

Second and foreign language learners: The effect of language exposure on the use of English phrasal verbs

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Abstract

Aims: This study investigates the possible effect of language exposure on the use of multiword units, and more precisely phrasal verbs with *up*. It compares two learner populations that receive different types and amounts of input, namely, learners of English as a second language, who get exposed to English in various everyday contexts, and learners of English as a foreign language, whose main source of exposure to English is limited to language classes.

Data and analysis: The study is based on the analysis of written and spoken corpora, including reference corpora of native English. It considers the frequency of phrasal verbs, the structures they occur in, and the verbs used with the particle.

Findings: The results show that the two groups of learners present some similarities, including a tendency to keep the verb and the particle next to each other even when an object could easily be inserted in-between. However, they also differ from each other in ways that could reflect their type and degree of exposure to English, with learners of English as a second language generally behaving in more native-like ways than learners of English as a foreign language.

Originality: The article considers the multiword status of phrasal verbs, and in particular particle placement, among two populations of learners who differ in the type and amount of input they receive in the target language.

Significance and implications: There appears to be a stronger sense of unity between the verb and the particle of phrasal verbs for learners than for native speakers of English. Learners should be made aware of the contexts that favour particle mobility.

Introduction

Language acquisition requires input, and hence exposure to the target language. This exposure can take various forms, including spontaneous interactions in everyday life and formal instruction in an educational setting. The type and amount of language that learners get exposed to is likely to have a major impact on their intake and, ultimately, their output. In this article, the potential effect of language exposure is investigated by means of corpora representing the language output of two groups of multilingual learners, namely, learners of English as a second

language (ESL) and learners of English as a foreign language (EFL), who share their non-native status but differ in terms of their exposure to English.¹

The linguistic object of study is a type of multiword unit which is typical of English (and other Germanic languages) and which tends to be problematic for learners of English, namely, phrasal verbs, which are multiword verbs made up of a verb and an adverbial particle. The focus is on phrasal verbs with *up*. The hypothesis that is tested is that, despite similarities caused by the non-native status of the two groups of learners, their use of phrasal verbs will present differences due to the distinct type and amount of input in English which they receive. In particular, the higher degree of exposure to English in a wider range of contexts for ESL learners should help them use phrasal verbs in more authentic ways than EFL learners, as established on the basis of a reference corpus of English as a native language (ENL). In testing this hypothesis, special attention is given to the multiword status of phrasal verbs and in particular particle placement.

The article is structured as follows. First, it introduces ESL and EFL as two different types of multilingualism. Second, it provides an overview of phrasal verbs as multiword units and emphasizes the difficulties that they may present for learners of English. Then, it describes the data and methodology and it outlines the results, including the frequency of phrasal verbs with *up*, the structures they occur in, and the verbs used with *up*. It ends with some concluding remarks.

ESL and EFL: two types of multilingualism

Learners of English as an additional, non-native language have traditionally been distinguished according to the environment in which they learn English (see Quirk et al., 1985, p. 4–5). *ESL learners* acquire English in an English-speaking environment. While the term can be used to refer to non-native speakers of English living in a native English-speaking country (e.g., immigrants living in the United States), in this article it will be used exclusively to describe users of English living in a country (former British or American colony) that has English as an official or semi-official language but not (predominantly) as a native language. Examples of such countries include India, Singapore, and South Africa. *EFL learners*, by contrast, learn English in a country that does not have English as a native or official language. Examples include Brazil, Germany, and Japan. Although ESL and EFL are usually acknowledged to form

a continuum rather than a clear-cut dichotomy (cf. Broughton et al., 1980, p. 7), for the sake of clarity they will be described here as distinct entities, with a focus on the most typical ESL and EFL situations.

As summarized in Table 1 (see also Gilquin, 2016; Götz & Schilk, 2011), ESL and EFL share the same *status*: they are non-native varieties that are found in multilingual environments, since ESL and EFL learners use English in addition to their native languages and, possibly, some other additional languages. However, ESL and EFL learners differ in terms of their exposure to the English language.

	ESL	EFL
Status	- Non-native varieties - Multilingual environment	- Non-native varieties - Multilingual environment
Exposure and use in natural settings	- For different international and intranational purposes	- Mainly for international purposes
Exposure and use in educational settings	- Object of study - Medium of instruction	- Object of study

Table 1. Comparison of ESL and EFL

In *natural settings*, ESL learners are exposed to English in their everyday life in various situations. In addition to serving as an international lingua franca, English can be used as a national lingua franca among citizens who do not share the same native languages, which is likely to happen given the high degree of multilingualism that usually characterizes these countries (see below). English is, therefore, used as a medium of intranational communication for different purposes, including administration, the media, and literary works. The role of English for both international and intranational purposes enhances the exposure to English in ESL environments. As for EFL environments, the global status of English has as a consequence that English is likely to serve international purposes (e.g., for business communication) and to be easily accessible to learners (most notably through the internet). However, English is less likely to be used for intranational purposes among locals, since it does not have any official status in these countries. As a result of the limited contexts in which English is used in EFL environments, EFL learners' exposure to this language is reduced.

In *educational settings*, both ESL and EFL students have English language classes (normally taught in English), where English is the object of study. For EFL students, this is the main source of exposure to the target language. ESL students, in addition, are often taught other

subjects such as history or biology through the medium of English. As a result, ESL students tend to be exposed to the target language more than EFL students.

This means that, although ESL and EFL learners are all multilingual, English is more predominant as an additional language among the former than among the latter, both in natural and educational settings. ESL learners are more likely to receive input in English, and the types of English that they get exposed to are more diverse in terms of genres and registers. EFL learners, by contrast, typically receive very little input in English outside the educational setting and, as a consequence, they tend to get exposed to a more limited range of genres and registers, namely, those that are used in the English classroom.

In addition, it should be pointed out that there is usually a higher degree of multilingualism in ESL countries than in EFL countries. An ESL country like South Africa has 11 official languages and some 15 languages with a special status, while India has 2 official languages, 24 recognized regional languages, and over 400 native languages. Among EFL countries, many are officially monolingual, and even officially multilingual countries tend to be limited to two languages (e.g., Finland) or three (e.g., Belgium and Switzerland) – although, of course, immigrants of various origins may speak other languages. This is expected to lead to more language contact situations in everyday life and more multilingual classrooms in ESL countries than in EFL countries.

Despite the obvious links between ESL and EFL, which both involve the acquisition and use of an additional language, very few linguistic comparisons of these two types of varieties were drawn until recently. This was mainly due to the different research paradigms within which they used to be studied, namely, contact linguistics for ESL varieties and second language acquisition research for EFL varieties. This ‘paradigm gap’, which was first highlighted by Sridhar and Sridhar (1986), was still deplored by Hundt and Mukherjee (2011).

Since then, however, some empirical studies have started to bridge the gap between the two paradigms by offering comparisons of ESL and EFL. These studies have highlighted shared linguistic features, including non-standard lexico-grammatical choices such as *discuss about* (Nesselhauf, 2009) or *enter into a place* (Gilquin & Granger, 2011), extended contexts of use (e.g., of the progressive; cf. Hundt & Vogel, 2011), and common avoidance of certain

phenomena such as the passive (Gilquin & Granger, 2021). These shared features are arguably the consequence of the non-native status of ESL and EFL.

The literature has also pointed to linguistic differences between the two types of varieties, for example, with respect to complexity and accuracy (generally higher in ESL than EFL writing; cf. Barrot & Gabinete, 2019) or formulaic sequences (e.g., more distinctive 3-grams in ESL than EFL; cf. Götz & Schilk, 2011). Such differences are expected in a usage-based view of language acquisition, which argues that language is learned inductively from the available input. This “input-driven inductive learning” (Goldberg, 2006, p. 12) has been used as a basis to formulate the “input-dependent L2 acquisition hypothesis” (Gilquin, 2016), which states that the higher exposure of ESL learners to authentic English gives them an advantage over EFL learners in terms of language acquisition.

When approaching a linguistic phenomenon such as phrasal verbs, which will be described in the next section, we may, therefore, expect similarities between ESL and EFL (on the grounds that they are both non-native varieties) and differences (on the grounds that they differ in their contexts of acquisition). With respect to differences, we may expect ESL to exhibit a more authentic behaviour (equated here with the ENL reference corpus), because of the higher degree of exposure to (naturalistic) written and spoken English in ESL contexts than in EFL contexts.

Phrasal verb as a multiword unit

Phrasal verbs are multiword units, or more precisely multiword verbs, which are made up of a verb followed by an adverbial particle (e.g., *come back*, *give up*, and *take off*). Following Quirk et al. (1985) and a long tradition of grammarians, they can be distinguished from prepositional verbs such as *look at* or *believe in*, which consist of a verb followed by a preposition. Despite being made up of several elements, phrasal verbs form a “unit which behaves to some extent either lexically or syntactically as a single verb” (Quirk et al., 1985, p. 1150). This unity between the verb and the particle is evident, among others, from the fact that phrasal verbs often have a one-word equivalent, for instance *abandon* for *give up*. It also appears from the restrictions on the mobility of the particle, as illustrated in (1) to (3), taken from Quirk et al. (1985, p. 1167). Normally, the verb and the particle cannot be separated by an adverb (1) and the particle cannot be moved before a relative pronoun (2) nor an interrogative pronoun (3):

- (1) **They **called** angrily **up** the dean.*
- (2) **the man **up** whom they **called***
- (3) ****Up** which man did they **call**?*

However, some mobility is possible, and sometimes even necessary. On the one hand, exceptions to the above principles are possible. For example, Quirk et al. (1985, p. 1153) point out that inversion of the verb and the particle “seems quite acceptable” with metaphorical uses of spatial adverbs, illustrating this with example (4). On the other hand, objects may be inserted between the verb and the particle, as shown in (5) and (6), taken from Quirk et al. (1985, p. 1167): nominal objects can be placed between the verb and the particle, and personal pronouns normally need to be placed between the verb and the particle. The phrasal verb is, therefore, less fixed than many other multiword units such as compounds or certain lexicalized and grammaticalized phrases.

- (4) *There was a gust of wind, and **out went** the light.*
- (5) *They **called** the dean **up**.*
- (6) *They **called** him **up**.*

The mobility of the particle with some objects leads to the existence of three structures:

- i. an intransitive structure in which the verb and the particle function on their own (e.g., *In the end, he [gave up]*), which will be called the verb-particle (VP) structure;
- ii. a transitive structure in which the particle precedes the object (e.g., *They stopped me from [giving up my studies]*), which will be called the verb-particle-object (VPO) structure; and
- iii. a transitive structure in which the particle follows the object (e.g., *Two weeks after taking the job, she [gave it up]*), which will be called the verb-object-particle (VOP) structure.

The choice between VP and VPO/VOP depends on the transitivity of the phrasal verb. As for the distinction between VPO and VOP, it is partly related to the nature of the object (pronominal objects normally require the VOP structure), but the vast literature on the alternation between these two structures has argued that many other factors can influence the choice between them, including phonological, morphosyntactic, semantic, and discourse-functional factors (see Gries, 2003 or Wulff & Gries, 2019 for a summary). It has also been suggested that the verb itself may influence this choice. A note in Quirk et al. (1985, p. 1155)

indicates that some transitive phrasal verbs “do not easily allow the possibility of placing the particle after the object (unless the object is a pronoun)”. Quirk et al. offer as examples *They had **given up** hope*, preferred to *They had **given** hope **up***, and *They **laid down** their arms*, preferred to *They **laid** their arms **down***. They add that “[c]onversely, some phrasal verbs do not easily allow the placement of the particle before the object” (Quirk et al., 1985, p. 1155), which they illustrate among others with idiomatic phrasal verbs, such as *I was **crying** my eyes **out*** rather than *I was **crying out** my eyes*. Using a technique called distinctive collexeme analysis, Gries and Stefanowitsch (2004) managed to quantify such preferences, thus further highlighting the association of certain phrasal verbs with one structure or the other (see also Gilquin, 2015a and Deshors, 2016 for applications to non-native English).

Phrasal verbs have been described as a stumbling block for learners of English. Gardner and Davies (2007, p. 339) point out that they are “one of the most notoriously challenging aspects of English language instruction”, and a study of learners’ active knowledge of 60 phrasal verbs brought to light an average score of some 25% which, in the author’s words, underlined learners’ “widespread ignorance” of phrasal verbs (Cornell, 1985, p. 271). It has also been shown that phrasal verbs tend to be avoided by non-native speakers of English (e.g., Dagut & Laufer, 1985; Hulstijn & Marchena, 1989; Liao & Fukuya, 2004), and that when they are used, they may be misused, with problems such as omission (e.g., Meyler, 2007) or redundancy (e.g., Zipp & Bernaisch, 2012) of the particle, non-conventional meanings (e.g., Aceto, 2006), or stylistic mismatch (e.g., Schneider, 2004). Difficulties are claimed to be even more pronounced among certain learner populations, in particular those that do not have phrasal verbs in their mother tongue (cf. Waibel, 2007).

In this study, the focus is on phrasal verbs with the particle *up*, which is said to be the most common particle in phrasal verbs (Biber et al., 1999; Kennedy, 2003). This focus on one single particle is made necessary by the amount of data to be investigated, but it has the advantage of enhancing the comparability of the data by selecting the same restricted set of phrasal verbs across all varieties. Unlike Quirk et al. (1985), no distinction is made between verbs with a literal meaning (e.g., *drink up*) and verbs with a figurative meaning (e.g., *turn up*).² While only the latter are recognized as phrasal verbs in Quirk et al. (1985), who describe the former as free combinations, both are included here on the grounds that, as acknowledged by Quirk et al. (1985, p. 1153) themselves, “there is an unclear boundary between phrasal verbs and free

combinations”. So-called phrasal-prepositional verbs, in which the particle is followed by a preposition (e.g., *come up with*, *face up to*, and *put up with*), are included in the analysis too.

Three aspects of the use of phrasal verbs with *up* are investigated, namely, their overall frequency, the frequency of their three structures (VP, VPO, and VOP), and the verbs used with the particle. For each of these aspects, we seek to find out how ESL and EFL compare with each other, and how they compare with the ENL reference. On the basis of the distinct multilingual profiles of ESL and EFL learners, it can be assumed that, while neither of these learner populations will display a fully native-like use of phrasal verbs, ESL learners, who are supposed to have been exposed to more instances of phrasal verbs and to a wider range of them than EFL learners, should use them more appropriately, and in a more native-like manner, than EFL learners. It is therefore hypothesized that ESL and EFL will differ from ENL in terms of the three aspects investigated, but that ESL will be closer to ENL, thus giving rise to the following cline: ENL – ESL – EFL.

Data and methodology

The comparison of phrasal verbs in ESL and EFL relies on written and spoken corpus data. The ESL data come from the East-African (EA), Hong Kong (HK), Indian (IND), Philippine (PHI), and Singaporean (SIN) components of the International Corpus of English (ICE; Greenbaum, 1996; Kirk & Nelson, 2018), and more precisely the sections comprising student essays and examinations to represent writing, and the sections comprising direct conversations to represent speech. The written EFL data come from the second version of the International Corpus of Learner English (ICLE; Granger et al., 2009), which is made up of argumentative and some literary essays produced by intermediate to advanced EFL students from 16 different mother tongue backgrounds: Bulgarian (BU), Chinese (CH), Czech (CZ), Dutch (DU), Finnish (FI), French (FR), German (GE), Italian (IT), Japanese (JP), Norwegian (NO), Polish (PL), Russian (RU), Spanish (SP), Swedish (SW), Tswana (TSW), and Turkish (TU). For spoken EFL, the data come from the Louvain International Database of Spoken English Interlanguage (LINDSEI; Gilquin et al., 2010), which consists of informal interviews with intermediate to advanced EFL students from 11 different mother tongue backgrounds, partly similar to those in ICLE: Bulgarian (BU), Chinese (CH), Dutch (DU), French (FR), German (GE), Greek (GR), Italian (IT), Japanese (JP), Polish (PL), Spanish (SP), and Swedish (SW).

It should be pointed out that, because of the paradigm gap that has prevented combined research on ESL and EFL until recently (see above), it is not necessarily possible to find corpus data that are fully comparable across the two types of varieties. While the student essays and examinations from ICE are quite similar to the essays from ICLE, the direct conversations from ICE represent a genre that is potentially quite different from the informal interviews from LINDSEI (although it has been reported that some of the so-called conversations in certain ICE components actually took the form of interviews rather than spontaneous conversations; cf. Hackert, 2010, p. 48); the age of the speakers is presumably not the same either. These differences should be acknowledged as a possible limitation of the study.

Finally, corpus data representing ENL, and more particularly British English, were included as a baseline. To avoid any bias towards either ESL or EFL, data were selected to be comparable to both the ESL and EFL data. The student essays and examinations sections and the direct conversations sections of the British component of ICE (ICE-GB) were chosen to represent, respectively, writing and speech comparable to the ESL data. The British data from the Louvain Corpus of Native English Essays (LOCNESS; Granger, 1998) and the Louvain Corpus of Native English Conversation (LOCNEC; De Cock, 2004), which were designed as native counterparts of ICLE and LINDSEI, respectively, were chosen as being comparable to the EFL data. The written data from ICE and LOCNESS were combined to form the written ENL corpus, while the spoken data from ICE and LOCNEC were combined to form the spoken ENL corpus.

Variety	Register	Word count
ENL	Writing	198,546
	Speech	301,764
	<i>Total</i>	<i>500,310</i>
ESL	Writing	284,977
	Speech	1,035,122
	<i>Total</i>	<i>1,320,099</i>
EFL	Writing	3,163,142
	Speech	792,141
	<i>Total</i>	<i>3,955,283</i>
TOTAL	<i>ALL</i>	<i>5,775,692</i>

Table 2. Word counts of the different data sets

Table 2 shows the word counts for the different data sets, that is, writing and speech in ENL, ESL, and EFL. The total amounts to almost 6 million words. To allow for comparisons between data sets that differ – sometimes considerably – in size, frequencies will be normalized per 100,000 words.

Phrasal verbs were retrieved by automatically extracting the word *up* from the corpora by means of WordSmith Tools (version 5; Scott, 2008). All the occurrences of *up* were manually examined to discard irrelevant hits, which led to the identification of 6,843 instances of phrasal verbs. Each of these was then coded for its structure (VP, VPO, or VOP), the nature of the object (noun, pronoun, or clause) and its length for transitive structures, as well as the verb used with the particle *up*. The list of verbs used with *up* served as a basis for a distinctive collexeme analysis, that is, a type of collostructional analysis that investigates the preference of certain words for one construction over another, where the two constructions form an alternating pair (see Gries & Stefanowitsch, 2004). The distinctive collexeme analysis made it possible to look at the association between the verb and the VPO/VOP structures. It was carried out by means of Coll.analysis 3.2a (Gries, 2007).

Results

Frequency of phrasal verbs with *up*

The first step of the analysis is to compare the frequencies of phrasal verbs with *up* in ESL and EFL, using the ENL data as a baseline.³ Figure 1 shows the relative and raw frequencies in the three types of varieties. The relative frequency is much higher, and significantly so, in ENL than in either of the non-native varieties, with 163.1 phrasal verbs per 100,000 words in ENL, to be compared with 112.9 in ESL and 114.7 in EFL. The difference between ESL and EFL, by contrast, is very small and not statistically significant.⁴

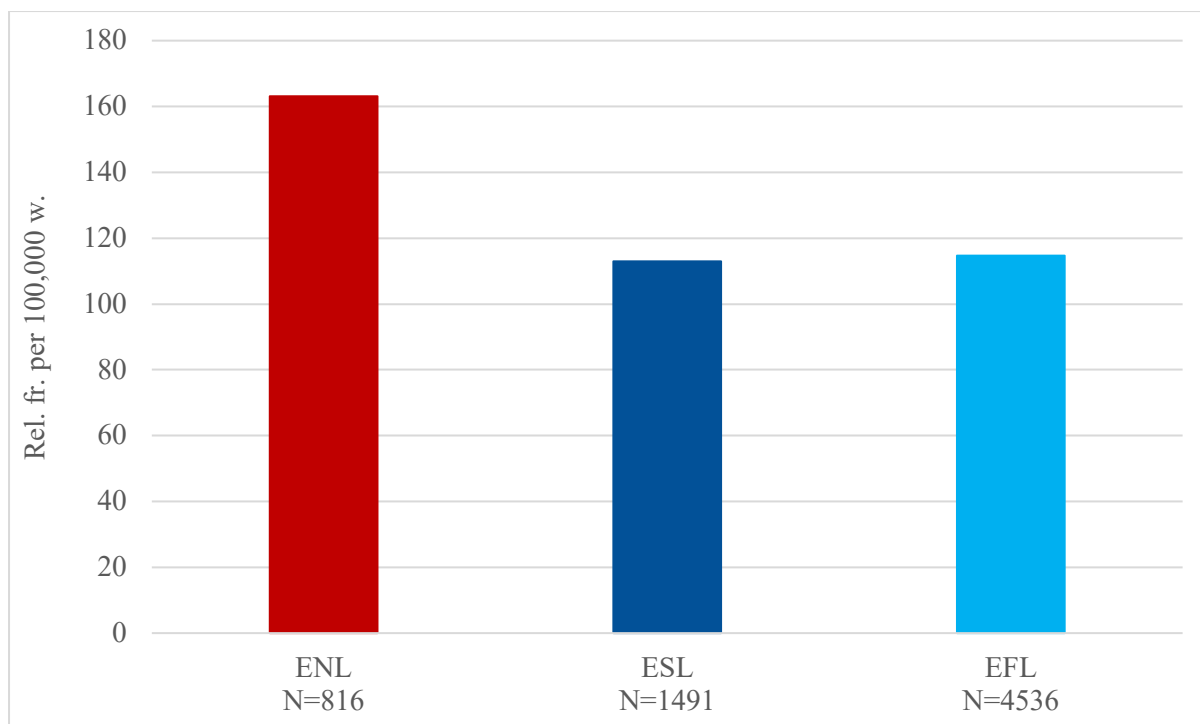


Figure 1. Relative frequencies (per 100,000 words) and raw frequencies (N) of phrasal verbs in ENL, ESL, and EFL

These results point to an underuse of phrasal verbs with *up* in ESL and EFL as compared to ENL, which confirms the many studies that have highlighted the avoidance of phrasal verbs by learners of English (see above). This, it should be noted, is true even if we consider only the most frequent phrasal verbs in ENL, which one would expect to be more common in learners' input and thus arguably easier for them to acquire. This underuse could be due to the intrinsic difficulties surrounding the use of phrasal verbs, such as their high number, their frequent polysemy, or the non-compositionality of more figurative phrasal verbs. It could also be related to the lack of equivalents to phrasal verbs in some of the learners' mother tongues. Importantly for our purposes, it seems as if the differences in context of use and acquisition between ESL and EFL, and in particular ESL learners' higher exposure to (naturalistic) English, are not reflected in the overall frequency of phrasal verbs with *up*, since no significant differences can be found between these two types of varieties.

These overall frequencies, however, hide a major difference between ESL and EFL, which has to do with the distribution of phrasal verbs according to register. As appears from Figure 2, phrasal verbs in ENL are twice as frequent in speech (203.5 per 100,000 words) as in writing (101.7 per 100,000 words), which can be accounted for by the relatively informal nature of many phrasal verbs (cf. Biber et al., 1999, p. 409). The same tendency can be observed in ESL,

and in almost equal proportions, despite the underuse of phrasal verbs in ESL: they are also about twice as frequent in speech (126.2 per 100,000 words) as in writing (64.9 per 100,000 words). In EFL, by contrast, phrasal verbs are more frequent in writing (127 per 100,000 words) than in speech (65.6 per 100,000 words) and are actually overused in writing. In fact, what we see in EFL is an almost exact mirror image of ESL, with EFL learners using phrasal verbs in reversed proportions across speech and writing as compared to ESL learners. This shows that the similar overall frequencies in ESL and EFL correspond to very different stylistic preferences.

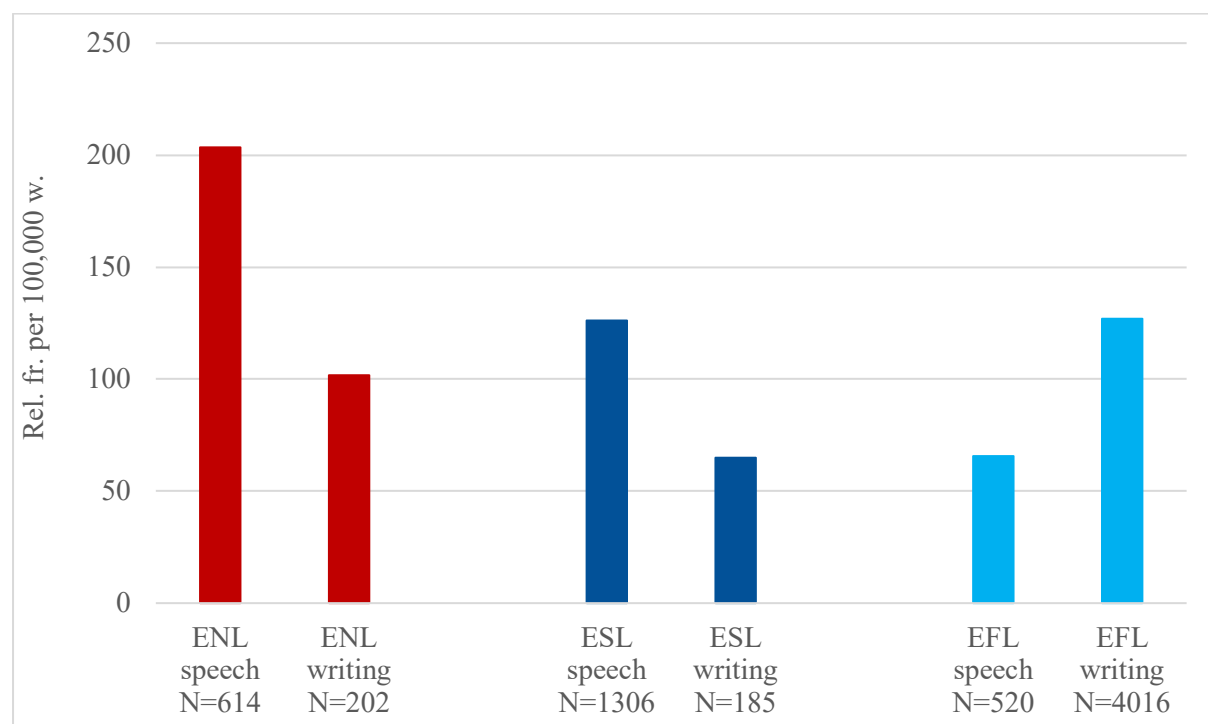


Figure 2. Relative frequencies (per 100,000 words) and raw frequencies (N) of phrasal verbs in ENL, ESL, and EFL according to register (speech versus writing)

These results reveal that, beyond the general underuse of phrasal verbs with *up* in non-native English, ESL learners are better at reproducing native stylistic preferences than EFL learners, whose distribution of phrasal verbs across speech and writing is the exact opposite of that found in ESL and ENL. This suggests that ESL learners' enhanced exposure to English in a wider range of contexts might give them an advantage over EFL learners in terms of stylistic appropriacy. In the case of EFL learners, by contrast, their more limited input in fewer contexts leads to a clear lack of stylistic awareness, already emphasized in the literature for other linguistic phenomena (cf. Gilquin & Paquot, 2008). Another possible explanation for the particularly marked underuse of phrasal verbs in EFL speech, which is not mutually exclusive

with the input-related explanation, is that EFL learners may not have yet fully automatized the use of phrasal verbs, and that they may, therefore, tend to avoid them in spoken contexts, where monitoring is generally reduced compared to written contexts.

Structure of phrasal verbs with *up*

We now turn to the different structures that phrasal verbs can be used in, namely, VP (intransitive structure), VPO (transitive structure with the object following the verb and the particle), and VOP (transitive structure with the object inserted between the verb and the particle). In all three types of English varieties, a majority of the occurrences of phrasal verbs with *up* correspond to an intransitive structure (VP), with a percentage ranging between 62.6% (for ESL) and 65.7% (for EFL), as appears from Table 3. What most distinguishes the varieties is the distribution of the two transitive structures, VPO and VOP. While in ENL the two structures are found with more or less the same proportion (some 18%), in the non-native varieties it is the VPO structure that predominates, with 24.4% in ESL and 28% in EFL.

	VP	VPO	VOP
ENL	63.2% (516)	18.6% (152)	18.1% (148)
ESL	62.6% (934)	24.4% (364)	12.9% (193)
EFL	65.7% (2,978)	28.0% (1,269)	6.4% (289)

Table 3. Percentages (and raw frequencies) of VP, VPO, and VOP structures with phrasal verbs in ENL, ESL, and EFL

What the above results point to is a tendency to mainly keep the verb and the particle next to each other, either in the intransitive structure VP or the transitive structure VPO. This tendency is strongest in EFL, with a percentage of 93.6%, followed by ESL and its 87.1%, and finally ENL, with 81.9%. This confirms other studies that have highlighted EFL learners' overuse of the VPO structure (Gilquin, 2015a; Deshors, 2016; Wulff & Gries, 2019).

It might be argued that the differences in proportions for the transitive structures are a consequence of the frequencies of pronominal objects, since VOP is normally required with such objects. Table 4, therefore, compares the percentages of VPO and VOP for nominal objects only, since these can be used in either the VPO or VOP structure (theoretically, at least).

As expected, the proportion of VOP decreases once pronominal objects are excluded. Based on Table 3 for all types of objects, VOP represents 49.3% of all transitive structures in ENL,

34.6% in ESL, and 18.5% in EFL. With nominal objects only (Table 4), VOP represents 21.7% of all transitive structures in ENL, and 5.1% in ESL and EFL. However, we still see a major difference between the native and non-native varieties with nominal objects, in that ENL presents a much higher proportion of VOP than the non-native varieties (over 4 times higher). This confirms, and even reinforces, the finding that ESL and EFL display a stronger tendency than ENL to keep the verb and the particle together, through the use of a VPO structure.

	VPO	VOP
ENL	78.3% (141)	21.7% (39)
ESL	94.9% (338)	5.1% (18)
EFL	94.9% (1,175)	5.1% (63)

Table 4. Percentages (and raw frequencies) of VPO and VOP structures among phrasal verbs with nominal objects in ENL, ESL, and EFL

Table 5 considers the length of nominal objects in VPO structures (percentages out of all transitive phrasal verbs, i.e. VPO and VOP, with nominal objects). Interestingly, it appears that the stronger tendency to use the VPO structure in non-native English than in native English, which was highlighted above, applies even to short objects, despite the fact that these would be easy to insert between the verb and the particle.

	1 word	2 words	3 words	4 words	5 words	6 words
ENL	68.0% (17)	68.0% (51)	84.6% (22)	100% (17)	83.3% (10)	100% (7)
ESL	95.7% (45)	91.0% (151)	98.4% (62)	100% (20)	100% (9)	100% (5)
EFL	87.5% (133)	92.6% (451)	97.6% (201)	97.8% (90)	98.9% (86)	100% (50)

Table 5. Percentages (and raw frequencies) of nominal objects in VPO structures according to their length in ENL, ESL, and EFL (out of all transitive phrasal verbs with nominal objects)

With one-word nominal objects, the proportion of VPO structures out of all transitive structures with a nominal object reaches 95.7% in ESL and 87.5% in EFL, as against only 68% in ENL. For nominal objects with two or three words, the proportions of VPO structures are almost exactly the same in ESL and EFL (91-92% with two words; 97-98% with three words), and still much higher than in ENL (68% and 84.6%, respectively). Nominal objects with four or more words almost all occur in VPO structures in each of the three types of varieties, with the exception of five-word nominal objects in ENL, which represent 83.3% (but only 10 instances, as against 2 instances of VOP).

The difference between native and non-native varieties in terms of the position of short nominal objects in phrasal verbs is illustrated in (7) to (9), which all include the same phrasal verb, *bring up*, with the same object, *children*:

- (7) *is it truly fair to **bring** children **up** in an environment such as this?* (ENL-W_LOCNESS)
- (8) *mere casual commerce, without the intention of cohabitation and **bringing up** children would not constitute marriage under any supposition* (ESL-W_ICE-EA)
- (9) *their ability to **bring up** children on their own is now widely recognized* (EFL-W_ICLE-IT)

The preference for VPO structures in ESL and EFL is such that it also affects pronominal objects to a certain extent. Although pronouns normally require a VOP structure, there are some cases in which it is possible to use a VPO structure, most notably with pronouns that bear contrastive stress, as in *I'm certainly not going to take off **HER*** (Huddleston & Pullum, 2002, p. 281). Table 6 shows that, out of all the phrasal verbs with a pronominal object, VPO structures are proportionally most frequent in EFL (12.4%), closely followed by ESL (11.2%), and finally ENL (7.6%).

	VPO	VOP
ENL	7.6% (9)	92.4% (109)
ESL	11.2% (22)	88.8% (175)
EFL	12.4% (32)	87.6% (226)

Table 6. Percentages (and raw frequencies) of VPO and VOP structures among phrasal verbs with pronominal objects in ENL, ESL, and EFL

In ESL and, especially, EFL, such combinations sometimes result in non-standard uses, as illustrated by examples (10) to (12), in which the pronoun follows the particle despite not bearing any contrastive stress. Notice how, in (11), the EFL learner uses VOP (*pick her up*) before using VPO (*picking up her*), which suggests that she thinks that the two structures can alternate with pronominal objects, as is the case with nominal objects.

- (10) *Just to say, cars ought to be banned, is too easy, we cannot **give up** them.* (EFL-W_ICLE-GE)
- (11) *If I am available, I come and pick her up there. If I am not available, I call my mother to ask for **picking up** her.* (EFL-W_ICLE-JP)
- (12) *People keep magazines and yet they still got the same quality you can just **take up** them to read and then put down and then a week later with a different feature* (ESL-S_ICE-HK)

What these results indicate is that, despite the possible influence of the nature of the object and its length, the verb and the particle are more often found next to each other in ESL and, especially, EFL than in ENL. This can be related to the fact that producing the two elements of the multiword verb together involves less processing effort (see Gries, 2003), and non-native speakers of a language may opt for structures that are less costly in terms of processing effort, given that producing a non-native language is already quite a challenge in itself. The strong sense of unity between the verb and the particle may be reinforced for some learners if their mother tongue or the substrate language has a one-word equivalent for certain phrasal verbs. For a French-speaking learner of English, for instance, *give up* may be quite clearly perceived as a unit because of its one-word translation in French, *abandonner*. Finally, it is possible that instruction has a role to play, in the sense that phrasal verbs are often taught in decontextualized lists of vocabulary which simply show the verb followed by the particle, with a synonym in English or a translation in the students' mother tongue. If such an instruction effect does exist, it is presumably stronger in EFL than in ESL, given the more predominant role of instruction in EFL contexts than in ESL contexts.

Overall, the degree of exposure to English seems to have a modest effect on the structure of phrasal verbs with *up*, in the sense that, when there is a difference between ESL and EFL, ESL tends to be more similar to ENL than EFL is. For example, the percentage of instances where the verb and the particle are kept next to each other, either in VP or VPO, forms the following cline (based on Table 3): ENL (81.9%) < ESL (87.1%) < EFL (93.6%). In other respects, however, ESL and EFL behave in very similar ways, which are different from ENL, thus underlining the importance of the non-native status of ESL and EFL.

Verbs used with *up*

The final aspect to be discussed is that of the verbs used with the particle *up*. Computing the type/token ratio for the phrasal verbs in the three types of varieties reveals that the highest degree of lexical variation is found in ENL (16.8%), followed by ESL (12.1%) and, finally, EFL (4.9%). This points to the use of a wider range of different phrasal verbs among ESL learners than among EFL learners. This could be a result of ESL learners' higher exposure to English, including naturalistic spoken English, which is more likely to include (different types of) phrasal verbs than the kind of classroom English that EFL learners mainly get exposed to.

Table 7 lists the ten most frequent verbs in each type of variety. It confirms the lower lexical variation in EFL, since the most frequent verb, *grow*, accounts for almost 11% of all phrasal verbs with *up* in EFL, as against some 7% for the most frequent verb in ESL (*come*) and ENL (*pick*). Also, the list of the ten most frequent verbs represents a cumulative percentage of as much as 60.2% in EFL, as compared to 47.6% in ESL and 43.7% in ENL.

ENL		ESL		EFL	
<i>pick</i>	7.1%	<i>come</i>	7.0%	<i>grow</i>	10.7%
<i>come</i>	5.6%	<i>pick</i>	6.8%	<i>end</i>	9.6%
<i>get</i>	4.4%	<u><i>take</i></u>	6.2%	<i>give</i>	7.6%
<i>end</i>	4.4%	<u><i>wake</i></u>	5.2%	<i>bring</i>	7.2%
<i>make</i>	4.2%	<i>grow</i>	4.8%	<i>make</i>	5.8%
<i>go</i>	3.9%	<i>bring</i>	3.9%	<i>sum</i>	5.4%
<i>give</i>	3.8%	<i>call</i>	3.6%	<i>come</i>	4.8%
<i>bring</i>	3.7%	<i>get</i>	3.6%	<u><i>wake</i></u>	3.6%
<i>grow</i>	3.4%	<i>go</i>	3.5%	<u><i>take</i></u>	2.8%
<i>set</i>	3.2%	<i>end</i>	3.2%	<i>build</i>	2.8%
Total	43.7%	Total	47.6%	Total	60.2%

Table 7. Ten most frequent verbs used with the particle *up* in ENL, ESL, and EFL (with percentages); verbs in bold are shared by ENL and ESL/EFL and underlined verbs are shared by ESL and EFL

These lists are also interesting because they show some verbs that are shared across the different types of varieties. It appears that the two most frequent verbs in ESL, *come* and *pick*, are the same as in ENL (albeit in reverse order), but that they differ from those in EFL (*grow* and *end*). It thus seems as if ESL learners' higher exposure to naturalistic English could help them determine the verbs that are most likely to be found with the particle *up*. Among the other verbs, there is quite some overlap between ENL on the one hand and ESL and/or EFL on the other (these verbs are in bold in the table). In ESL, seven of the verbs are also found in the ENL list, while in EFL six verbs can be found in the ENL list. This suggests that non-native learners' lexical preferences are not so different from those of native speakers. In addition, two verbs are found in the ESL and EFL lists but not in the ENL list, namely, *take* and *wake* (underlined in the table). There remains only one verb that is unique to ESL (in the top 10 list), namely, *call*, and two that are unique to EFL, namely, *sum* and *build*. There is also one such unique verb in ENL, which both ESL and EFL learners use less often, namely, *set*.

Importantly, these quantitative findings can point to some interesting qualitative phenomena. Thus, the presence of *call* in the ESL list only could be due to the influence of American

English, since it is used in the ESL corpora in the sense of ‘telephone’ (see (13)), a meaning that is more typical of American English and is more often expressed by means of *ring up* in the ENL corpora, which represent the British English variety.

- (13) *And you were always on the phone lah I **called up** four times already* (ESL-S_ICE-SIN)

In EFL, the first place of the verb *grow* and, in effect, its overuse in comparison to ENL, appears to be largely due to its non-standard transitive use in the EFL data, as illustrated by (14) and (15), where *grow* and *bring up* or *raise*, respectively, would have been more idiomatic:

- (14) *They maintained by hunting, gathering wild plants, they learned to **grow up** corn soon.* (EFL_W-ICLE-CZ)
 (15) *to be honest I wouldn't prefer to **grow up** my children here in Athens* (EFL_S-LINDSEI-GR)

The presence of *sum* in the top 10 list for EFL, in contrast to ENL and ESL, is to be related to the general overuse of the phrase *to sum up* by EFL learners to introduce a conclusion (Gilquin et al., 2007, p. IW28), as exemplified in (16):

- (16) *To **sum up**, television plays an important role in our daily life.* (EFL-W_ICLE-CH)

Finally, the presence of *take* in the ESL and EFL lists only can partly be accounted for by the unnecessary use of the particle *up* with this verb in some non-native instances, such as (17) and (18):

- (17) *if we **take up** Endamuri as our model definitely we can grasp enough* (ESL-S_ICE-IND)
 (18) *One of the first scientists to **take up** the subject of nourishment seriously was an American scholar - prof. Keys.* (EFL-W_ICLE-PL)

To delve deeper into the association between the verb and the particle, distinctive collexeme analyses were carried out, comparing the verbs most distinctively associated with VPO versus VOP in each of the three types of varieties. Table 8 lists the statistically significant results for each structure in ENL, ESL, and EFL, with the so-called collexemes ordered in decreasing order of collostructional strength (the higher this value, the stronger the association between the verb and the structure). The verbs in bold are the collexemes that are also found in ENL for the same structure; the underlined verbs are those that are shared by ESL and EFL but are not found in ENL.

VPO distinctive collexemes		VOP distinctive collexemes	
ENL	Coll. strength	ENL	Coll. strength
<i>give</i>	5.5095	<i>ring</i>	2.3540
<i>take</i>	3.0666	<i>put</i>	1.5142
<i>build</i>	1.5366	ESL	Coll. strength
<i>set</i>	1.5366	<i>call</i>	8.0501
ESL	Coll. strength	<i>beat</i>	3.7867
<i>take</i>	9.3757	<u><i>wake</i></u>	1.6832
<i>set</i>	3.9243	<i>pick</i>	1.4020
<i>build</i>	1.8485	EFL	Coll. strength
EFL	Coll. strength	<i>lock</i>	12.8054
<i>take</i>	6.6359	<i>cheer</i>	5.6474
<i>build</i>	4.3572	<u><i>wake</i></u>	5.1541
<i>set</i>	4.2806	<i>look</i>	2.5545
<i>make</i>	3.5410	<i>hang</i>	2.4917
<i>give</i>	2.8370	<i>sum</i>	2.4200
		<i>ring</i>	2.1987
		<i>back</i>	1.5952

Table 8. Statistically significant distinctive collexemes for the VPO and VOP structures in ENL, ESL, and EFL (with collostructional strength); verbs in bold are shared by ENL and ESL/EFL and underlined verbs are shared by ESL and EFL

It turns out that for the VPO structure, most of the verbs that are distinctive in ESL and EFL are also distinctive in ENL. This is the case of *take*, *set*, and *build* in ESL, and *take*, *build*, *set*, and *give* in EFL. There is only one distinctive verb in EFL which is not distinctive in ENL, namely, *make*. For the VOP structure, by contrast, most of the collexemes differ across the three varieties. Only one verb is common to ENL and EFL, namely, *ring*, and one verb is shared by ESL and EFL, namely, *wake*.

These results show that there are more native-like preferences with VPO than with VOP in both ESL and EFL. This could be interpreted as a sign of greater phraseological awareness among both groups of learners for the VPO structure, which could be related to ESL and EFL learners' general preference for this structure over VOP. It might be hypothesized that they pay more attention to phrasal verbs in VPO structures, perhaps better memorizing the chunks when the two words appear next to each other and thus being able to reproduce those VPO combinations that are likely to be heard in ENL.

Conclusion

This article has investigated the use of phrasal verbs with *up* by two populations, ESL and EFL learners, who have their non-native and multilingual status in common, but differ in the type and amount of exposure to the target language that they typically receive. It was hypothesized that this would lead to both similarities and differences between ESL and EFL, and to a cline from ENL to ESL to EFL, with ESL learners exhibiting a more native-like behaviour than EFL learners thanks to their enhanced exposure to authentic English.

The results of the corpus study have confirmed that ESL and EFL present similar features which distinguish them from ENL. Most notably, they are both characterized by an overall underuse of phrasal verbs, which is most likely the result of the difficulties that are inherent in the use of these multiword verbs (polysemy, non-compositionality, particle placement, etc.). They also share a tendency to keep the verb and the particle together, with a preference for the VPO structure over the VOP structure. ESL and EFL learners rely heavily on VPO with nominal objects, even very short ones. Both groups of learners also present more native-like distinctive collexemes for VPO than VOP structures, thus pointing to a greater phraseological awareness for the former.

Beyond these similarities, ESL and EFL also present differences in the use of phrasal verbs, in accordance with their distinct contexts of use and acquisition. As expected from the higher degree of exposure to naturalistic English in ESL environments, ESL learners tend to come closer than EFL learners to the native reference. Thus, ESL learners are better at reproducing the native distribution of phrasal verbs across speech and writing than EFL learners, who use them in reverse proportions. ESL learners also display a more native-like distribution of the three structures of phrasal verbs (VP, VPO, and VOP). They present a lower percentage of VPO structures with pronominal objects, a structure which is normally dispreferred in ENL. As for the verbs used with the particle *up*, the lexical variation in ESL is higher than in EFL and closer to ENL, and the top two verbs in ESL are the same as in ENL. The main clines from ENL to ESL to EFL that appear from the data, and hence seem to confirm the effect of exposure on the native-like use of phrasal verbs, are as follows:

- Frequency of phrasal verbs in speech: ENL (203.5 per 100,000 words) > ESL (126.2 per 100,000 words) > EFL (65.6 per 100,000 words)

- Tendency to keep the verb and the particle together (VP + VPO): ENL (81.9%) < ESL (87.1%) < EFL (93.6%)
- VPO structures with pronominal objects: ENL (7.6%) < ESL (11.2%) < EFL (12.4%)
- Type/token ratio of the verbs used with *up*: ENL (16.8%) > ESL (12.1%) > EFL (4.9%)

With respect to the multiword status of phrasal verbs, one finding that emerges from the results is that the VPO structure seems to be better entrenched in ESL and EFL than the VOP structure. This suggests that the verb and the particle form a strong unit in ESL and EFL – stronger, perhaps, than in ENL, as appears from the higher proportion of VPO in ESL and EFL than in ENL. This strong unity between the verb and the particle in non-native English does not seem entirely consistent with the finding that L2 users tend to perceive multiword units as separate parts (cf. Kessler & Beck, 2022). This may be indicative of the special status of phrasal verbs among multiword units, with phrasal verbs being perhaps more likely to be stored as wholes even among L2 users.

Among the possible reasons for this better entrenchment of VPO than VOP in ESL and EFL, the influence of the input does not seem like a plausible one if we take ENL as a reference, since VPO and VOP are equally frequent in ENL (about 18% each). However, the input that ESL and EFL learners actually receive may differ from the type of reference that has been used in this study. In particular, it may be predominantly non-native (coming, for example, from non-native teachers in EFL environments or from people using the local English variety in ESL environments) and include an unusually high proportion of VPO structures as compared to VOP, which ESL and EFL learners would then reproduce in their English production. Another possible explanation is that the predominance of the VP structure in the input (whatever this input is) may contribute to the entrenchment of VPO, to the detriment of VOP. Finally, instruction may reinforce the unity between the verb and the particle, most notably through lists of vocabulary items.

This study presents a number of limitations that must be acknowledged, among which the possible lack of comparability between the corpora (especially the spoken ones) and the focus on one particle only. It must also be pointed out that no distinction has been made between the different ESL and EFL varieties as identified on the basis of learners' origins (Hong Kong English, Indian English, German English, etc.) and that transfer has not been studied at all as a potential source of variability. While corpus data have made it possible to bring to light several

interesting differences between ESL and EFL in the use of phrasal verbs, as well as striking similarities, the cognitive implications of these findings, including the seemingly better entrenchment of VPO in learners' than native speakers' minds, the strong unity between the verb and the particle and, more generally, the actual effect of different types of multilingualism on the processing of phrasal verbs, would need to be assessed through experimentation, which would, therefore, come as a valuable complement to the corpus study.

Endnotes

¹ For the sake of simplicity, the term 'learner' will be used to refer both to people who learn English as a foreign language and to people who learn/acquire/use English as a second language, although the term 'user' would arguably be more appropriate to describe the latter (especially for the spoken data, produced by speakers of various ages who may no longer be in the process of learning/acquiring English).

² It is, however, acknowledged that the literal versus figurative meaning of phrasal verbs could have an effect on their use by learners. Wulff and Gries (2019), for example, have shown that EFL learners use non-literal phrasal verbs in a more native-like way than literal phrasal verbs.

³ Some of the overall frequencies presented in this section were reported in Gilquin (2015b, p. 105–106). More precisely, the written and spoken EFL data and the spoken ESL data were the same. The direct conversations from the British component of the International Corpus of English (ICE-GB), used here in combination with the Louvain Corpus of Native English Conversation (LOCNEC) as a reference corpus for spoken ENL, were used on their own in Gilquin (2015b). The written ESL and ENL data relied on different parts of ICE.

⁴ Statistical significance in this section was tested by means of the chi-square test, with Bonferroni adjustment for multiple comparisons.

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