their literal increased. These results, however, might have been affected by the particular examples examined, and further research is needed to verify them.

Section 5 identifies the reasons that allowed the development of phrasal verbs in English but disallowed their emergence in Greek. Section 5 begins with our decision to examine the emergence of compound verbs in Greek through the cases of tmesis found in the Homeric poems. In 5.3, we presented the results obtained

from our study of data in the TLG corpus with regard to the particles ἐν, ὑπό, ἐπί and ἐκ. We observed that although tmesis occurs, they still form a semantic unit with the verb, conveying often metaphorical meaning. Finally, in 5.4 we contrastively discussed Greek and English data and argued that the origin of phrasal verbs in English should be searched for in the shift from an OV to a VO word order and the influence of lexicalization vs grammaticalization. On the other hand, the initial position of the preverbal particle, implemented by the information structure of Ancient Greek and grammaticalization prevented the emergence of phrasal verbs in Greek. These characteristics prompted the development of compound verbs and the change of preverbs into prefixes.

The present MA thesis aimed to fill a gap in the literature concerning the semantic development of phrasal verbs and the contrastive examination of verbal constructions, focusing on the emergence of phrasal verbs. Nevertheless, several questions remain open for further research. Similar research could be carried out focusing on the semantic development of particles in the diachrony of American English or other varieties of English. The research would also greatly benefit from a contrastive study of the particles in British and American English. Furthermore, it would be important to examine phrasal verbs in other languages as well. The development of preverbal particles in other non-Germanic languages provides a fruitful ground for such research. The above-proposed studies would yield interesting results and help gain valuable insight into the diachronic development of the verbal syntax.

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