

## Chapter 11

# L2 Spanish Acquisition of English Phrasal Verbs: A Cognitive Linguistic Analysis of L1 Influence

Rafael Alejo González  
*University of Extremadura*

### 11.1 Introduction

Almost any teacher with experience in the area of English as a Second Language (ESL) will point out Phrasal Verbs (PVs) as a source of difficulty for their students. To bear witness to this fact we only have to look at the shelves of an ESL specialized library. The amount of material published on PVs, both in the form of dictionaries and workbooks, is phenomenal.

However, not all teachers would put PVs at the top of their list of difficulties, and equally not all students experience the same level of difficulty in tackling these verbs. That is, PVs are acknowledged as a source of trouble but they may affect students in different ways, the L1 of the students being of the most likely explanation.

The scant research on the subject, which we shall see later on, has corroborated these impressions and has shown that Swedish and Dutch students experience a lesser degree of difficulty, while students whose L1 is a Romance language (e.g. Italian), may have more trouble with these verbs. In other words, language transfer may well be the main factor accounting for the problems experienced by students (Odlin 1989). Despite being ignored by some researchers in Second Language Acquisition (cf. Dulay and Burt 1974 or Krashen 1981, as cited in Jarvis and Pavlenko 2008: 100), it seems that transfer, which has now been purified and adapted to the new findings in the field, has become respectable again.

Identifying, in a general way, the origin of the problem, however, may not be enough to help students. L1 transfer merely points to the dissimilarity between the source and the target language, in this case between those languages which contain two- or three-word verbs and those languages which do not, but it does not identify the nature of the problems students

face when acquiring PVs and to what extent some verbs may be more difficult to learn than others. Furthermore, a lexical approach in which general reference to opacity in meaning is made does not help either. Difficulty and opacity may be considered as equivalent terms and do not provide an explanation.

In this chapter, an attempt is made to identify the specific source of difficulty that PVs pose for learners. Thus, the key element of the problem will be located within one of the words that constitute the PV: the particle. Particles are highly frequent, non-salient polysemous words and as such they are, like other words with the same features, very difficult to learn. They apparently provide redundant information and are difficult to notice by learners whose first languages have not trained them to pay attention to this specific linguistic element. In short, as established by the Associative-Cognitive Creed (Ellis 2007: 84), they constitute typical elements that are 'blocked' by the learners' first language experience.

The organization of the chapter is as follows. After giving a broad linguistic definition of PVs, so that the limits of the phenomenon studied become clear, I make a brief summary of the main findings in the literature on the subject and identify how progress can be made from there. Then, I introduce the methodology used in the study and I finally present the results and the discussion of the analysis carried out.

## 11.2 Definition of PV

The concept of Phrasal Verb has traditionally been used in language teaching to refer to those verbs that are made up of two (e.g. *look up*) or three words (e.g. *look forward to*). The tendency has mainly been to consider them as vocabulary items that needed to be learned as a whole because their meaning was sometimes difficult to be inferred from their constituent parts. No specific linguistic criterion is adopted and the defining trait in this context is related to their formulaic and opaque nature, something which makes them closer to idioms.

Within the linguistics literature, however, a different terminology is adopted. Thus, Quirk et al. (1985) talk about 'Multi-word Verbs' to refer to the same group of verbs that language teaching texts and dictionaries refer to as 'Phrasal Verbs' and, what is more important, this reference grammar uses the term 'Phrasal Verb' to refer to a subgroup of 'Multi-word Verbs'. The other two groups would be 'Prepositional Verbs' (PRVs) and 'Phrasal Prepositional Verbs' (PPVs).

The reason for this classification is mainly syntactic. Even though apparently similar, PVs are used in constructions which the other groups do not licence. Thus, most PVs allow for a change in the position of the direct object complement, whereas PRVs and PPVs do not. This makes 2b unacceptable in the following examples:

- 1a *I'll have to look up his records at least*
- 1b *I'll have to look them up at least*
- 2a *I'm looking for a biography on Lincoln*
- 2b *\*I'm looking it for*

There are other tests and, even though it is true that not all of them work equally well, they can serve to make this distinction appropriate from a grammatical point of view (see O'Dowd 1998; Cappelle 2005 for a full account). I will therefore adhere to this restrictive definition of PVs, since I consider that some of their syntactic and phonological peculiarities may have an influence on their acquisition.

### 11.3 Cognitive Linguistics Approach to PVs

The acceptance of the linguistic terminology explained in the previous section does not imply that I understand PVs in a similar way. Although I believe that the exploration of the syntactic properties of PVs is appropriate, they do not account for the way meaning is created within these linguistic units. The total rejection of compositionality of meaning, apparently in accord with the idiomatic meaning of PVs, does not really fit a view of language where syntactic behaviour is related to meaning. In other words, their emphasis on grammar produces a separation from lexis that I do not think is appropriate.

This means that I subscribe to a Cognitive Linguistics approach to the analysis of PVs. As a consequence, I will propose that it is possible to posit some sort of compositionality in the interpretation of the meaning of PVs and that, based on this compositionality, the key to the understanding of these verbs lies in the meaning of particles.

According to the cognitive linguistics literature (Lindner 1981; Tyler and Evans 2003), particles are linguistic elements whose basic meaning can be traced back to their proto-typical use as spatio-temporal adverbs. From this basic meaning, sometimes resulting from metaphor and sometimes from what Gibbs (1997) calls experiential correlation, a radial web of senses are derived.

Thus, the cognitive framework used for the interpretation of spatial scenes can also be used, and as a consequence concepts such as Figure/Trajector or Ground/Landmark can serve to establish the meaning of the particle even when used in a PV construction. In this way, in a sentence like (3), the verb *walk out* will establish 'staff' as the trajector and 'bank' as the landmark of an action where the meaning of the verb is metaphorically derived from the spatial interpretation: 'the staff of most banks are not in their jobs today, i.e. they are on strike'.

(3) Staff at most banks walked out today

Cognitive Linguistics, then, provides a more adequate framework to study the acquisition of PVs since the concepts this school uses are more likely to reflect learners' intuitions of their meaning.

## 11.4 L2 Research on PVs

Research on the acquisition of PVs by L2 learners has mainly adopted a vocabulary approach. It is mainly concerned with the factors and circumstances that explain why L2 learners avoid using PVs (Dagut and Laufer 1985; Hulstijn and Marchena 1989; Laufer and Eliasson 1993; Sjöholm 1995; Liao and Fukuya 2004).

Although the amount of research on PVs can be considered to be scarce, some preliminary conclusions have already been drawn:

- a. A preliminary finding established by the literature (Ishii and Sohmiya 2006; Siyanova and Schmitt 2007) is the clear distinction in the use of PVs between native and non-native speakers.
- b. There are language distance effects, which will explain why L1 Dutch (Hulstijn and Marchena 1989) or Swedish (Sjöholm 1995) learners show less avoidance than L1 Hebrew learners (Dagut and Laufer 1985). Dutch and Swedish, in so far as they are Germanic languages, share certain similarities with English with respect to the use of particles.
- c. A developmental sequence from avoidance in the first stages of acquisition to non-avoidance in the later stages has also been identified, although individual variability has been found with regard to proficiency. Advanced students show less avoidance than students at other levels (Liao and Fukuya 2004). However, this remains a controversial matter since a more recent study (Siyanova and Schmitt 2007) has found no difference in avoidance between proficiency levels.

- d. The context of acquisition makes no difference (Siyanova and Schmitt 2007). Thus, learners of English as a Foreign Language and as a Second Language have difficulty in acquiring PVs. This, of course, may be another way of stating that proficiency levels have no determining influence on the final outcome.
- e. Idiomaticity has been demonstrated to play a role in avoidance. Thus more opaque PVs will be susceptible to higher avoidance by L2 learners (Dagut and Laufer 1985; Liao and Fukuya 2004; however see Ishii and Sohmiya 2006, for different findings).
- f. Avoidance is related to task effects (Liao and Fukuya 2004). Thus, more controlled tasks, like multiple choice tests, will produce fewer instances of avoidance.

These conclusions, however, have mainly been obtained in experimental conditions and one should consider whether a different methodology might produce different results or whether at least these could be qualified. Experimental tasks overlook learners' word choices in more normal, extended and unguided language use.

Thus, key factors such as frequency effects have not been taken into account and avoidance, which by definition should be considered as a gradable concept, has been expressed in dual terms (yes/no, all/nothing). Finally, the selection of PVs used in the tasks of all the studies has not been justified and therefore it may well be that the verbs chosen are not representative of the phenomenon of PVs as such.

What is more important, if language distance or language typology determines L1 transfer, the concept should be used for something more than classifying L1s into different groups. Language typology (Talmy 2000) has been established on solid cognitive grounds and the explanation that it provides for other areas, such as motion events, may prove of great heuristic value, if only because it also deals with words belonging to the same parts of speech: verbs of motion and particles or prepositions expressing path.

## 11.5 Goals of the Study

In this context, the present chapter aims to study the acquisition of PVs by L1 Spanish learners of English and to confirm that language transfer or cross-linguistic influence may be posited as one of the driving forces behind the avoidance of this group of verbs. To support this hypothesis I have chosen to use natural rather than experimental data since, as has already been



pointed out in the previous section, this approach may be more suitable to the task or at least offer a different perspective. This methodological decision also made it necessary to use natural data from learners with a different L1 background (in our case Swedish learners) and from native speakers; they both served as a benchmark against which to interpret the results obtained with the Spanish speakers.

The use of natural data also made it possible to broaden the scope of our study, and it allowed us to focus on other factors that may have an influence on the acquisition of PVs by Spanish learners. It is important here to note that the new developments in the field of transfer, or Cross-Linguistic Influence, as Jarvis and Pavlenko (2008) like to call it, allow for the consideration of simultaneous intervening factors.

As there is a considerable number of PVs, this study has only focused those containing the particle 'out', on the grounds that the conclusions drawn from it could be useful to explain some of the patterns of PV avoidance by L2 students.

## 11.6 Methodology

### *a. Corpora*

As we have seen, the study has been conducted using natural data from existing corpora of learner language. In this case, both the Spanish and Swedish sections of the ICLE were used. The ICLE is a non-tagged corpus of short essays written by 3rd and 4th year university students on non-academic, non-technical controversial topics (e.g.: 'Television is the opium of the masses'). The average length of the essays is about 500 words, with the Spanish subcorpus containing about 200,000 words.

To provide an element of contrast and comparison of results, the university and school essay sections from the BNC were also used. Like the ICLE, they mainly consist of argumentative essays written in this case by native speakers of British English.

The most important aspect to be considered was the comparability of the corpora in terms of subject matter and size. The subject matter of all the corpora used includes an array of topics ranging from literature to current affairs with a degree of specificity which may be regarded as intermediate. With regard to the size of the corpora used (see Table 11.1), the match could be considered more than appropriate to be able to reach some preliminary conclusions.

**Table 11.1** Corpora

Corpus	Tokens	Types	TTR
Spanish section of ICLE (SPICLE)	200,926	12,161	6
Swedish section of ICLE (SWICLE)	198,675	11,434	6
Written School and University Essays from the BNC	202,247	14,366	7

### *b. Procedure*

Once the corpora were selected, the procedure carried out was the following:

1. All the concordances of the particle 'out' found in the three corpora were extracted irrespective of whether the particle was located on its own or accompanied by the preposition 'of'. This was done using the concordancer *WSmith Tools*.
2. The concordances containing the particle 'out' were then tagged using the following labels:
  - a. *PV status*. The categories used here were
    - i. VPC (Verb Particle Construction), i.e. Phrasal Verbs.
    - ii. V+P (Verb and Particle), constructions where the verb and the particle, though constructed together, do not constitute a syntactic unit, and basically describe motion events.
    - iii. Non-VP, instances where the particle 'out' is used outside the scope of direct influence by the verb.
  - b. *PV syntax*. This was encoded in two related fields: The first field indicated whether the verb was used transitively or intransitively, and the second expressed the position of the complement (before or after the particle) when the verb was used transitively.
  - c. *Errors*. The existence of a deviation from native usage was also recorded and then classified into different categories: lexical, syntactic, collocational or orthographic.
  - d. *Particle meaning*. Since the meaning of the particle was considered essential, all the instances were coded using the different meanings proposed by Tyler and Evans (2003: 203–216) for the particle 'out' (see Table 11.2).
3. The resulting database was included in a spreadsheet and the results were analysed for statistical significance using a binomial test.

**Table 11.2** Meanings of 'out'

---

<b>OUT</b>	
1. PROTO-SCENE:	<i>Exterior to a Landmark</i>
2. LOCATION CLUSTER	
a. Not In Situ Sense:	<i>Amy is out sick for the day</i>
b. No More Sense:	<i>We're out of business</i>
c. Completion Sense ('completely'):	<i>The ground has now thawed out</i>
3. THE VANTAGE POINT IS INTERIOR CLUSTER	
a. Exclusion Sense:	<i>They voted out the unpopular member</i>
b. Lack of Visibility Sense:	<i>He switched out the light; He crossed out the typo</i>
4. THE VANTAGE POINT IS EXTERIOR CLUSTER	
a. Visibility Sense:	<i>The sun is out</i>
b. Knowing sense:	<i>The secret is out; We figured out the problem</i>
5. THE SEGMENTATION CLUSTER	
Distribution Sense:	<i>I'm always having to fork out on my old car</i>
6. REFLEXIVITY:	<i>Spread out the butter</i>
<b>OUT OF</b>	
7. MATERIAL SOURCE:	<i>The chair is made out of wood</i>
8. THE CAUSE SENSE:	<i>John sacrificed himself out of love</i>

---

## 11.7 Results and Discussion

The analysis presented here mainly focuses on what is considered to be the leading factor explaining the acquisition of PVs by L2 learners: avoidance. But PV avoidance is not a simple phenomenon and I will attempt to portray some of its complexity by relating it to other factors and by looking at it from different perspectives. Besides, I will also deal with 'frequency effects', which, although apparently contradicting the importance of L1 transfer, can also be interpreted in ways that are consistent with our findings on PV avoidance.

### *a. PV Avoidance*

In a corpus study like the present one, it is not possible to measure avoidance behaviour by resorting to 'think aloud' protocols or similar tasks used in L2 studies, to access the intention or awareness of the learner in producing or, as in this case, in avoiding a specific structure. As a consequence avoidance will be defined, in this study, in comparison to habitual behaviour by native speakers in a similar context. That is, L2 speakers will be considered to avoid using a PV when they use a significantly smaller number of instances of the particle 'out' than native speakers.



In using this definition of avoidance, I share the view expressed by Liao and Fukuya (2004), who do not think it necessary to ascertain the learner's previous knowledge of a PV. In contexts of real language use, it would require an enormous methodological effort to adopt the criterion that learners can only avoid what they already know. More importantly, when this previous knowledge is measured, as some of the studies have done (see, for example, the case of Siyanova and Schmidt 2007), some sort of experimental task is necessary, thus failing to take advantage of the richer information derived from natural contexts. In a way, my definition of avoidance is very similar to one given, in corpus linguistics studies, for the term underuse (see, for example, Cobb, 2003), which I think is more appropriate. I keep the former term because it is the one used in the bibliography dealing with PVs.

As Table 11.3 shows, the total number of 'out'-PVs used by both L1 Swedish and L1 Spanish learners is significantly smaller than that habitually used by L1 English speakers. This means that avoidance of 'out'-PVs can be said to affect all the second language learners studied, although, as we can see in the same table, Swedish learners have a much lower level of avoidance than Spanish students.

These data are confirmed by the results analysed in Table 11.4, where the data for 'out'-PV types are recorded. As one would expect, avoidance is not only related to stylistic choices but to the size of the vocabulary that students show.

These results confirm for PVs what has been hypothesized for formulaic sequences in general (Wray 2002), i.e. that non-native speakers are less likely to use PVs than native speakers. In this sense, the findings are not new

**Table 11.3** Out-PV tokens

VPC Tokens	Number	%	Avoidance
BNC	283	100,00	–
SWICLE	194	69,26	30,74
SPICLE	127	44,88	55,12

**Table 11.4** Out-PV types

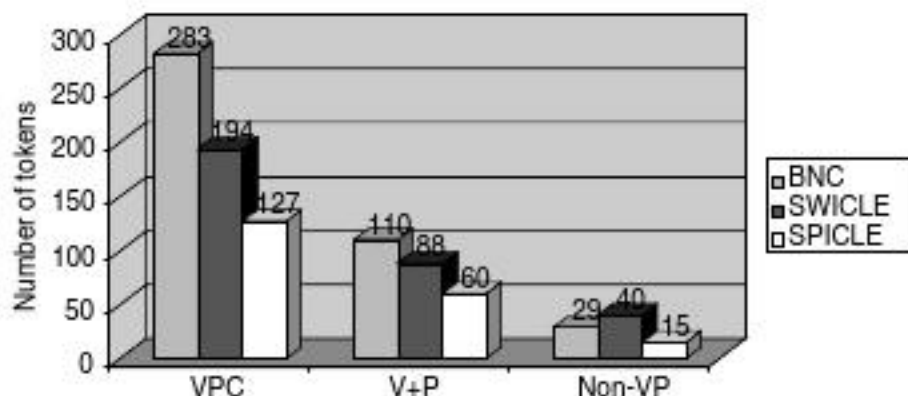
VPC Types	Number	%
BNC	107	100,00
SWICLE	60	56,07
SPICLE	35	32,71

and bear out, for the formal written context analysed here – essay writing – the ones obtained by Siyanova and Schmitt (2007) for more informal spoken contexts. But, at the same time, they contradict the hypothesis these authors put forward at the end of their article ('the notion that learners tend to avoid multi-word verbs in spoken colloquial, but perhaps not in written contexts' Siyanova and Schmitt 2007:133) when they compared their results with previous studies on PVs and attempted to explain why avoidance was not found in some of them (Hulstijn and Marchena 1989; Liao and Fukuya 2004). In my opinion, avoidance was found to be statistically non-significant in the latter studies not because of the written context but because of the types of experimental tasks used, such as multiple-choice tests, which tap less into natural language use and the skills typical of online processing.

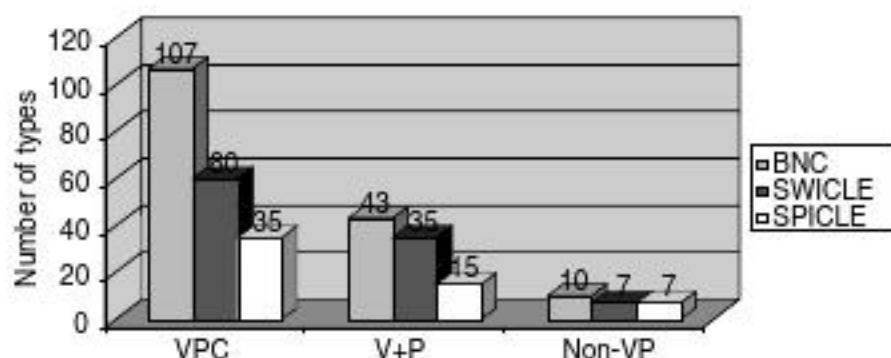
On the other hand, the fact that Spanish L1 learners are less likely to use PVs than are Swedish L1 learners can be explained – as Laufer and Eliasson (1993) and Sjöholm (1995) do for Hebrew and Finnish vs. Swedish – on the grounds that Spanish lacks this category of verbs while Swedish does not. In other words, the present study shows, once again, that the L1 of the learner is highly influential and that the distance between the L1 and the L2 can explain a great number of the problems learners may have with this construction.

#### *b. PV Avoidance as a particular case of particle avoidance*

The importance of PV avoidance can be more clearly perceived if considered in the larger context of particle use. Thus, as Figure 11.1 shows and Figure 11.2 corroborates, 'out'-PV avoidance is by far the most important phenomenon if compared to avoidance in similar constructions. In other



**FIGURE 11.1** Number of tokens in the different constructions



**FIGURE 11.2** Number of types in the different constructions

words, the particle ‘out’ is avoided to a much a greater extent when used in PV constructions (VPCs) than when it is used in other constructions of the English language to describe motion events (V+P) or in other adverbial or prepositional uses that fall outside the immediate scope of influence of the verb. This is not surprising given the idiomatic or non-transparent meaning of PVs in comparison with other constructions.

However, in spite of these differences, the avoidance of ‘out’-PVs should be understood as a special case within a general trend of avoidance of the particle ‘out’, as L2 learners, especially Spanish speakers, also tend to avoid the use of the particle in the remaining constructions types (V+Ps and Non-VPs). Indeed, these data suggest that PV avoidance could be related with lower frequency with which path morphemes and manner verbs occur in the narratives of L1 Spanish speakers while describing motion events in an L2 (see Cadierno 2004). In other words, avoidance of PVs could be seen as further support of the ‘thinking for speaking hypothesis’ (Slobin 1996, 1997, 2000, 2003), since the particles used PVs, as defended by Cognitive Linguistics, can be considered as metaphoric extensions from their spatio-temporal meanings (Tyler and Evans 2003).

### *c. Specific areas of avoidance within PV use*

Further insight into PV avoidance may gained if, instead of looking at PVs as a homogenous phenomenon, we consider their semantic and syntactic variation. I analyse this variation using a cognitive-linguistic framework, which is particularly useful for the semantic analysis of PVs. Thus, as indicated in the methodology, I use Tyler and Evans (2003) to identify the meaning of ‘out’ in PVs. This will allows a more objective and fine-grained semantic analysis, less dependent on judgment than the labels ‘opaque’ and ‘transparent’, used so far in the bibliography, to classify PVs from a semantic point of view.

**Table 11.5** Number of errors in L2 use

Deviations	No. of errors	% over total
SWICLE	15	7.75
SPICLE	49	38.58

Table 11.6 presents the range of meanings associated with the particle ‘out’ in English and the frequency with which each meaning is found in the three corpora studied (BNC, SWICLE and SPICLE). If we pay attention to significant results, we can see that the relative frequency of certain meanings does not really correspond to typical native speaker behaviour. Thus, in the case of L1 Spanish speakers, we find an overproduction of PVs expressing ‘visibility/ knowing’ and of those expressing ‘completion’, which is also noticeable, as we can see (cf. Table 11.5 above), in the number of deviant PVs L1 Spanish students use to convey these meanings (e.g. ‘From this point on everything tries to clear out’). On the other hand, PVs expressing ‘location’/‘motion’ and ‘distribution’ are much less frequently used by L1 Spanish speakers. For their part, L1 Swedish speakers show a less marked preference for ‘visibility’ and ‘knowing’ meanings than Spanish speakers, but still use more PVs expressing those meanings than native speakers. L1 Swedish speakers, however, make less use of PVs expressing ‘completion’ and ‘invisibility’.

These results indicate that avoidance may be affected by the meaning of the particle. This would imply that the L1 of the learner may have an influence in the avoidance of certain meanings of the particle, perhaps those that are less transferable from their L1. On the other hand, the overuse of the ‘visibility/knowing’ meaning may be the result of a more complex picture where L1 transfer and frequency effects have a combined influence. As we will see later, frequency is a factor that should also be taken into account.

For its part, the syntax of both L1 Spanish and L1 Swedish learners (see Table 11.7) also shows areas of cross-linguistic influence. While the former group seems reluctant to insert a Nominal Phrase (NP+out) before the particle (*Try to help sort things out*) and concomitantly overproduce the symmetrical structure (out+NP), the latter also underproduce the NP insertion (NP+out). Finally, both groups of learners underproduce sentences where the particle is stranded.

The similarity in behaviour of both groups of learners indicates that the L1 would be less influential and that factors at play here could be related to intrinsic difficulty of the syntactic construction for L2 learners in general. As suggested by the cognitive-linguistic bibliography (see Dirven 2001), NP insertion before the particle, which is usually called Construction 2, is used for

**Table 11.6** Numbers and percentages of meanings for Out-PVs

MEANING2	VPC #			VPC %		
	BNC	SPICLE	SWICLE	BNC %	SPICLE %	SWICLE %
VISIBILITY/KNOWING	131	75	103	46.29	59.06*	53.09*
COMPLETION	54	28	31	19.08	22.05	15.98
LOC/MOV	36	4	23	12.72	3.15*	11.86
EXCLUSION	18	8	17	6.36	6.30	8.76
INVISIBILITY	14	8	3	4.95	6.30	1.55**
DISTRIBUTION	14	2	7	4.95	1.57*	3.61
BEYOND	7		2	2.47	0.00**	1.03
NOT IN SITU	2	2	5	0.71	1.57**	2.58**
REFLEXIVITY	7		1	2.47	0.00	0.52
NO MORE			2	0.00	0.00	1.03
Grand Total	283	127	194	100.00	100.00	100.00

Notes: Percentages whose differences with the BNC were found to be \*significant  $p < 0.05$ ; \*\*marginally significant =  $p < 0.10$

**Table 11.7** Numbers and percentages for structures used with transitive Out-PVs

PARTICLE PLACEMENT	BNC	SPICLE	SWICLE	BNC (%)	SPICLE (%)	SWICLE (%)
NP + OUT	16	3	1	8.04	3.03**	0.80*
OUT + NP	62	44	44	31.16	44.44*	35.20
OUT + CLAUSE	53	25	40	26.63	25.25	32.00
PR + OUT	12	6	10	6.03	6.06	8.00
NON-FOLLOWING	56	21	30	28.14	21.21	24.00*
Total	199	99	125	100.0	100.00	100.00

Notes: Percentages whose differences with the BNC were found to be \*significant  $p < 0.05$ ; \*\*marginally significant =  $p < 0.10$

discourse cohesion purposes and involves a greater degree of automaticity in language use since direct objects placed in mid-position require a lesser degree of awareness.

#### d. Errors in the use of PVs

Avoidance only reflects part of the problems students find when using PVs. Language transfer may also occur in the form of deviation from native speaker usage. Again there is a difference between L2 learners and native speakers, but as Table 11.5 shows Swedish learners would seem to have significantly fewer problems than Spanish speakers.

Here we can see some examples of errors made by Spanish learners:

- ‘And the last main point **to jut out** but not the less important is the role psychiatrics play inside jail.’ (SPICLE, lexical)



- ‘It **points out** the idea of the family as the pillars of Victorian Society.’ (SPICLE, lexical: selection of the particle)
- ‘we should **stand out**, the incipient attention to the social problems of the pre-capitalist society.’ (SPICLE, lexical and syntactic)
- ‘From this point on everything tries to **clear out**.’ (SPICLE, lexical)
- ‘Nowadays the number of people who don’t **carry out** Military Service has increased.’ (SPICLE, collocation)

The mostly lexical nature of the errors suggests that learners over-generalize the use of the particle ‘out’ to form PVs that are non-existent in the English language. Language transfer may not be the only factor at play, however, as will be seen in the following subsection.

#### *e. Frequency effects*

The corpus analysis carried out in this article is especially helpful to identify factors that are much less evident using an experimental methodology. This is the case of frequency effects, which, following Ellis (2002), I understand as both the ease of processing and the learning outcomes derived from the frequency with which some linguistic elements are found in the input. Thus, since ‘fluent language users tend to produce the most probable utterance for a given meaning on the basis of the frequencies and recencies of utterance representations’ (Ellis 2002: 162), this article assumes that those PVs used with a high frequency in the corpora analysed are most probably the result of implicit intralingual learning factors, dependent on the input speakers have been exposed to, rather than the result of cross-linguistic influence.

This assumption is supported by the fact that the most frequent PVs in all three corpora – all with a frequency higher than 5 – are, not surprisingly, the same: *point out*, *carry out*, *find out* and *turn out*. It seems as if the specific essay writing task used to compile the corpora activates these specific PVs as they are very frequent in argumentative text-types. Figure 11.3 offers further confirmation of how L2 learners use of PVs parallels that of native speakers.

The importance of frequency effects is further emphasized if we consider not only the particular verbs but the meanings expressed through the particle. As Figure 11.4 shows, L2 students are very aware of the prototypical meanings that are expressed through the particle. This is also the case of syntactic constructions (see Figure 11.5).

Finally, frequency effects can also be seen in the syntactic patterns used with transitive verbs. Learners are not only aware of the frequency with which certain meanings are used but they also pay attention to the most prototypical syntactic structure in which PVs appear.

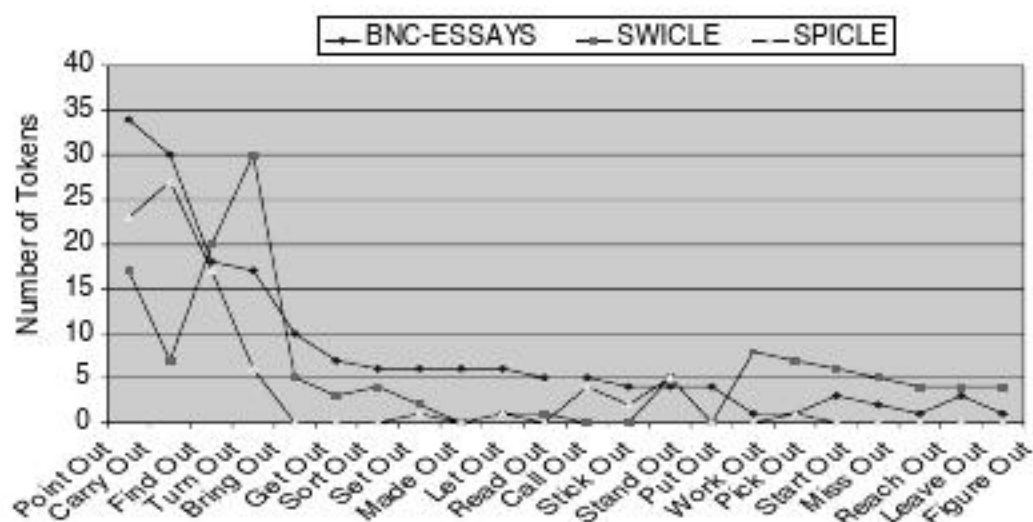


FIGURE 11.3 Comparison of most frequent Out-PVs

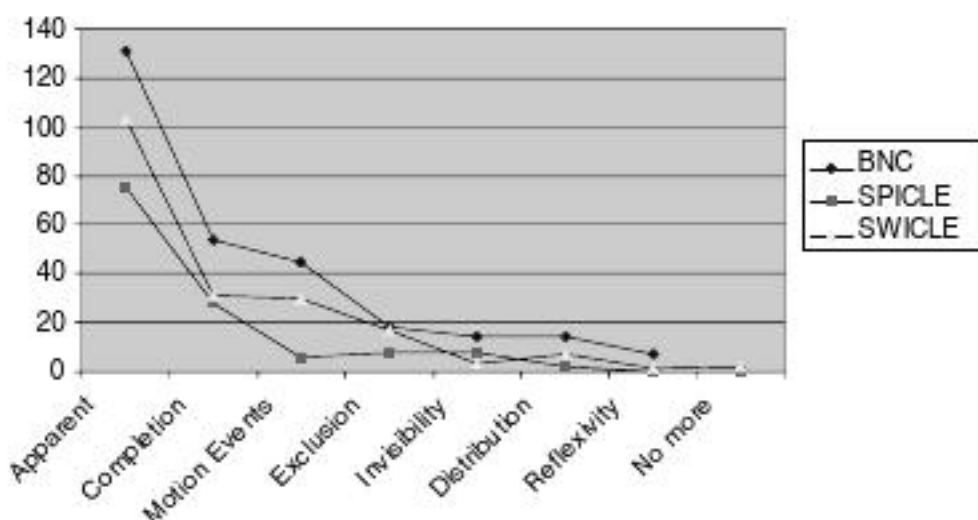
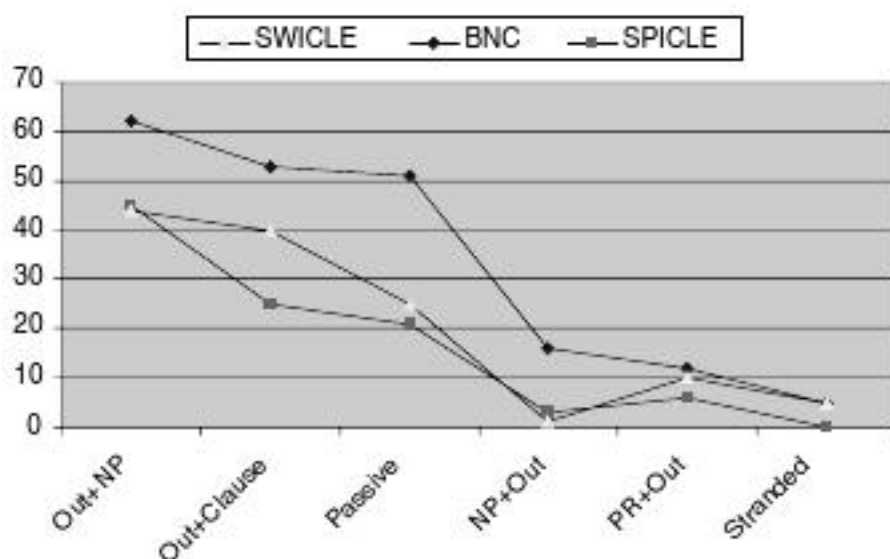


FIGURE 11.4 Most frequent meanings of Out-PVs

It is by looking at these frequency effects that we can now explain some of the phenomena of overuse that were detected along with avoidance. As Cobb (2003) states, overuse is the other side of avoidance and is closely linked to it.

## 11.8 Conclusion

The analysis of OUT-PVs shows that learners' L1 may have an influence on underproduction of this group of verbs. This finding would seem to be in



**FIGURE 11.5** Most frequent structures used with transitive Out PVs

accordance with the analyses which, based on Slobin's 'thinking for speaking' hypothesis, posit that what Talmy (2000) calls Verb-framed languages (Romance languages in general) are less likely to express the path of motion events.

The data shown here for Spanish speakers reveal that the use or avoidance of PVs will reflect this tendency even more markedly than motion events. The level of avoidance detected in this study is a reliable indication that L1 Spanish learners of English underproduce 'out'-PVs to a much greater degree than the speakers of Swedish.

However, avoidance of PV use seems to be compatible with awareness on the part of learners of the frequency and prototypicality of the different PVs, their most frequent meanings and the structures in which they are used.

Future research should establish whether the patterns described in this study will also hold for the entire phenomenon of PVs.

## References

- Cadierno, T. (2004), 'Expressing motion events in a second language: A cognitive typological perspective', in Achard, M. and Niemeirer, S. (eds), *Cognitive Linguistics, Second Language Acquisition and Foreign Language Teaching*. Berlin: Mouton de Gruyter, pp. 13–49.
- Cappelle, B. (2005), *Particle Patterns in English. A Comprehensive Coverage*. Ph.D. Dissertation at the Faculteit Letteren, Katholieke Universiteit Leuven.
- Cobb, T. (2003), 'Analyzing late interlanguage with learner corpora: Quebec replication of three European studies'. *Canadian Modern Language Review*, 59, 393–423.

- Dagut, M. and Laufer, B. (1985), 'Avoidance of Phrasal Verbs: A Case for Contrastive Analysis'. *Studies in Second Language Acquisition*, 7, 73–79.
- Dirven, R. (2001), 'English phrasal verbs: Theory and didactic applicaton', in Pütz, M., Niemeier, S. and Dirven, R. (ed.), *Applied Cognitive Linguistics*. 2 Vols. Berlin: Mouton de Gruyter, pp. 3–27.
- Dulay, H. and Burt, M. (1974), 'Natural sequences in child second language acquisition'. *Language Learning*, 24, 37–53.
- Ellis, N. (2007), 'The associative-cognitive CREED', in Van Patten, B. and Williams, J. (eds), *Theories in Second Language Acquisition. An Introduction*, Mahwah, New Jersey/London: Lawrence Erlbaum Associates, pp. 77–98.
- Ellis, N. C. (2002), 'Frequency effects in language processing. A review with implications for theories of implicit and explicit language acquisition'. *Studies in Second Language Acquisition*, 24, 143–188.
- Hulstijn, J. H. and Marchena, E. (1989), 'Avoidance: Grammatical or Semantic causes?' *Studies in Second Language Acquisition*, 11, 241–255.
- Ishii, Y. and Sohmiya, K. (2006), 'On the semantic structure of English. Spatial particles involving metaphors', in A. Yohitomi (ed.), *Readings in a Second Language Pedagogy and Second Language Acquisition: In Japanese Context*. Amsterdam: John Benjamins, pp. 381–402.
- Jarvis, S. and Pavlenko, A. (2008), *Crosslinguistic Influence in Language and Cognition*. New York/London: Routledge.
- Krashen, S. (1981), *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon.
- Laufer, B. and Eliasson, S. (1993), 'What causes avoidance in L2 learning: L1-L2 difference, L1-L2 similarity, or L2 complexity?', *Studies in Second Language Acquisition*, 15, 35–48.
- Lee, D. (2001), *Cognitive Linguistics: An Introduction*. Victoria, Australia: Oxford University Press.
- Liao, Y. and Fukuya, Y. J. (2004), 'Avoidance of phrasal verbs: The case of Chinese learners of English'. *Language Learning*, 54, (2), 193–226.
- Lindner, S. (1981), *A Lexico-Semantic Analysis of Verb-Particle Constructions with up and Out*. San Diego: University of California.
- Odlin, T. (1989), *Language Transfer*. Cambridge: Cambridge University Press.
- O'Dowd, E. M. (1998), *Preposition and Particles in English. A Discourse-Functional Account*. New York/Oxford: Oxford University Press.
- Quirk, R., Greenbaum, S., Leech, G.N. and Svartvik, J. (1985), *A Comprehensive Grammar of English*. London: Longman.
- Siyanova, A. and Schmitt, N. (2007), 'Native and non-native use of multi-word vs. one-word verbs'. *IRAL*, 45, 119–139.
- Sjöholm, K. (1995), *The Influence of Crosslinguistic, Semantic, and Input Factors on the Acquisition of Phrasal Verbs*. Abo: Abo Akademi University Press.
- Slobin, D. I. (1996), 'Two ways to travel: Verbs of motion in English and Spanish', in Shibatani, M. and Thompson, S. A. (eds), *Grammatical Constructions: Their Form and Meaning*. Oxford: Clarendon Press, pp. 195–220.
- (1997), 'Mind, code, and text', in Bybee, J., Haiman, J. and Thompson, S. A. (eds), *Essays on Language Function and Language Type: Dedicated to T. Givón*. Amsterdam/Philadelphia: John Benjamins, pp. 437–467.

- (2000), 'Verbalized events: A dynamic approach to linguistic relativity and determinism', in Niemeier, S. and Dirven, R. (eds), *Evidence for Linguistic Relativity*. Amsterdam/Philadelphia: John Benjamins, pp. 107–138.
- (2003), 'Language and thought online: Cognitive consequences of linguistic relativity', in Gentner, D. and Goldin-Meadow, S. (eds), *Language in Mind: Advances in the Study of Language and Thought*. Cambridge, MA: MIT Press, pp. 157–192.
- Talmy, L. (1985), 'Lexicalization patterns: Semantic structure in lexical forms', in Shopen, T. (ed.), *Language Typology and Syntactic Description*. Cambridge: Cambridge University Press.
- (2000), *Toward a Cognitive Semantics, Vol. 1: Concepts Structuring Systems*. Cambridge, Massachusetts, MA: MIT Press.
- Tyler, A. and Evans, V. (2003), *The Semantics of English Prepositions*. Cambridge: Cambridge University Press.
- Wray, A. (2002), *Formulaic Language and the Lexicon*. Cambridge: Cambridge University Press.