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From the Editors

MULTIWORD PATTERNS: CONSIDERING PHRASAL VERBS AND THEIR UNDERLYING SEMANTIC SYSTEMS (II)

This is the second volume in *Language Value* that is thoroughly devoted to the issue of Verb Particle Combinations (VPCs) also known and analysed under different linguistic trends and terms as phrasal/prepositional verbs, compound verbs, discontinuous verbs or multiword verbs, among others. For the sake of simplicity we will use the term verb particle combinations (VPCs) throughout this editorial.

Five articles present perspectives on the use of VPCs as used in different texts and contexts: that of animal-related VPCs in Panther and Thornburg, VPCs in child and adult interaction in data taken from the CHILDES corpus in Hampe's article, economics and finance texts in Breeze's, VPCs in cartoons in Kihr's, and constructions made by L2 learners of the VPCs as reflected in a corpus of learner language in Alejo's article.

As most authors in this issue, the study conducted by **Hampe** is framed within the field of Cognitive Linguistics. In it, the author takes a construction grammar perspective in order to carry out a thorough multi-factorial analysis of transitive verb-particle constructions in English. Hampe draws on the findings of previous studies like Gries (2003, 2011) and Diessel & Tomasello (2005) and suggests that the two word-order alternatives found in this kind of constructions are actually members of two different *construction networks*, each with a different prototype; thus, while those realisations of the *Verb-Particle-Object (V-Prt-O)* alternative rank higher as instances of the transitive construction, realisations of the *Verb-Object-Particle (V-O-Prt)* template are closer to the Caused-Motion Construction (CMC).

Her claims, however, go a step beyond by introducing the components of first-language acquisition and use; Hampe proposes that, in early stages, "literal" realisations of transitive phrasal verbs fitting the *V-O-Prt* alternative may be conceived of by the child, together with other expressions with, say, deictic adverbs, as instantiations of the same,

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primitive and simple CMC. These, all together, and among other factors, are assumed to act as precursors of non-literal and more complex realisations of the CMC.

One of the aims of her study, accordingly, is to ascertain the role of *V-O-Prt* phrasal verbs as one kind of possible precursors in the acquisition of the CMC, with a special focus on the resultative caused-motion network. In her research, Hampe also takes into account the occurrence of either alternative in conjunction with spatial/non-spatial uses and the prevalence of either option in child and adult speech.

Her analysis is based on child and adult data extracted from different corpora: two age groups (3 and 5-7 year-olds) from the British part of the CHILDES and a third age group (adults) from the spoken part of the ICE-GB plus spontaneous spoken language and broadsheet newspaper texts from the BNC in order to also take into account genre-specific data.

Alejo explores the acquisition of VPCs by L2 learners from the perspective given by a usage-based approach to language. The article investigates an issue that has so far been nearly neglected in the area of VPC analysis: whether the *syntactic* distinction between particles and prepositions implies a difference in the way non natives learn them and whether the syntactic difficulty is really problematic or just something to be learnt without too much effort. In order to fill in this gap, Alejo examines one particle –OUT – considering all its possible syntactic and grammatical realisations. The approach followed in this article is to first focus on particle use contrasting data between native and non-native speakers, and then go on with the analysis of how this use is allocated in the different syntactic and semantic possibilities in order to establish the extent to which OUT is used by L2 learners. The author carries out an extensive analysis in three corpora: the *International Corpus of Learner English* (ICLE) was used to establish L2 learners' use of VPCs with OUT, and two other corpora were used to contrast learner English patterns of use for VPCs with native English patterns (the *Louvain Corpus of Native English Essays* (LOCNESS) and the university and school essay sections of the *British National Corpus* (BNC)).

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In their paper, **Panther and Thornburg** analyse a series of verb-particle "critter" constructions (VPCs whose verbal component derives from an animal name) from a Cognitive Linguistic perspective.

The authors propose a "conceptual schema" template combining a series of parameters (folk models, image schemata, aspectual categories, metaphoric and metonymic projections and sense specialization) that allows them to provide compelling explanations for each of the cases analysed.

The notion of folk model becomes central in their explanations as it helps them to illustrate how cultural models like "negative rat", "positive beaver" or "clam" bring a rich load of conceptual content that explains the lexico-grammatical structure of constructions like *rat out, beaver away* or *clam up*.

The authors show that whereas the verbal component in this kind of constructions contributes with the folk model in hand, the spatial schema underlying the particle element allows for a metonymical association with an aspectual target. Operations of metaphoric and metonymic nature allow for the necessary changes leading to the correct interpretation of the VPC in hand thanks to a final process of sense specialisation. The resulting semantic conception of these VPCs is therefore non-compositional and arises out of the combination of the factors mentioned above.

In the next article, **Breeze** explores the use of the particles UP, DOWN, AHEAD, BACK, OUT and OFF in VPC constructions in two economics and finance corpora. Her analysis of the most frequent patterns is mapped out in the underlying conceptual metaphors of verb particle use in the field of financial reports. The prototypical cognitive schemata that lead to the different VPC senses by means of metonymy and metaphorisation are clearly identified and discussed. The author also finds out that VPC nominalisations, though not particularly frequent, are preferred to define various finance or business agreements (such as *buying/selling*) in the corpora studied.

The descriptions of the schemas activated in the VPC combinations analysed in the corpora are employed in the design of classroom activities, presenting exercises based on cognitive linguistics postulates. Thus, the article ends with contextualised examples

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for VPC teaching focusing on the use of specific particles and the patterns they appear in using data from the corpora and applying corpus analysis results to the proposed exercises.

Abdeljalil Naoui **Khir** examines how phrasal verbs are exploited in order to convey humour through the use of verbal and non-verbal cues in cartoons. He discusses how cartoon verbal and visual modes interact in the creation of different VPC interpretations (literal and idiomatic) thus originating the typical cartoon humour.

Khir suggests that the combination of puns and literal meanings provides teachers with situations and cultural aspects to which students can relate; this, together with the pictorial support, makes phrasal verb cartoons well worth exploiting in the English language classroom. The author also suggests that humour appreciation may also be introduced in the class as triggered by the combination of literal and metaphorical or idiomatic meaning in the situation depicted in the cartoon. Moreover, the author discusses how the use of phrasal verbs in cartoons in an ambiguous way with other possible interpretation(s) may also be understood as a violation of Gricean Maxims.

The volume ends with a review of *Macmillan Phrasal Verbs Plus* where Yasutake **Ishii** focuses on the entry items coverage and the special features that distinguish this dictionary from other phrasal verb dictionaries. The usefulness of dictionary macro and microstructure is also considered and compared to other dictionaries.

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REFERENCES

Diessel, H. and Tomasello, M. 2005. "Particle placement in early child language: A multifactorial analysis". *Corpus Linguistics and Linguistic Theory* 1 (1), 89-111.

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Gries, S.T. 2003. *Multifactorial Analysis in Corpus Linguistics. A Study of Particle Placement.* London/New York: Continuum.

Gries, S.T. 2011. Acquiring particle placement in English: a corpus-based perspective. In Guerrero, P. (Ed.) *Morphosyntactic Alternations in English. Functional and Cognitive Perspectives*. London, UK/Oakville, CT: Equinox, 235-263.

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Transitive phrasal verbs in acquisition and use: A view from construction grammar[1]

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ABSTRACT

This paper surveys a number of aspects involved in viewing transitive phrasal verbs as *verb-particle constructions* in the construction-grammar sense of the term. The two word-order templates *Verb-Object-Particle* and *Verb-Particle-Object*, as fully schematic and semantically and pragmatically distinct constructions (Gries 2003), are discussed as members of different *construction networks*, viz. transitive vs. caused-motion constructions, with a focus on the latter. Moreover, the word-order constructions are distinguished from specific phrasal verbs as "formal idioms". It is argued that the notion of "allostruction" (Cappelle 2006) can be fruitfully applied only at the intermediate level of the latter.
The first results of a corpus study using data from CHILDES (parts of Manchester, Fletcher), the ICE-GB and parts of the BNC are reported to support the claim that early instances of transitive phrasal verbs exhibiting the word-order *Verb-Object-Particle* function as *precursors* (Diessel 2004) to full-blown, lexically and syntactically more complex realisations of the caused-motion construction. In a more explorative and thus also preliminary way, three *hierarchical configurational frequency analyses* are employed to trace the constellations of selected features of transitive phrasal verbs across different age groups.

Keywords: *verb-particle construction, particle placement, caused-motion construction, particle placement, allostruction, precursor construction, hierarchical configurational frequency analysis*

I. INTRODUCTION

Because of their complex morphosyntactic, semantic and discourse-pragmatic properties, transitive phrasal verbs have equally fascinated and challenged linguists of all kinds of theoretical persuasions for nearly a century (van Dongen 1919). Among the issues most intensely debated are (i) the placement of the particle before or after the direct-object NP as well as (ii) the degree of idiomaticity or, vice versa, the motivation of the meaning of the combination by its parts, especially the spatial meaning of the particle:

[1] The author gratefully acknowledges the use of HCFA 3.2, an interactive script in R, kindly provided by Stefan Th. Gries.

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(1.a) *Take off* your shoes.

(1.b) You can *leave* your hat *on*.

As has been emphasized before (cf. Bolinger 1971, Lindner 1983, Morgan 1997, Hampe 1997, 2000), the latter is an intricate issue, as a verb-particle construction can be non-literal in a number of ways. Concerning metaphorical shifts, it could be the case that only the particle (or only the verb, for that matter) is used figuratively. This is the case with the particles in (2.a). This "semi-idiomatic" use is what Bolinger (1971: 112-131) traced back to the presence of "first-level metaphor" (cf. Lindner 1983, for a very detailed analysis of phrasal verbs with *out* and *off*). Apart from that – and irrespective of whether the particle is used literally or not – the entire construction can be used figuratively (ex (2.b)), thus exhibiting Bolinger's "second-level metaphor". A third kind of shift that may contribute to a construction's degree of idiomaticity is presented by "second-level stereotyping" (ex (2.c)), i.e. the close association of a phrasal verb with a very specific context of use, such that aspects of this context are incorporated in the meaning of the verb-particle construction:

(2.a) He *rubbed out* the first sentence. He *switched out* the lights.

(2.b) This perspective *brings out* a completely new dimension of the problem.

(2.c) He *brought in* ('served') dinner like an expert.

Beyond these structural and semantic aspects, various discourse properties of phrasal verbs have attracted attention, as they open up a potential for expressing meanings at several levels of discourse other than that of the ideational content, e.g. the level of information structure or the level of participant interaction (Schiffrin 2006). The possibility of spreading out the verbal meaning across the entire verb phrase, and thus put the particle in the final, most rhematic position, for instance, allows speakers to manipulate the information structure so as to focus on (aspects of) the meaning of the verbal predicate itself. In addition, the presence of a stylistic connotation for informality allows speakers to index attitudes and emotions (Powell 1992), with the effect becoming more pronounced the more (referentially) redundant the particle is, i.e. the more the (imagistic meaning of the) particle emphasizes and repeats dimensions of meaning already coded by the verb itself. In this way, a particular conceptual construal of the scenario referred to is made explicit (Hampe 2002). What makes the study of

phrasal verbs so complex is that all of these factors interact in highly intricate ways, with discourse-pragmatic aspects being strongly motivated by the morphosyntactic properties of the entire verb-phrase and the semantic characteristics of the verb-particle combination itself.

The most comprehensive study of the multi-dimensional problem of particle placement to date (Gries 2003) investigates the effect of a large (though probably still not exhaustive) range of semantic, syntactic and discourse-pragmatic determinants of speakers' positioning choices – both in isolation and in conjunction – on the basis of a carefully chosen sample of typical alternating transitive phrasal verbs from the British National Corpus (BNC).[2] Gries's work presents both mono-factorial analyses for each factor as well as a multi-factorial analysis, which assigns factor weights in view of the simultaneous presence of all factors.[3] Overall, the study shows particle positioning to be determined by factors from all of the linguistic levels listed above, such that (i) literal (i.e. spatial) particles, (ii) pronominal, simple, short (< 3 words) and definite realisations of the direct-object NP and (iii) concrete as well as discourse-old referents work towards a preference for the post-object position of the particle.[4] In contrast, (i) idiomatic (but not necessarily transparently metaphorical), (ii) lexical, long and complex realisations of the direct-object NP and (iii) non-concrete as well as discourse-new referents contribute to a preference for the post-verbal position of the particle. The author stresses that many of these factors are tightly correlated (cf. ibid.: 49-61): literal particles, for example, will co-occur with concrete object-NP referents. Along the same lines, discourse-new referents are usually indefinite, require a lexical realisation and are thus – at least if the head of the NP needs to be complemented or modified – usually not just relatively longer, but also syntactically more complex. Their processing is, in other words, relatively more costly. The results are thus explained with reference to an overarching processing-related hypothesis which assumes that speakers unconsciously decide for one of the placement options because they strive to minimize production

[2] The study included only the most frequent verbs, taking VPCs that allow for both positioning options: *put, bring, take, turn, throw, pull, call, get, keep, kick* as well as the most frequent particles: *up, out, off, down, in, away, back, over, on, around* in syntactic contexts where the direct object appears in post-verbal position.

[3] Specifically, the author employs a General Linear Model in the form of a *discrimination analysis*.

[4] The latter is defined via (i) large amounts of previous mentions (> threshold value 6) and (ii) short distance to last mention (2.03 clauses on average, SD 3.56, as opposed to 6.07 clauses for verb-adjacent particles, SD 4.37).

effort and maximize ease of comprehension. These empirical findings are chosen as the point of departure here because they are informative, not just about particle positioning itself, but also about the nature of transitive phrasal verbs – and even of the probabilistic nature of (many, if not most) grammatical choices more generally. At the very least, it follows from these results that the study of single factors in isolation allows only partial insights into the multi-dimensional phenomenon at hand.

This paper will bring up a number of aspects involved in viewing transitive phrasal verbs as *verb-particle constructions* (henceforth also VPCs) in the construction-grammar sense of the term. It will discuss in how far the two word-order templates *Verb-Object-Particle* (henceforth V-O-Prt) and *Verb-Particle-Object* (henceforth V-Prt-O), as candidates for two highly schematic, semantically and pragmatically distinct constructions (Gries 2003), must be distinguished from lexically more specific constructions, i.e. particular phrasal verbs as partially schematic/formal idioms which can be more or less strongly attracted to either of the former. In this context, it will also examine the role "allostructions". Special emphasis will be put on the fact that V-O-Prt and V-Prt-O belong to different *construction networks* (Fillmore et al. 1988), thus playing different roles in, for instance, the acquisition of these networks. While an exhaustive characterization of the issues involved in this is far beyond the scope of this paper, the role of transitive phrasal verbs exhibiting V-O-Prt as *precursors* (Diessel 2004) to full-blown, prototypical realisations of the caused-motion construction, which are lexically and syntactically more complex than (literal) transitive phrasal verbs, will be explored in some detail.

To this end, this paper will first report the results of two previous, multifactorial studies of particle placement in early child language (Diessel and Tomasello 2005, Gries 2011) and then present the first results of a pilot study by the author that investigates data from English-speaking children in their 3rd, 6th and 8th year of life. Rather than focussing on particle placement as such again, this study attempts to trace the changing configurations of certain key features of the constructions children produce and compare them to adult usage. Among the features presently included in the analysis are (i) the number and kinds of particles, (ii) particle placement and (iii) selected semantic characteristics of the constructions.

II. PARTICLE PLACEMENT IN EARLY CHILD LANGUAGE

Diessel and Tomasello (2005) replicated Gries (2003) for early child language on the basis of data from two children aged 1;6 to 2;3, viz. Peter, recorded in the Bloom files of the CHILDES database, and Eve, recorded in its Brown files. They investigated 450 tokens of transitive phrasal verbs, including phrasal verbs with multiple particles or particles plus directional adverbials. Their main findings did not only confirm earlier results about what has become known in the generative literature as the "stranded particle stage", i.e. about the overwhelming predominance of the word order option V-O-Prt (V-O-Prt: 421, V-Prt-O: 29). They also found that expressions exhibiting V-Prt-O occur only with a rather restricted range of particles, viz. *up*, *on*, *off*, *out*, and only after the children's second birthday. In order to tease apart confounded factors in the multi-factorial analysis, the authors employed a *logistic regression analysis*. Their major findings are that, like adult particle positioning, the children's word-order decisions are also governed by a set of interrelated factors, but this set is a subset of the adult criteria for particle placement and only includes (i) the NP type of the direct object (lexical vs. pronominal), which was most pronounced and correlated with both the length and the complexity of the NP, and (ii) the meaning of the particle (spatial vs. non-spatial). To this, it should be added that the children's constructions closely mirrored those of their mothers.

Gries (2011) in turn presents a replication and extension of the study by Diessel and Tomasello (2005).[5] Gries investigates data from 3 children aged 1; 6 to 5 years (CHILDES: Kuczay: Abe, Brown: Adam, Suppes: Nina), thus including later stages of acquisition. By and large, this study confirmed the previous results about the predominance of the ordering V-O-Prt (here 95%) and about the factors determining particle placement: while particles marking a (spatially defined) end-state made all children prefer V-O-Prt, this ordering was generally dispreferred when the particle served as a (grammaticalized) completive.[6] In contrast to the previous study, Gries (2011) takes into account individual differences between the children, observing for instance that Nina seemed to have formed a generalization missing from those of the

[5] Gries also included an additional phonological determinant of positioning choice (CV alternation).
[6] In which way this category is related to figurative uses of either the particle or the entire combination or both is left open.

other two children when she dispreferred V-O-Prt with the NP type "proper noun". Of the greatest interest/relevance to the construction grammarian, however, are probably those findings which suggest that, in contrast to previous claims by Diessel and Tomasello, "rote learning" may have a role in particle placement. Only about a tenth of all verb types used by the children allowed for both particle positions (Abe: 13.3%, Adam: 10.5%, Nina: 13.7%), with some verbs occurring in VPO more frequently than chance would predict (ex (3.a)), and other verbs, especially those with a high frequency of occurrence in the children's speech, strongly preferring VOP (ex (3.b)). From a cursory look at (3.a), it appears that these verbs might well be associated with very specific scenarios in the children's world, such as putting on and taking off clothes, or picking things up off the floor after a play session, and thus present instances of second-level stereotyping.

(3.a) Abe: *put on, pick up*; Adam: *put on, take off, get out*; Nina: *take off, pick up*

(3.b) Abe: *put in, get off, take off, take out, throw away*; Adam: *eat up, knock down, put up, punch out*; Nina: *put in, want on, have on, wear on*

III. TRANSITIVE PHRASAL VERBS AS "CONSTRUCTIONS" IN CONSTRUCTION GRAMMAR

Treating transitive phrasal verbs as constructions in the construction-grammar sense of the term is not as trivial a task as a cursory look at the issue might suggest, for two reasons. Firstly, in formalist/transformational approaches to syntax, particle positioning presents an instance of a syntactic "alternation" – a concept that standard CG-approaches have avoided for a number of reasons (Cappelle 2006). Apart from this, a few additional considerations are required for models that deserve the label *usage-based*. These models define units as cognitive routines, whose degree of entrenchment correlates with their frequency of occurrence in usage. Through the recognition of similarities between multiple instances, units of a similar structure (i.e. of a similar part-whole composition in the horizontal plane) are connected via relations of instantiation/elaboration and schematization. From a usage-based perspective, (seemingly) redundant instantiations of one and the same schema at various levels of specificity are thus not only possible, but also plausible. For an informal illustration of

this, consider the following, progressively more schematic non-literal examples of verb phrases in the caused-motion construction:

(4.a) *put emphasis* [$_{PP}$ *on* [NP]], *put pressure* [$_{PP}$ *on* [NP]], *put responsibility* [$_{PP}$ *on* [NP]]

(4.b) *put* [$NP_{abstract\ mass\ noun}$] [$_{PP}$ *on* [NP]]

(4.c) $VERB_{caused\text{-}motion}$ [$NP_{abstract\ mass\ noun}$] [$PP_{metaphorical\ source/goal}$]

An adequate treatment of verb-particle constructions as "constructions" must therefore, secondly, incur verb phrase generalizations at various levels of schematicity simultaneously, not all of which are equally unproblematic. To take up the most straightforward aspects first, any specific transitive phrasal verb (as a lexeme) clearly needs to be defined at an intermediate level of schematicity, i.e. it presents a so-called *formal idiom*, where both the verb and the particle, but not the direct-object NP, are lexically specific (ex (5.a)). Apart from these, there are also a considerable number of entirely lexically fixed idiomatic verb phrases with phrasal verbs (ex (5.b), taken from Capelle, 2006: 13), all of which can in turn be seen as conventionalized elaborations of the mid-level schema.

(5.a) *put out* [$NP_{dir\ o}$] */ put* [$NP_{dir\ o}$] *out*; *roll up* [$NP_{dir\ o}$] */ roll* [$NP_{dir\ o}$] *up*; *take away* [$NP_{dir\ o}$] */ take* [$NP_{dir\ o}$] *away*; *throw in* [$NP_{dir\ o}$] */ throw* [$NP_{dir\ o}$] *in*; *turn back* [$NP_{dir\ o}$] */ turn* [$NP_{dir\ o}$] *back* ...

(5.b) *put out feelers / put feelers out*; *roll up one's sleeves / roll one's sleeves up*; *take away so.'s breath / take someone's breath away*; *throw in one's hand / through one's hand in*; *turn back the clock / turn the clock back* ...

The interesting/problematic issues concern (i) the completely schematic level comprising the two positioning options of the particle, i.e. the word-order templates V-O-Prt and V-Prt-O, and (ii) the integration of particle placement in the model. So far, two divergent suggestions have been made by Gries (2003) and Capelle (2006).

Gries (2003: 132-143) treats the word-order templates V-O-Prt and V-Prt-O as two different, entirely schematic verb-phrase constructions, each with the semantic and discourse-pragmatic characteristics summarized above. To recapitulate: V-O-Prt is preferred in spoken language (as well as children's talk) for the expression of caused-motion meanings, i.e. of scenarios which involve the movement of concrete and

accessible objects to or from a spatially defined goal (hence relatively short phrases of low complexity taking up discourse-old referents as most typical referents of the direct-object NP). V-Prt-O, on the other hand, is preferred with discourse-new referents of the direct-object NP as well as with idiomatic meanings of the verb-particle combination, i.e. with non-spatial transitive scenarios, where the direct-object NP typically expresses referents that are non-concrete and/or inaccessible (hence relatively long phrases of a higher complexity). What is certainly special about these categorisations as the semantic poles of the two verb-phrase constructions V-O-Prt and V-Prt-O is the dominance of discourse-pragmatic over strictly semantic information, especially with V-Prt-O. Given that construction grammars assume a continuum uniting semantic and discourse-pragmatic aspects of the conceptual content expressed, such a constellation should not be disallowed in principle, though it raises questions about the ways in which information from a more generic/schematic construction can be inherited by its more specific instantiations, i.e. about whether Goldberg-style inheritance links are the only kinds of relations between a schema and its instantiation. In this case, the discourse-related information associated with each word-order template strongly motivates certain kinds of expressions, but violations do not automatically create unacceptable expressions.

Despite these open issues, it must be stressed that the postulation of the two schematic verb-particle constructions is highly plausible within a strictly usage-based framework and in view of the results obtained from the quantitative analysis presented in Gries (2003), as the different, very complex usage-properties of the two word-order options arise as statistical tendencies from the analysis (or from any given speaker's experience) of a large number of specific expressions. In other words, at the most schematic level (i.e. irrespective of any specific lexical realisation), the properties of V-O-Prt are decidedly distinct from those of V-Prt-O, and both are in sync with the diverging demands arising from their respective discourse environments. This is not necessarily the case at the level of the specific instantiation, or even at the intermediate level of the particular phrasal verb. Any given realisation could in principle go against the broader usage tendency without becoming ungrammatical, because decisions about particle placement are generally probabilistic and not categorical – with the exception of (i)

those verbs that are restricted to one ordering, and (ii) the well-known limiting case of unstressed, pronominal object NPs requiring V-O-Prt with any transitive phrasal verb.

Criticizing this postulation as "extreme constructivism", Capelle (2006: 18-25) argues that the two word-order generalisations should not be treated as categories that are completely distinct in the minds of speakers, as it is plausible to assume that speakers are aware that two expressions with the same phrasal verb, but different particle positions are semantically (i.e. truth-conditionally) identical. To account for this, he introduces the notion of "allostruction" and presents the two orderings as bi-directionally associated variants of one and the same schematic phrasal construction, which is formally underspecified, viz. with respect to the positioning of the particle (ex (6), cf. ibid.: 18, Fig. 1). In analogy to inheritance links in Goldberg's model, the link between the two allostructions is assumed to constitute a syntactic object in its own right.

(6.a) $[_{VP}$ trans V Prt $NP_{direct\ Obj}]$ ⇔ $[_{VP}$, trans V $NP_{direct\ Obj}$ Prt]

(6.b) $[_{VP}$ trans V {Prt} $NP_{direct\ Obj}$ {Prt}]

Notwithstanding the obvious need for – or the psychological plausibility of – a link between closely related expressions, i.e. expressions with identical phrasal verbs, but differing positioning realisations of the particle, I suggest that this issue cannot be resolved without making explicit the precise level of specificity at which each single generalization can be justified. From a usage-based perspective, "allostructions" at the most generic level are highly implausible and could in a way also be labelled "extreme". Firstly, as expounded above, the usage tendencies that transcend the specifics of the use of any particular phrasal verb will be maximally distinct, as schematizations over all usage events bundle the most frequent usage configurations into prototypes that are quite far apart from one another. Secondly, the formally underspecified, overarching super-construction (ex (6.b)) that is required to unite the two allostructions at the most generic level is unmotivated, as it remains unclear what the semantic pole of this construction should consist of – presenting, as it were, a generalization over the discourse properties and already extremely generic semantic specifications of the two word-order templates.

Clearly connected in the minds of speakers, however, are the two different uses of each specific phrasal verb that allows for both ordering options – if only for the obvious reasons of the shared lexical material and the similar truth-conditional semantics of all expressions that only differ with respect to particle placement. It is thus at the intermediate and the lowest level of generality, i.e. the levels of the phrasal verb as either a formal or a substantial idiom, where particle placement must be incorporated in the model and where the notion of "allostruction" can be most fruitfully implemented. The associative link arising from the existence of pairs of expressions making similar contributions to the (truth-conditional) semantics of the clauses they appear in creates formally underspecified constructions with two options for particle placement and either a lexically schematic or a lexically substantial NP slot:[7]

(7.a) [$_{VP}$ *put out feelers*] ⇔ [$_{VP}$ *put feelers out*], [$_{VP}$ *put out* [NP]] ⇔ [$_{VP}$ *put* [NP] *out*]

(7.b) [$_{VP}$ *put* {*out*} *feelers* {*out*}], [$_{VP}$ *put* {*out*} [NP] {*out*}]

The relation between the two schematic word-order constructions V-O-Prt and V-Prt-O and the lexically bound/lower-level constructions with positioning variants (allostructions) is one of elaboration, with any given phrasal verb or even phrasal-verb idiom being attracted with a particular strength to one (or both) of the word-order options provided by the most schematic constructions. Empirically, this can be measured by means of a *simple collexeme analysis*, a method from the framework provided by *collostruction analysis* (Stefanowitsch and Gries 2003), which measures the degree of mutual attraction (or repulsion) between a construction and the lexical instantiations of one of its slots.[8]

One further aspect that has largely remained implicit in the literature relates to the fact that the two generic word-order constructions V-O-Prt and V-Prt-O participate in different construction networks and are influenced by different sets of motivating relations and networks of choices. Gries (2003: 142) points out that (early, prototypical) elaborations of V-O-Prt refer to the manipulation of the spatial positions of concrete objects and thus constitute a subset of the *Caused-Motion Construction* (henceforth also CMC, cf. Goldberg 1995). To this it should be added that expressions realising V-Prt-O

[7] Although Cappelle (2006) stresses that his postulation does not entail the assumption of a complementary distribution (which can be seen as the limiting case of contrasting usage patterns), I find the term *allostruction* misleading for precisely this association.

[8] For experimental evidence in support of the method, see Gries et al. (2005, 2010).

typically constitute informal alternatives to semantically highly specific mono-lexemic verbs. Although they express transitive scenarios that are certainly not restricted to motion and that often involve abstract object referents, they differ from their mono-lexemic alternatives because they exhibit an imagistic dimension, viz. the properties of the spatial relation depicted by the particle, serving as a source domain of figurative shifts. As phrasal verbs with transparent motivations of verb and particle preserve this contribution of the particle (with the exception perhaps of the strongly grammaticalized uses of completive *up* and durative *on*), the question arises as to whether and in which way transitive phrasal verbs precede their mono-lexemic alternatives in acquisition and thus pave the way towards the mastery of more abstract meanings. While this big question goes beyond the confines of this paper, the role of V-O-Prt in the resultative family or network (Goldberg and Jackendoff 2004, Hampe 2011) will be explored, both as regards its role as one of the precursors to full-blown instances of the caused-motion construction and with respect to its relatedness to the latter in adult usage.

Usage provides another aspect connecting caused-motion constructions and phrasal verbs, which may be easily overlooked in analyses that disregard the lexical characteristics of actual usage. Strong paradigmatic restrictions on seemingly open slots can lead to partial chunking within the lexical realisations of a given construction, which may to some extent blur the boundaries between neighbouring constructions. Seemingly complex structures thus come to resemble simpler ones. Lexically stereotyped instantiations of the resultative phrase in the CMC, for example, might turn it into an unanalysed whole that is much like a simple adverb and thus bring the entire construction closer to transitive phrasal verbs.

(8) put X *at risk*, leave X *in abeyance*, take X *on board*, etc.

A final issue concerns the role in later/adult usage played by strategies that are employed in early child language. In two classic articles on syntax and discourse from 1979 (Givon 1979, Ochs 1979), genre and acquisition perspectives are brought together. It is emphasized that early usage strategies – which together define what Givon calls the "pragmatic mode" – may be retained in some forms of adult usage, rather than entirely replaced by the later, more elaborate strategies which define a more "syntactic mode" and enable the language user to express more precise meanings in a relatively context-

independent way. They are generally found in (predominantly written) adult genres which do not put as extreme a planning/ production pressure on the speaker as does real-time conversation. In other words, what appears in acquisition as a movement towards a more syntactic mode re-surfaces in adult usage as genre variation.

The use of particular constructions may be a part of these different strategies or repertoires, such that early constructions, like V-O-Prt, might still dominate adult usage in spontaneous informal talk.[9] In contrast, later constructions, such as V-Prt-O, may be overused for stylistic reasons in formal written registers – and even appear in linguistic contexts (for instance with spatial meanings or object-NPs of a very low complexity) that do not strictly require or strongly prefer them. Such genre effects might remain partially or entirely veiled in corpus studies that contrast data from the spoken mode with data from the written mode, irrespective of the properties of the genres that the data are sampled from.

IV. TRANSITIVE PHRASAL VERBS AS PRECURSOR CONSTRUCTIONS

Transitive phrasal verbs leave the reference point of the spatial relation expressed by the particle implicit. They are thus semantically and syntactically simpler than full-blown instantiations of the Caused-Motion Construction. It is therefore well worth asking to what extent transitive phrasal verbs serve as precursors in the acquisition of the resultative network, especially the CMC itself. In this capacity, they might be related to other constructions with similar properties that are not usually considered proper instances of transitive verb-particle constructions. Obvious candidates are provided by expressions of a similar form where a deictic or non-deictic adverb, rather than a spatial particle, realises the resultative phrase after the direct-object NP:

(9.a) put that *there*, bring it *here*

(9.b) take that *home*, put that one *outside*

It can be assumed that these partially strictly situation-bound ways of describing a spatial relation are at least as undemanding as an expression with a spatial particle. For a

[9] This does not hold if a precursor is ungrammatical from an adult perspective: the 'presentational amalgam construction' as a precursor of an adult relative clause, for instance, disappears in adult (standard) British and American usage (Diessel 2004: 134-135).

young child with no command over V-Prt-O, expressions like those in (9) and transitive phrasal verbs with spatial meaning in V-O-Prt must appear as instantiations of the same pattern, viz. an early, simple caused-motion construction.

V. GOALS AND METHODS OF THIS STUDY

For an illustration of some of the points discussed above, the pilot study presented here investigates (a part of) the caused-motion network in British English across 3 age groups in order to study the relation between VPCs, other precursor constructions and the CMC, as well as the occurrence of the order V-Prt-O in conjunction with non-spatial uses of transitive phrasal verbs. In addition, it will also examine to which extent the early pattern provided by V-O-Prt remains the prevalent option in spontaneously spoken adult language, though it is superseded by V-Prt-O in more formal written genres and known to be generally more frequent in adult usage.

The child data are gathered from the British part of the CHILDES database. The two age groups are chosen to coincide with the lower and the upper end of the time span investigated in the previous studies introduced in section 2. The data for the first age group, roughly encompassing the 3rd year of life (22-36 months), come from 5 of the 12 files of the MANCHESTER corpus (Anne, Aran, Becky, Gail, Domin).[10] For the second group, data from 5- and 7-year-old children are taken from two of the three files of the FLETCHER corpus, in total comprising data from 72 children.[11] The third age group comprises adult data from the spoken part of the ICE-GB. In order to keep apart the effects of mode and genre in adult usage, the results obtained from the spoken part of the ICE-GB are compared to those from its written part as well as to the results of an additional study, employing genre-specific BNC data that were extracted from files containing only spontaneously spoken language and texts from broadsheet newspapers, respectively.

In order to trace the relation in acquisition between transitive VPCs and more elaborate instances of the CMC, all tokens of those caused-motion verbs that constitute the most

[10] The Manchester Corpus of CHILDES was compiled by Elena V. M. Lieven, Julian Pine, Caroline Rowland and Anna Theakston (cf. Theakston et al. 2001, Johnson 1986).
[11] The Fletcher Corpus of CHILDES was compiled by Paul Fletcher, Michael Garman, Michael Johnson, Christina Schelleter and Louisette Stodel (cf. Fletcher and Garman 1988).

typical dynamic collexemes of the CMC in the ICE-GB (ex (10), cf. Hampe 2011) were also retrieved from the child data. These verbs present a subset of the verbs investigated in Gries (2003, see note 2). Moreover, as components of verb-particle constructions, these verbs are semantically "light" in that the information coded by the verbs does not add much to the meaning of the construction, which is precisely instantiated by *put*. In other words, in all of these combinations, the particle will be more informative than the verb and carry the brunt of the meaning of the combination (cf. also Geld and Krevelj, 2010).[12]

(10) *put, bring, get, set, take, leave, turn*

Though by far not all of the children's phrasal verbs are thus included in the study, those that are contain verbs that have long been claimed to be *path-breaking* in the acquisition of the CMC (most notably *put*, the strongest collexeme of the CMC) and thus ensure the greatest possible comparability with full-blown instances of the CMC. This way, it will be possible to investigate how far this path-breaking function is initially bound to a simple realisation of the resultative phrase as a spatial particle or (deictic) adverb rather than a prepositional phrase.

From the child corpora, the data were retrieved with maximal recall by inspecting *all* occurrences of the respective verbs manually. The relevant instances from the ICE-GB were taken from an earlier study (Hampe 2011) that had analysed the environments of all verbs parsed as *complex-transitive* (cxtr.). This initial data set was then completed by retrieving all occurrences of the verbs listed in (10) which are not parsed as *cxtr.* and which are followed by either of the tags <adv(phras)> or <prep(phras)> within a span of up to ten words (not containing another verb). This was done by means of the REGEX option in ANTCONC, whereby the search string was applied to a txt version of the corpus, which all tags had been removed from prior to the query, except for the two tags given above, all verb tags and all corpus-file tags.[13]

All instances of the seven verbs with a spatial particle before the direct-object NP or with a spatial particle, deictic adverb, prepositional phrase (or even a sequence of any of these) after the direct-object NP were included in the investigation, i.e. coded as true

[12] It is presently unclear to what extent such a combination presents an additional factor supporting V-O-Prt.
[13] I wish to thank Katja Fleming for preparing the corpora with the help of R.

hits. In contrast to the route taken by Gries (2003) and others, who studied particle placement per se, I did not exclude cases in which the direct-object NP does not appear in its original position due to passivization or occurrence in object-interrogative/-relative clauses, but kept track of these by the coding employed so that they appear as a third word-order option.

To complement this data set with more genre-specific data from the BNC that are not pre-determined by the semantic and lexical characteristics of the verbs chosen for the developmental part of the study, all BNC files containing either spontaneously spoken language or material from broadsheet newspapers were investigated for sequences of any main verb followed by the tag <w AVP> within a span of up to ten intervening words that are not verbs. This was again done with the help of the REGEX option in ANTCONC. The search string retrieved transitive phrasal verbs and their closest relatives, e.g. expressions with multiple particles or phrasal-prepositional verbs (ex (11a.b)). Of the approximately 17,000 hits that this procedure yielded per genre, the first 1,000 true hits of the randomized output were coded in the same way as the data from the other corpora.

(11.a) And in ten minutes if they ain't down here, I'm going *back up there*! (KCN)

(11.b) … the match against Hampshire at Basingstoke which petered *out into a draw* yesterday… (K4T)

The results of all studies were evaluated mono-factorially by comparing the frequencies of single feature values across age groups or genres. In addition, the data from the CHILDES files as well as the data from the spoken part of the ICE-GB were evaluated in a more explorative way by means of a *hierarchical configurational frequency analysis* (HCFA). This method is designed to detect all combinations of feature levels that occur with a frequency significantly above chance. It was carried out by means of an interactive script in R (HCFA 3.2) written and kindly provided by Stefan Th. Gries. Included in the analysis were the following four features:

(12)
- CONSTRUCTION (NUMBER OF ELEMENTS IN RP): single particle vs. sequence
- PARTICLE POSITION:[14] V-O-Prt, V-Prt-O, V-Prt
- DEICTICS: presence or absence of a deictic adverb
- SEMANTICS OF THE COMBINATION: spatial/literal; specialized; figurative

[14] In cases of sequences of elements, the position of the first element was taken into account.

VI. HYPOTHESES

In accordance with the findings of previous studies as well as the preceding considerations, the following assumptions are made:

(i) Spatial particles will present the earliest, typical realisation form of the resultative phrase (RP) in the caused-motion construction. In the child data, transitive phrasal verbs exhibiting V-O-Prt will thus outnumber full-blown CMCs, whose RPs are semantically and syntactically more complex. This effect will decrease with age, though it might not disappear entirely in spoken adult language.

(ii) V-O-Prt will be the most frequent order in the child data and probably also in spontaneously spoken adult language. The latter trend might be veiled in the ICE-GB data.

(iii) Expressions with deictic adverbs like *here*, *there* or other adverbs (like *home*) will likewise serve as precursors to the CMC, as they also code caused-motion meanings and are close to (if not even simpler than) transitive phrasal verbs exhibiting V-O-Prt. Though of initial importance, their frequency will decrease with age, as they do not usually occur in V-Prt-O and do not contribute to the expression of non-spatial meanings.

(iv) Although the frequency of V-Prt-O is known to increase both with age and with the shift towards formal written genres, this order will remain marginal in all of the child data: firstly, because other deictic and non-deictic adverbs are excluded from it and, secondly, because "figurative/metaphorical competence" only starts to develop around the age of 7 (Liu 2008: 94-97). Of the few expressions with non-spatial meanings, however, most will be attracted to V-Prt-O (where this is not ruled out by object pronominalization). Those that are not are expected to be highly transparent or to exhibit only instances of "first-level" metaphor.

(v) As particle combinations (with or without a deictic adverb: *back in*, *down there*, etc.) make the description of the endpoint of a path more precise in that the second element adds to the information provided by the first, it can be expected that they help children express spatial scenarios. There might also be a role for such sequences in adult usage, especially if the combination takes on the more complex

form of one or more particles preceding one or more prepositional phrases (*up on the shelf, down here in the box*, etc.).

(vi) As constructions become more diversified in the course of development, with the number of available options multiplying, the amount of variation in the spoken adult data from the ICE-GB will be very large (also because these are not genre-specific). In the younger age groups, however, it is expected that a smaller number of feature constellations – excluding the feature-level "figurative" – will characterize a bigger portion of the entire material.

VII. RESULTS AND DISCUSSION

In the early child data from the Manchester corpus – both the pooled data and the individual data for each child – transitive phrasal verbs (i.e. expressions with particles as resultative phrases) clearly outnumber full-blown CMCs (i.e. expressions with PPs as resultative phrases) containing the same verbs (cf. Appendix: Figure 1.1). At the same time, the number of full-blown instances of the CMC are steadily increasing with age, even already within the time span documented in the Manchester corpus, i.e. the third year of life (cf. Appendix: Figure 1.2), though the overall effect size here is small (Cramer's V = 0.145), due to the fact that the observed frequencies for CMCs are higher than expected only from month 31 onwards, with again relatively small residuals (2.63, 1.58 and 2.22, in months 31, 32 and 33, respectively). In addition, there is considerable variation in the data for each individual child (cf. Appendix: Figures 1.3a, b).

The comparison across age groups requires the exclusion of all expressions in the increasingly frequent word order V-Prt-O, which is *not* associated with caused-motion scenarios.[15] The results show that the frequencies of full-blown instances of the CMC steadily increase with age: while these are already roughly on a par with VPCs in the Fletcher data, they outnumber VPCs in the ICE-GB (cf. Appendix: Figure 1.3). The differences between the age groups are highly significant, with the CMC exhibiting the highest residuals in the ICE-GB (+9.4) and the lowest in Manchester (-7.4). Vice versa, VPCs exhibit the highest residuals in Manchester (+5.9) and the lowest in the ICE-GB

[15] To make sure there are no examples with doubtful word orders left in the Manchester data either, incomplete or otherwise doubtful tokens were excluded from this count. The overall number of VPCs in Figure 1.4 is thus slightly lower than in Figure 1.1.

(-7.4). The residuals in Fletcher point in the same direction as those in the spoken adult data, but are a lot smaller (VPC: -2.8, CMC: +3.5). The overall effect size is moderate (Cramer's V = 0.29). There is no significant difference between the two language modes in the ICE-GB.[16]

The inclusion of other expressions with adverbs in post-object position completes this picture in that it brings out the preference in early child language for simple as well as deictic realisations of the resultative phrase in caused-motion expressions. As concerns deictics, more than 80% of all expressions with adverbs as RPs in the data from both CHILDES corpora contain one of the deictic adverbs *here*, *there*, and *over there*, which are practically absent from the adult data.[17] Apart from that, expressions with particles or adverbs outnumber those with prepositional phrases only in the two child corpora (74.02% in Manchester and still 66.79% in Fletcher), while the situation in the spoken part of the ICE-GB is nearly reversed, with 59.39% of all expressions exhibiting RPs in the form of prepositional phrases (cf. Appendix: Figure 1.5). The highest positive residuals are thus to be found with full-blown CMCs in the ICE-GB (+11.65) and constructions with simple RPs in Manchester (+4.85), while the lowest provide the mirror image: -6.7 for full-blown CMCs in Manchester and -8.4 for constructions with simple RPs in the ICE-GB. The residuals for the frequencies in Fletcher point in the same direction as those in Manchester, but are smaller than 1 and thus near the chance distribution. The overall effect size is again moderate (Cramer's V = 0.28). In sum, the early preference for simple and frequently also deictic constructions, as well as the trend towards more complex constructions with increasing age strongly support the assumption of a precursor-role of transitive phrasal verbs of the word order V-O-Prt in the acquisition of the CMC.

To take a closer look at particle positioning itself, the word order V-Prt-O is excessively rare in the early child-language corpora, but increases with age, as expected. The same goes for V-Prt (cf. Appendix: Figure 2.1). Counting out the latter (cf. Appendix: Figure 2.2), the distribution of the word-order frequencies changes significantly across age

[16] Spoken part of the ICE-GB: VPC: 295, CMC: 449; written part of the ICE-GB: VPC: 129, CMC: 225 (chi-squared = 1.043, df = 1, p-value = 0.307, n.s.).

[17] In the Manchester corpus 142 of the 174 adverbs are deictic (81.61%). In the Fletcher corpus, 162 of 188 adverbs are deictic (86.17%). The latter frequency, esp. of the deictic expressions, is probably an artefact of the experimental situation: the children were required to take figures from a board and stick them back on after play.

groups with a very strong effect (Cramer's V = 0.599). The highest positive residual is found with V-Prt-O in the spoken adult data from the ICE-GB (+22.66), the highest negative residuals are found with V-Prt-O in the Manchester data (-10.73) and with V-O-Prt in the ICE (-6.87) –although the 193 expressions exhibiting V-O-Prt still account for 56.1% of all cases.

As concerns adult word-order variation due to language mode and genre (cf. Appendix: Figure 2.3), it turns out that V-Prt-O is not just more frequent in the written than in the spoken part of the ICE-GB, but also more frequent than V-O-Prt in the written data, occurring in 69.63% of all instances. Though these differences are highly significant, the effect is small (Cramer's V = 0.23). In the genre-specific BNC data, which come from spontaneously spoken language and broadsheet newspapers, respectively, and thus contrast sharply with respect to formality and spontaneity, these tendencies appear enlarged to a surprising degree (Cramer's V = 0.81). On the one hand, the formal and/or elaborated style of the broadsheet newspapers favours the word-order construction V-Prt-O, which is close to mono-lexemic transitive verbs, to the practical exclusion of V-O-Prt. On the other hand, the frequency of V-O-Prt in spontaneously spoken language remains very high (80.55%).

Indeed, and as hypothesized, the frequency of V-O-Prt is significantly higher in spontaneously spoken language than in genre-unspecific spoken data, though the effect is moderate (Cramer's V = 0.26). It was not expected, however, that the analogous difference between the frequency of V-Prt-O in the written genre of broadsheet newspapers and just any written data should be so much more pronounced (Cramer's V = 0.47).

Extreme data sparsity makes it impossible to assess the children's use of figurative phrasal verbs. The two figurative examples from the 5-year-olds in Fletcher show V-O-Prt, but only contain first-level metaphors (ex (13.a)), which still make it possible to refer to the resultant state of the lights or the fire as being *off* or *out*. They are thus not too far removed from a spatial use of these particles. All of the five examples from the 7-year-olds in Fletcher are highly transparent and involve a shift of meaning at the second level (ex (13.b)). They exhibit both V-Prt-O and V-O-Prt (ex (13b)), obviously due to the influence of factors other than their meaning.

(13.a) turn the light *off*, get the fire *out*

(13.b) *took* them a few centuries *back*, *get* one *up* to 1000, *put in* another story (2x), *take away* 10

The results of the three HCFAs (Appendix, Tables 1-3), carried out with the data retrieved from the two CHILDES corpora and the spoken part of the ICE-GB, confirm and extend the results of the mono-factorial analyses. Although they yield some insights into frequent complex configurations of specific feature-values, these results are to be taken with great care, as the effect sizes for all feature-level combinations are extremely small, indicating that a great amount of variation in the data is unaccounted for by the features chosen.

The results for single feature values, however, are robust and confirm that V-O-Prt is the single feature value occurring significantly above chance and with the highest effect size (above 0.9) in the data of both 2- and 3-year-olds documented in the Manchester corpus and the 5-/7-year-olds recorded in the Fletcher corpus (cf. Appendix, Tables 1 and 2). Apart from this, constructions with the following two single feature values occur significantly above chance in both age groups: constructions with only one particle and with literal (i.e. spatial) meanings.[18] The effects of both of these are still strong (Q between 0.6 and 0.9). While non-deictic constructions are likewise significantly frequent with a strong effect in the Manchester corpus (with deictic ones being significantly less frequent than expected by chance), this is not the case in Fletcher, where the feature "deictic" is more frequent and does not significantly diverge from a chance distribution (see note 17). Finally, the feature level "figurative", which is entirely absent from the Manchester corpus, does occur in the data from Fletcher, albeit with a frequency significantly below chance (Q = 0.48). The most conspicuous result in the spoken adult data from the ICE-GB (cf. Appendix, Table 3) thus relates to the frequency of the feature level "figurative", which now occurs significantly above chance with the third-largest effect size in this data set (Q = 0.37). Otherwise, non-deictic elements again outnumber deictic ones to such an extent that deictic constructions occur below chance with an effect size above 0.9. The word-order feature V-O-Prt remains significantly above chance, though the effect size is now small (Q =

[18] In the table, the feature relating to "number of particles" is called "construction" and this value is given as "VPC". Constructions with more than one particle are labelled "VPC_seq".

0.22) and thus dramatically lower than in the data from both child corpora.[19] In contrast, V-Prt-O, which occurred in the child corpora with a frequency significantly below chance (Q = 0.5 and 0.47, respectively), does not diverge significantly from chance. The feature level V-Prt remains below chance in all age groups, but is a lot smaller in the spoken adult data from the ICE-GB (Q = 0.18) than in the child data (Q = 0.49 and 0.48, respectively).

As regards feature combinations, in the data from the Manchester corpus (cf. Appendix, Table 1), three different kinds of feature-level constellations can be discerned. Firstly, the feature-value combination with the highest p-value and effect size (of all combinations involving more than two features) involves three features and relates to expressions that exhibit only one particle, which is non-deictic and occurs in post-object position (Q = 0.14). The most complex constellation involving all of these features-values plus the one for constructional meaning (*literal*), however, is weaker (Q = 0.095) than the second pattern. Rather interestingly, this second pattern, which constitutes the most complex feature-value constellation with the lowest p-value and highest (though still very small) effect size in this data set (Q = 0.10), points to the increased frequency of constructions with literal/spatial meanings that contain more than one particle in post-object position, one of which is deictic. The third pattern is also maximally complex, but so weak (Q = 0.04) that it is only reported here, because it goes against one of the hypotheses: it unites expressions with "specialized" meanings that exhibit one non-deictic particle in post-object position.

In the Fletcher data (cf. Appendix, Table 2), pattern 2, pertaining to expressions with literal/spatial meanings that exhibit several particles, including a deictic one, in post-object position, re-occurs as the feature constellation with the lowest p-value and highest effect size after the values of the single features. With Q = 0.07, the effect is tiny, however. All other significant feature combinations are so weak that they remain under an effect size of 0.01. One of these is identical to the third pattern found in the Manchester data, i.e. it unites expressions with specialized meanings, which – again unexpectedly – do not seem to motivate V-Prt-O. The other captures (the two) non-deictic figurative expressions in the word order V-Prt-O.

[19] Note that V-Prt is counted in here as a third feature-level.

Due to the increased number of options in the spoken adult data from the ICE-GB, all of the effect sizes of the significant feature-level combinations remain under 0.1. Interestingly, though, the new feature constellations pertain to figurative constructions where the verb and one non-deictic particle are immediately adjacent. This may occur with both of the orders V-Prt (highly significant, Q = 0.07) and V-Prt-O (very significant, Q = 0.08). Only a very weak reflection of the early child data is provided by literal/spatial combinations with several particles in post-object position, which may or may not be deictic (Q = 0.02 and 0.03, respectively).

This discussion should close on a note of caution. Much further work with this method of data evaluation is urgently required. Firstly, a lot depends on the specific feature selection employed. In the present analysis, some features (such as syntactic form or newsworthiness of the direct object), which previous studies have determined to be highly influential, have not been included in the analysis. It goes without saying that factors like these contribute to the large amount of unexplained variation in the data, reflected by the very small effect sizes of the feature-value combinations. Secondly, depending on the number of features and feature levels chosen, the corpora employed may have to be relatively big for certain patterns to surface with a frequency above chance in the first place.

VIII. CONCLUDING REMARKS

The realisation and choice of constructions is determined by a large range of (partially highly correlated) factors from all strata of the language system, as well as by dimensions of their users. In the case of transitive verb-particle constructions, preceding work suggests that choosing a particular construction over another, such as V-Prt-O over V-O-Prt (or vice versa), may entail choosing certain discourse-pragmatic values besides or even above choosing a particular constructional semantics. Though this possibility is clearly entailed by the assumption of a semantics-pragmatics cline in many construction-based grammars, it still raises principled issues for further research pertaining to what kinds of conceptualisations must be regarded as constituting the semantic pole of constructions and what kinds of relations can hold between a schema and its instantiations.

Beyond that, the present study has shown that a construction-based analysis can benefit from the consideration of a construction's location in its surrounding construction networks. The word-order construction V-O-Prt, for example, was shown to be an early member of the caused-motion network, serving as a precursor in the acquisition of full-blown instances of the CMC. In doing so, it parallels other early expressions with simple realisations of the resultative phrase, viz. as mono-lexemic adverbs, especially deictic ones.

The data on particle placement across adult language modes and genres, finally, have demonstrated that the linguistic differences between unplanned, spontaneous adult talk and more planned, elaborate forms of adult language use are indeed not entirely unlike those between the early and late stages of the developmental trajectory. In particular, early constructions (such as V-O-Prt with transitive phrasal verbs) may well be retained and continue to be dominant in certain (spontaneous, unplanned) genres of adult usage, while later ones (such as V-Prt-O) will generally complement, rather than fully replace them. The near-exclusive occurrence of V-Prt-O in the BNC data sampled from broadsheet newspapers presents an extreme case that may be stylistically motivated. Clearly, these results call for more research on the influence of highly specific genre-requirements.

Finally, the results have also shown that further research is needed on the usage of phrasal verbs by older children and teenagers. The huge differences in the frequencies of the word order V-Prt-O and of the feature-value "figurative" between the data from Fletcher and the adult data from the ICE-GB suggest that V-Prt-O really develops after the age of 7, very likely in conjunction with the emergence of "figurative competence". The latter remains an important issue for future research, not just because of current data sparsity, but also because the consistent coding of non-literal examples for the number and kinds of metaphorical shifts is extremely difficult and requires reliable coding by several trained investigators.

REFERENCES

Bolinger, D. 1971. *The Phrasal Verb in English.* Cambridge, MA: Harvard University Press

Cappelle, B. 2006. "Particle placement and the case for "allostructions"". *Constructions* 1, 28 pgs. <http://elanguage.net/journals/constructions/article/view/22/27>

Diessel, H. 2004. *The Acquisition of Complex Sentences*. Cambridge: Cambridge University Press.

Diessel, H. and Tomasello, M. 2005. "Particle placement in early child language: A multifactorial analysis". *Corpus Linguistics and Linguistic Theory* 1 (1), 89-111.

Fillmore, C.J., Kay, P. and O'Connor, C.M. 1988. "Regularity and idiomaticity in grammatical constructions: The case of *Let alone*". *Language* 64 (3), 501-538.

Fletcher, P. and Garman, M. 1988. "Normal language development and language impairment: Syntax and beyond". *Clinical Linguistics and Phonetics* 2, 97–114.

Givon, T. 1979. "From discourse to syntax: Grammar as a processing strategy". In Givon, T. (Ed.) *Syntax and Semantics* (Vol. 1). New York: Academic Press, 81-112.

Geld, R. and Krevelj, S.L. 2010. "Centrality of space in the strategic construal of up in English particle verbs". In Brdar, M., M. Omazic, V. Pavicic Takac, T. Gradecak-Erdeljic and G. Buljan (Eds.) *Space and Time in Language*. Frankfurt am Main: Peter Lang, 145-166.

Goldberg, A.E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure.* Chicago: The University of Chicago Press.

Goldberg, A.E. and Jackendoff, R. 2004. "The English resultative as a family of constructions". *Language* 80 (3), 532-568.

Gries, S.T. 2003. *Multifactorial Analysis in Corpus Linguistics. A Study of Particle Placement.* London/New York: Continuum.

Gries, S.T. 2011. "Acquiring particle placement in English: A corpus-based perspective". In Medina, P.G. (Ed.) *Morphosyntactic Alternations in English: Functional and Cognitive Perspectives*. London/Oakville, CT: Equinox, 235-263.

Gries, S.T., Hampe, B. and Schönefeld, D. 2005. "Converging evidence: Bringing together experimental and corpus data on the associations of verbs and constructions". *Cognitive Linguistics* 16 (4), 635-676.

Gries, S.T., Hampe, B. and Schönefeld, D. 2010. "Converging evidence II: More on the association between verbs and constructions". In Rice, S. and J. Newman (Eds.) *Empirical and Experimental Methods in Cognitive/Functional Research*. Stanford, CA: CSLI Publications, 59-72.

Hampe, B. 1997. "Towards a solution of the phrasal-verb puzzle: Considerations on some scattered pieces". *Lexicology* 3 (2), 203-243.

Hampe, B. 2002. *Superlative Verbs. A Corpus-based Study of Semantic Redundancy in English Verb-particle Constructions*. Tübingen: Gunter Narr Verlag.

Hampe, B. 2011. "Discovering constructions by means of collostruction analysis: The English denominative construction". *Cognitive Linguistics* 22 (2), 211-245.

Johnson, M. 1986. *A Computer-based Approach to the Analysis of Child Language Data*. unpubl . Ph. D. dissertation, Reading, UK: University of Reading.

Lindner, S. J. 1983. *A Lexico-Semantic Analysis of English Verb-Particle Constructions with "out" and "up"*. (LAUT Paper, no. 101). Trier, Germany: Linguistic Agency of the University of Trier.

Liu, D. 2008. *Idioms. Description, Comprehension, Acquisition and Pedagogy*. London: Routledge.

Morgan, P. 1997. "Figuring out 'figure out'. Metaphor and the semantics of the English verb-particle construction". *Cognitive Linguistics* 14 (2), 15-28.

Ochs, E. 1979. "Planned and unplanned discourse". In Givon, T. (Ed.) *Syntax and Semantics* (Vol. 1). New York: Academic Press, 51-80.

Powell, M.J. (1992). Semantic/Pragmatic regularities in informal lexis. *Text* 12 (1), 19-58.

Schiffrin, D. 2006. "Discourse". In Fasold, R. and J. Connor-Linton (Eds.) *An Introduction to Language and Linguistics*. Cambridge: Cambridge University Press, 169-203.

Stefanowitsch, A. and Gries, S.T. 2003. "Collostructions: Investigating the interaction of words and constructions". *International Journal of Corpus Linguistics* 8 (2), 209-243.

Theakston, A.L., Lieven, E.V.M., Pine, J.M. and Rowland, C.F. 2001. "The role of performance limitations in the acquisition of verb-argument structure: An alternative account". *Journal of Child Language* 28, 127-152.

van Dongen, W.A. 1919. "He puts on his hat and He puts his hat on". *Neophilologicus* 4, 322-353.

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APPENDIX

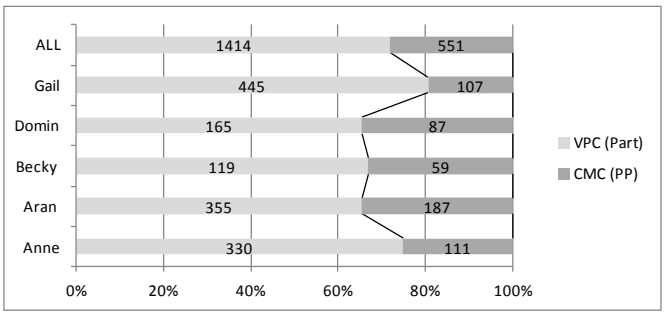


Figure 1.1. Proportions of VPC and CMCs in the 5 files from the Manchester corpus (CHILDES); Statistics for line ALL: chi-squared = 379.017, df = 1, $p_{(chi\ 2)}$ = 1.147E-83***.

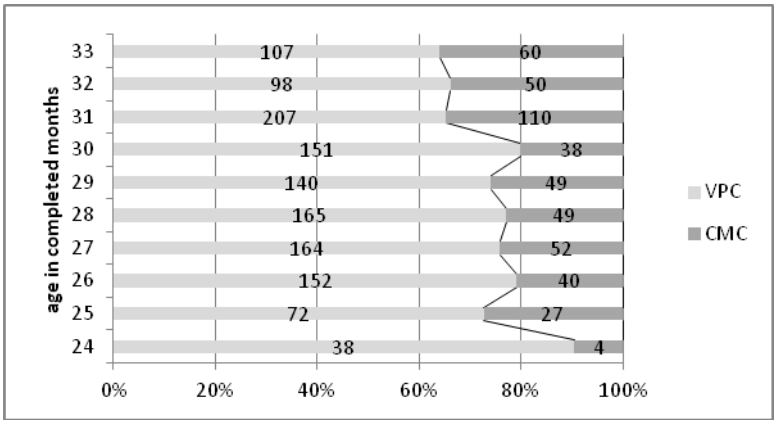


Figure 1.2. Average proportions of VPC and CMCs across months in 5 files from the Manchester corpus (CHILDES): months with tokens from all 5 children only; chi-squared = 37.382, df = 9, p = 2.249E-05***, Cramer's V = 0.145.

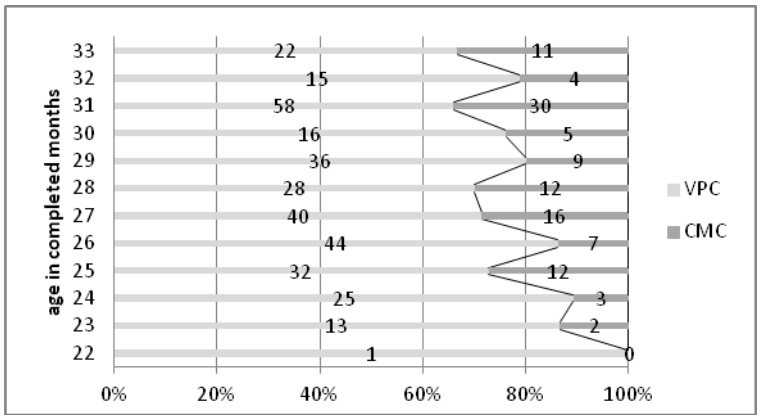


Figure 1.3a. Proportions of VPC and CMCs across months: Manchester corpus (CHILDES): Anne.

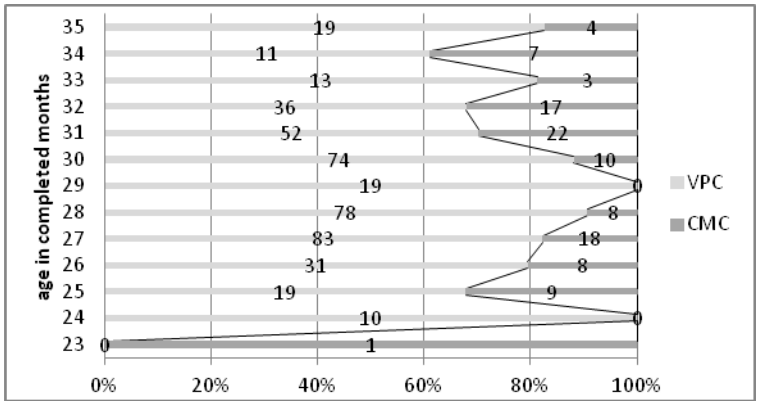


Figure 1.3b. Proportions of VPC and CMCs across months: Manchester corpus (CHILDES): Gail.

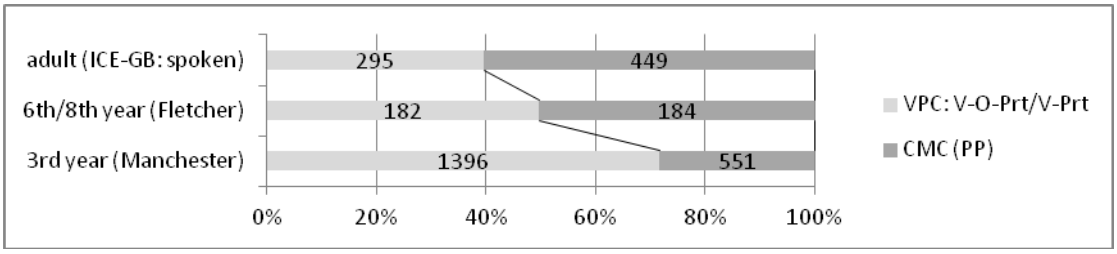


Figure 1.4. CMC vs. VPC (only V-O-Prt/V-Prt) across age groups;
chi-squared = 256.35, df = 2, $p_{(chi2)}$ = 2.15879E-56***, Cramer's V = 0.290

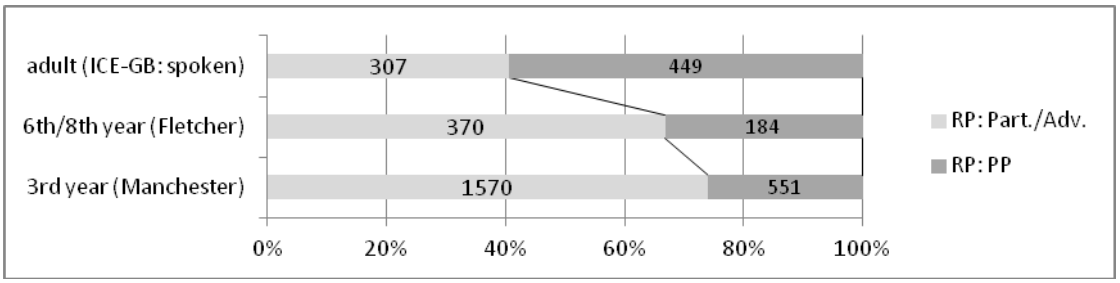


Figure 1.5. CMC vs. simpler precursors (constructions with particles and deictic/non-deictic adverbials) across age groups; chi-squared = 275.861, df = 2, $p_{(chi2)}$ = 1.28E-60***, Cramer's V = 0.283

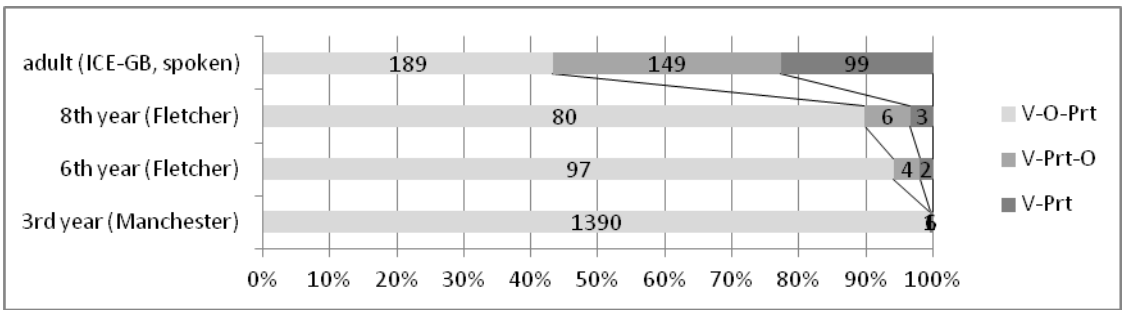


Figure 2.1. Proportions of the word orders V-O-Prt, V-Prt-O and V-Prt across age groups

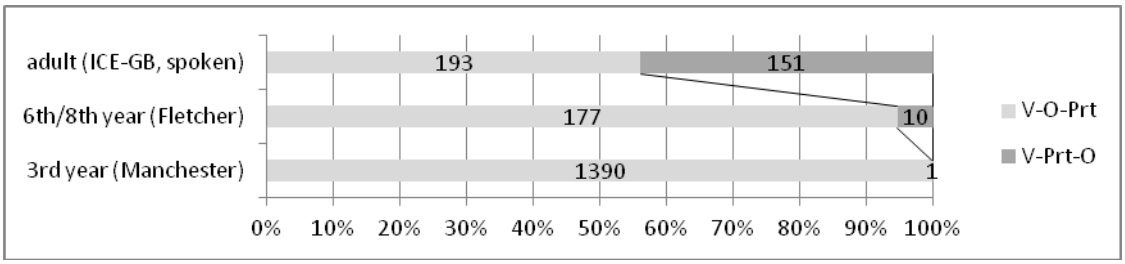
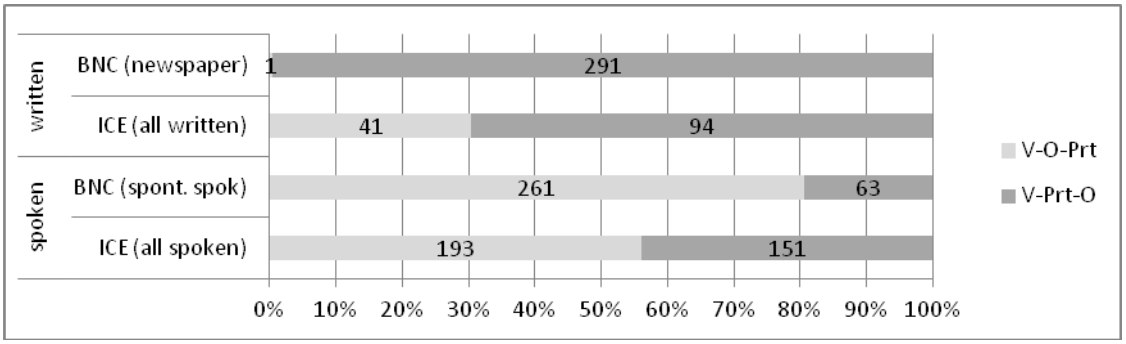


Figure 2.2. Proportions of V-O-Prt and V-Prt-O across the age groups;
chi-squared = 688.792, df = 2, $p_{(chi2)}$ = 2.696E-150***, Cramer's V = 0.599



- differences between language modes in ICE: chi-squared = 25.696, df = 1, $p_{(chi2)}$ = 3.996E-07***, Cramer's V = 0.23
- differences between genres in the BNC: chi-squared = 404.291, df = 1, $p_{(chi2)}$ < 2.2E-16***, Cramer's V = 0.81
- differences between the spoken data from the ICE-GB and the spontaneously spoken sample from the BNC: chi-squared = 45.814, df = 1, $p_{(chi2)}$ = 1.300E-11***, Cramer's V = 0.262
- differences between the written data from the ICE-GB and the newspaper sample from the BNC: chi-squared = 93.861, df = 1, $p_{(chi2)}$ < 2.2E-16***, Cramer's V = 0.469

Figure 2.3. Proportions of V-O-Prt and V-Prt-O in the adult data: language mode (ICE-GB: spoken vs. written) vs. genre (BNC: spontaneous spoken vs. broadsheet newspaper samples):

Table 1. Significant results of the HCFA (exact binomial test with Bonferroni correction): Manchester corpus

deictics	construction	part pos	meaning	obs	exp	cont.chisq	obs-exp	p.adj.bin	dec	Q
.	.	VOP	.	1604	537.00	2120.091	>	0.00E+00	***	0.993
.	VPC	.	.	1402	805.50	441.728	>	7.28E-217	***	0.741
.	.	.	literal	1393	805.50	428.499	>	1.59E-209	***	0.729
0	.	.	.	1323	805.50	332.472	>	2.31E-158	***	0.642
0	VPC	.	.	1310	1151.36	21.857	>	1.90E-19	***	0.138
0	VPC	VOP	.	1303	1146.36	21.403	>	2.39E-18	***	0.137
1	VPC_seq	.	literal	196	32.31	829.392	>	1.85E-87	***	0.104
1	VPC_seq	VOP	literal	196	32.17	834.442	>	2.67E-87	***	0.104
1	VPC_seq	.	.	196	37.36	673.543	>	2.41E-77	***	0.101
1	VPC_seq	VOP	.	196	37.20	677.867	>	3.56E-77	***	0.101
0	VPC	.	literal	1092	995.56	9.342	>	2.63E-06	***	0.097
0	VPC	VOP	literal	1085	991.24	8.870	>	1.67E-05	***	0.095
0	VPC	.	special	218	155.80	24.830	>	3.00E-06	***	0.043
0	VPC	VOP	special	218	155.13	25.484	>	6.59E-06	***	0.043
0	.	.	special	218	179.03	8.484	>	5.92E-03	**	0.027
1	.	.	literal	288	249.03	6.099	>	1.83E-02	*	0.029
1	.	VOP	literal	288	247.95	6.471	>	4.38E-02	*	0.029
0	.	VOP	special	218	178.25	8.864	>	1.44E-02	*	0.028

deictics	construction	part pos	meaning	obs	exp	cont.chisq	obs-exp	p.adj.bin	dec	Q
.	VPC_seq	.	.	209	805.50	441.728	<	7.28E-217	***	0.741
.	.	.	special	218	805.50	428.499	<	1.59E-209	***	0.729
1	.	.	.	288	805.50	332.472	<	2.31E-158	***	0.642
.	.	VPO	.	1	537.00	535.002	<	5.02E-281	***	0.499
.	.	VP	.	6	537.00	525.067	<	2.36E-269	***	0.494
1	VPC	.	.	92	250.64	100.407	<	4.83E-34	***	0.117
1	VPC	VOP	.	92	249.55	99.465	<	3.28E-33	***	0.116
0	VPC_seq	.	.	13	171.64	146.622	<	4.84E-59	***	0.11
0	VPC_seq	VOP	.	13	170.89	145.880	<	3.14E-58	***	0.11
0	VPC_seq	.	literal	13	148.41	123.550	<	1.90E-48	***	0.093
0	VPC_seq	VOP	literal	13	147.77	122.910	<	1.09E-47	***	0.092
1	VPC	.	literal	92	216.72	71.776	<	2.90E-23	***	0.089
1	VPC	VOP	literal	92	215.78	71.004	<	1.63E-22	***	0.089
1	.	.	special	0	38.97	38.972	<	2.94E-17	***	0.025
1	.	VOP	special	0	38.80	38.803	<	1.05E-16	***	0.025
1	VPC	.	special	0	33.92	33.916	<	1.04E-14	***	0.022
1	VPC	VOP	special	0	33.77	33.769	<	3.62E-14	***	0.021
.	VPC_seq	.	special	0	28.28	28.282	<	1.62E-12	***	0.018
.	VPC_seq	VOP	special	0	28.16	28.159	<	5.52E-12	***	0.018
0	VPC_seq	.	special	0	23.23	23.226	<	5.53E-10	***	0.015
0	VPC_seq	VOP	special	0	23.12	23.125	<	1.84E-09	***	0.015

Table 2. Significant results of the HCFA (exact binomial test with Bonferroni correction): Fletcher corpus.

deictics	construction	part pos	meaning	obs	exp	cont.chisq	obs-exp	p.adj.bin	dec	Q
.	.	VOP	.	435	150.33	539.037	>	1.41E-181	***	0.947
.	.	.	literal	426	150.33	505.491	>	5.05E-167	***	0.917
.	VPC	.	.	360	225.50	80.223	>	6.67E-39	***	0.596
1	VPC_seq	VOP	literal	73	44.30	18.589	>	6.11E-04	***	0.071
1	VPC_seq	.	literal	73	45.93	15.951	>	6.55E-04	***	0.067
1	VPC_seq	VOP	.	73	46.90	14.521	>	0.00125416	**	0.065
1	VPC_seq	.	.	73	48.63	12.216	>	0.00122565	**	0.061
0	VPC	.	special	18	6.69	19.119	>	2.23E-03	**	0.025
0	VPC	.	.	192	167.63	3.544	>	0.04177328	*	0.086
0	.	.	special	18	8.38	11.038	>	0.01409268	*	0.022
0	.	VPO	special	3	0.19	42.625	>	0.0166642	*	0.006
0	VPC	VPO	special	3	0.15	54.836	>	1.74E-02	*	0.006
0	.	VPO	figur	2	0.07	51.397	>	0.04471329	*	0.004

deictics	construction	part pos	meaning	obs	exp	cont.chisq	obs-exp	p.adj.bin	dec	Q
.	VPC_seq	.	.	91	225.50	80.223	<	6.67E-39	***	0.596
.	.	VP	.	6	150.33	138.573	<	2.08E-68	***	0.480
.	.	.	figur	7	150.33	136.659	<	6.65E-67	***	0.477
.	.	VPO	.	10	150.33	130.999	<	1.02E-62	***	0.467
.	.	.	special	18	150.33	116.489	<	3.15E-53	***	0.440
0	VPC_seq	.	.	18	42.37	14.019	<	3.9115E-05	***	0.060
0	VPC_seq	.	literal	16	40.02	14.420	<	8.29E-05	***	0.058
0	VPC_seq	VOP	.	18	40.87	12.797	<	0.00030778	***	0.056
0	VPC_seq	VOP	literal	16	38.60	13.235	<	6.39E-04	***	0.055
1	.	.	special	0	9.62	9.619	<	0.00035946	***	0.022
1	.	VOP	special	0	9.28	9.277	<	0.00152804	**	0.021
1	VPC	.	special	0	7.68	7.678	<	5.20E-03	**	0.017
1	VPC	.	.	168	192.37	3.088	<	0.04467653	*	0.094
1	VPC	VOP	special	0	7.41	7.406	<	2.06E-02	*	0.017
1	.	VPO	.	0	5.34	5.344	<	0.02776911	*	0.012

Table 3. Significant results of the HCFA (exact binomial test with Bonferroni correction): ICE-GB (spoken)

deictics	construction	part pos	meaning	obs	exp	cont.chisq	obs-exp	p.adj.bin	dec	Q
0	.	.	.	493	251.50	231.898	>	2.04E-131	***	0.96
.	VPC	.	.	437	251.50	136.820	>	3.83E-68	***	0.738
.	.	.	figur	292	167.67	92.199	>	2.11E-29	***	0.371
.	.	VOP	.	242	167.67	32.955	>	1.58E-11	***	0.222
.	.	VOP	literal	89	51.96	26.404	>	3.54E-06	***	0.082
0	.	VOP	literal	81	50.93	17.758	>	3.96E-04	***	0.067
0	VPC	VP	figur	83	52.89	17.138	>	9.91E-04	***	0.067
.	VPC	VP	figur	83	53.97	15.622	>	9.93E-04	***	0.065
.	VPC_seq	VOP	literal	31	6.82	85.772	>	1.18E-10	***	0.049
.	VPC_seq	VOP	.	55	31.75	17.019	>	3.81E-04	***	0.049
.	VPC_seq	.	literal	37	14.17	36.777	>	1.14E-06	***	0.047
0	VPC_seq	VOP	literal	23	6.68	39.847	>	1.74E-05	***	0.033
1	VPC_seq	.	literal	9	0.28	269.822	>	2.68E-10	***	0.017
1	VPC_seq	VOP	.	9	0.63	110.938	>	2.81E-07	***	0.017
1	VPC_seq	.	.	10	1.31	57.526	>	4.76E-06	***	0.017
1	VPC_seq	VOP	literal	8	0.14	456.460	>	8.54E-11	***	0.016
1	.	VOP	literal	8	1.03	46.989	>	2.23E-04	***	0.014
0	VPC	VPO	figur	110	76.13	15.074	>	1.37E-03	**	0.079
.	VPC	VPO	figur	110	77.67	13.458	>	1.56E-03	**	0.076
0	VPC_seq	.	literal	28	13.89	14.336	>	5.53E-03	**	0.029
1	.	.	literal	9	2.15	21.872	>	0.002274	**	0.014
0	.	VP	figur	85	60.88	9.556	>	1.80E-02	*	0.055
.	.	VP	figur	85	62.12	8.431	>	1.61E-02	*	0.052

deictics	construction	part pos	meaning	obs	exp	cont.chisq	obs-exp	p.adj.bin	dec	Q
1	.	.	.	10	251.50	231.898	<	2.04E-131	***	0.96
.	VPC_seq	.	.	66	251.50	136.820	<	3.83E-68	***	0.738
.	.	.	special	103	167.67	24.941	<	3.90E-10	***	0.193
.	.	VP	.	107	167.67	21.951	<	5.22E-09	***	0.181
.	.	.	literal	108	167.67	21.233	<	9.70E-09	***	0.178
.	.	VOP	figur	97	140.49	13.460	<	4.34E-05	***	0.12
.	VPC	VOP	figur	79	122.05	15.186	<	3.30E-05	***	0.113
0	.	VOP	figur	97	137.69	12.026	<	2.91E-04	***	0.111
0	VPC	VOP	figur	79	119.63	13.797	<	2.06E-04	***	0.106
.	.	VPO	literal	12	33.07	13.421	<	1.33E-04	***	0.045
0	.	VPO	literal	12	32.41	12.852	<	4.21E-04	***	0.043
.	VPC	VPO	literal	9	28.73	13.547	<	2.09E-04	***	0.042
0	VPC	VPO	literal	9	28.16	13.033	<	6.36E-04	***	0.04
.	VPC_seq	VPO	.	4	20.21	12.999	<	6.55E-05	***	0.034
0	.	VP	literal	6	22.52	12.116	<	5.45E-04	***	0.034
0	VPC_seq	VPO	.	4	19.81	12.613	<	1.84E-04	***	0.033
.	VPC	VP	literal	4	19.96	12.761	<	2.42E-04	***	0.033
.	.	VP	literal	7	22.97	11.107	<	6.82E-04	***	0.033
0	VPC	VP	literal	4	19.56	12.381	<	6.76E-04	***	0.032
.	VPC_seq	VPO	figur	0	11.73	11.730	<	1.26E-04	***	0.024
0	VPC_seq	VPO	figur	0	11.50	11.497	<	3.20E-04	***	0.023
1	VPC	.	.	0	8.69	8.688	<	6.25E-04	***	0.018
.	VPC_seq	.	figur	20	38.31	8.754	<	3.60E-03	**	0.039
.	VPC	.	literal	71	93.83	5.554	<	2.55E-02	*	0.056
0	VPC_seq	.	figur	20	37.55	8.204	<	1.08E-02	*	0.038
1	.	.	figur	0	5.81	5.805	<	0.017472	*	0.012

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Variability in L2 acquisition of formulaic sequences: A study of linguistic factors in the use and learning of phrasal verbs by non-native speakers

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ABSTRACT

In this paper, the acquisition of phrasal verbs (PVs) by L2 learners is explored from the perspective provided by a usage-based approach to language. This involves looking at low scope or item-specific schemas, which in this article are identified as the actual particles, prepositions and PVs used by the learners, together with the more abstract syntactic or semantic schemas that emerge from their use.
Given the labour intensive work required by this type of analysis, the focus is placed on the use of verb-out constructions made by L2 learners of the PVs as reflected in a corpus of learner language, i.e. the Spanish, Italian, Swedish, Dutch, Russian and Bulgarian subsections of the ICLE (1,287,517 words). More concretely, I analyse L2 use of out-PVs at different grain levels and provide an account of the factors influencing the acquisition of these linguistic units. The results obtained from the analysis show 1) that out is underused by learners, at the lowest level of constituency, the level of the word and its collocates and that this may be due its low cue answer contingency (it is a short form with many meanings); 2) that out-PVs, as other formulaic sequences, shows a pattern of overuse of a small number of frequent verbs and underuse of the rest; 3) that, at a morpho-syntactic level, out-PVs used by L2 learners are typically frozen with little variability in both the tenses and the syntactic patterns chosen; and 4) that at the semantic level, more prototypical and frequent meanings in the text type analysed, not necessarily literal uses, are used with greater frequency by NNS. All in all, the usage-based approach adopted has allowed us to reveal the complexity of factors involved in explaining the difficulty L2 learners have in acquiring phrasal verbs.

Keywords: *phrasal verbs, constructions, formulaicity, second language acquisition, corpus linguistics, particle OUT*

I. INTRODUCTION

In the last few years, the role of formulaicity or formulaic language has been acknowledged (e.g. Wray 2002, Schmitt and Carter 2004) as one of the key elements explaining the difference in language use and learning between native (NS) and non-native speakers (NNS) of English. More recent research has nuanced this broad finding by showing that underuse of formulaic sequences (FSs) by NNS is only part of the picture, which is completed by the tendency to overuse a small group of these linguistic units (Durrant and Schmitt 2009). The question remains, however, whether this gap in

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the knowledge between NS and NNS can simply be described in quantitative terms, i.e. NS use more FSs than NNS, or whether, if we restrict ourselves to linguistic factors, there are additional qualitative factors specifically tied to the nature and constituent parts of the formulae. In other words, the question that needs to be asked is whether NNS not only use fewer FSs than NS but also use them in a different way and whether, as suggested by Schmitt and Carter (2004), the constituent elements or individual words integrating the FS play a particular role in this process.

The above research programme starts from two main assumptions. The first one concerns the understanding of FSs as units that are not completely frozen or fixed. FSs can certainly show variability, flexibility and complexity at the different linguistic levels and this has been recognized by the different theoretical approaches (see Gries 2008, Moon 1998, for an overview). The second one, and here the theoretical differences are greater, is related to the fact that non-compositionality need not be absolute. Individual words contribute both syntactic (Konopka and Bock 2009) and semantic (Wulff 2009) information to the FSs.

Given this approach, phrasal verbs (PVs) become a perfect test bed to study the range of linguistic factors affecting the L2 acquisition of FS. They do not only show different syntactic or semantic configurations (e.g. transitive vs. intransitive, continuous vs. split, opaque vs. transparent, etc.), which make them subject to great variability. More importantly, following a usage-based approach, PVs can be described at different levels of abstraction ranging from lower level concrete constructions, which can be equated to specific uses taught to learners in EFL books (e.g. Put it out), to their highest schematic configuration defined in reference grammars (e.g. as verb+particle constructions). PVs are thus the perfect example to study the problems that variable and schematic FS are likely to pose to L2 learners.

However, the existing SLA research has focused on the problems that PVs as a group pose to NNS (Ishii and Sohmiya 2006, Siyanova and Schmitt 2007), thereby emphasizing their homogeneity and paying little attention to the different sources of variation. NNS are shown to avoid and/or underuse PVs and this is taken as a manifestation of their mostly idiomatic and formulaic status irrespective of specific linguistic factors involved. This is basically the result of the mostly experimental

methodology used, which only allows the analysis of a limited number of PVs taken as representative of the whole phenomenon (however, see Waibel 2007). Moreover, PVs are defined exclusively following a structuralist approach (usually based on Quirk et al. 1985) which gives priority to syntax and semantic opacity and therefore disregards the chunking mechanism at play in cases of multiple constituency (*she'd come out of the water* cf. Cappelle 2005) and in non-compositional ones (e.g. *go out*). As research has shown, some of these sequences can become formulaic by dint of their frequent use.

It is the aim of this article to explore the acquisition of PVs by L2 learners from the perspective provided by a usage-based approach to language, which will take into consideration all levels of schematicity (from low scope or item-specific levels to the more abstract syntactic schemas). Thus, given the labour-intensive work required by this type of analysis, I will concentrate on the use of verb-out constructions made by L2 learners of the PVs as reflected in a corpus of learner language. This will allow me to start at the lowest level of analysis, the level of the word (in this case the word *out*), and proceed to study the construction at higher levels of abstraction that take into account meaning and syntax. In this way, I will look into L2 use of *out*-PV at different grain levels and will hopefully be able to provide a more thorough and detailed account of the factors that may influence the acquisition of these linguistic units.

The article is organized as follows. After an introduction on the different aspects involved in the acquisition of PVs and a summary of the main findings on L2 acquisition of PVs, I present the methodology and the main hypotheses. Then I will analyse the use of the particle *out* by L2 learners at different grain levels, first in isolation and then in combination with other words (i.e. its collocates), and finally I will concentrate on the main focus of the present article – its verbal patterns.

II. WHAT IS INVOLVED IN L1 KNOWLEDGE OF PVS?

II.1. Lexis and/or grammar

Following some of the research on the subject (Jackendoff 1997, 2002, 2010, but see also Cobb 2003), the task of acquiring PVs could be described as very similar to vocabulary acquisition. Given their phraseological status, these multi-word units would be stored, as also happens with other idioms, in the mental lexicon on an item-by-item

basis. The knowledge native speakers have of PVs would then become part of their long-term memory together with their meanings and structural specifications (see Konopka and Bock 2009 for an account). Gauging the number of PVs known by a native speaker or, as in our case, by an L2 learner would amount to establishing their use of these multi-word units.

However, as Jackendoff (2002) himself acknowledges, this view does not provide us with a complete picture since there are at least two groups of what he calls verb particle constructions (VPCs) that do not need to be stored in the mental lexicon. The first one is instantiated by a sentence like *I'm (all) coffeed out*, where a verb and a noun can be substituted in the place of the verb with the meaning 'worn out from too much V-ing/too much N'. The second makes reference to verb-particle combinations such as *flip out*, *phase out*, *chill out*, *etc.* (2002: 188), which allow for much less variation in the verb slot and can roughly be paraphrased as 'go into an unusual mental state'. According to Jackendoff, in both cases the VPCs can actually be constructed online as they are respectively based on productive and semi-productive schemas that can give rise to new and non-conventionalised instances. In other words, there is a rule involved in their production.

Even though other researchers have shown that frequently productive constructions or schemas can also be stored in the mental lexicon (cf. Durrant and Schmitt 2009), Jackendoff's analysis emphasizes that a lexical approach to the acquisition of VPCs is not enough and that there is a higher level of abstraction involved in the knowledge of VPCs, i.e. the syntactic level. In fact, it is only at this level that VPCs can be identified since it is by looking at their specific syntactic structure that it becomes possible to distinguish them from similar expressions containing a preposition (e.g. *he went down the street*). As put forward by the linguistics literature (Cappelle 2005, Jackendoff 1997, 2002, 2010, Quirk et al 1985), the knowledge of PVs would involve being able to distinguish particles from prepositions, as these show different syntactic behaviour. This knowledge would obviously be implicit since very few native speakers, except perhaps for linguists, would be able to explain the difference between these two units. Very few studies, however, have explored whether this syntactic distinction between particles and prepositions entails a difference in the way they are learned and the difficulty they pose for native and non-native speakers. The present study intends to address this gap by

studying the acquisition of *out* both when it functions as a preposition (e.g. *He went out of the building*) and when it does so as a particle (e.g. *He went out*).

II.2. Semantic approaches to PV knowledge

For some researchers (O'Dowd 1998, or Cappelle 2005 for a summary) grammatical knowledge is not entirely reliable and the syntactic status of particles has been problematized. Thus, even reference grammars (Huddlestone and Pullum 2002, for example) have opted for doing away with them and subsuming them under the blanket category of prepositions.

This decision is taken on the grounds that the semantic similarity between these two linguistic units should have priority. In Cognitive Linguistics, which is the approach that has paid greater attention to them, this semantic overlap has been explained in terms of semantic or metaphorical extension from their basic meaning. Thus, the spatiotemporal meaning of a preposition like *over* would be extended into a network of senses that have arisen by its use in other less specific and abstract contexts (Lakoff 1987), for example when it expresses control (Evans and Green 2006). This basic approach has been applied to other prepositions and has produced an extraordinary wealth of research (Brugman 1981, Campoy 1996, Coventry and Garrod 2004, Deane 1993, 2005, Dirven 2001, Evans 2003, Hampe, 2002, Lakoff 1987, Lindstromberg 1998, Morgan 1997, Navarro 2002, Silvestre 2009, Svorou 1994, Vandeloise 1991, 1994).

This new outlook on prepositions is made possible by the research on compositionality (e.g. Gibbs et al. 1989; Glucksberg 1993), which has shown that very few formulae or idioms are strictly non-compositional. In the case of PVs, this has even led to the elaboration of a measure of the contribution to the meaning of PVs by each of the component words (Berry-Rogghe 1974, cited in Wulff 2009).

This approach, however, is not without its critics, even within the field of cognitive linguistics. Thus, as Zlatev summarizes (2007: 341), both radial networks and the primacy of space have been called into question by experimental research (cf. Cuyckens et al. 1997, Rice et al. 1999, Sandra and Rice 1995) and have been said to lack psycholinguistic reality at the level of the individual speaker. But the evidence is still

scarce and does not refute the existence of meaning connections or networks as such at a linguistic or conventionalized level (Zlatev 2007). The mind of the individual speaker may not exactly reflect the diachrony of the language and the way meaning networks were created, but it is unlikely that all the connections between related meanings remain obscure for him or her. On the other hand, the spatiotemporal senses may not necessarily be the basic meaning, but, as prototype theory predicts, other senses will take its place in the mental lexicon.

II.3. PV Constructions

This critique of the standard cognitive linguistic position on prepositions brings to our notice the fact that both the syntactic and, to a lesser degree, the semantic descriptions above assume an understanding of PVs by an ideal native speaker and a homogenous knowledge of all PVs. But this is not always the case, as shown by the example of children. Here, as pointed out by Tomasello, it seems more accurate to posit a more unsystematic and patchy knowledge: "a given child might use a lexical item like *up* in all kinds of interesting ways in all kinds of combinatorial patterns, but then use the very similar lexical items *down* and *on* only as single word utterances" (Tomasello 2000: 212). It can be argued that, although different in kind, L2 learners' knowledge of PVs can also be assumed to be patchy and unsystematic and that an analysis at a lower level of abstraction like the one carried out here with *out* is necessary.

In fact, as suggested by Jackendoff (2002), it would be more accurate, from a strict constructionist perspective, to posit six different constructions or, to use his own words, phenomena (Jackendoff 2010), since he can see no unity in their semantics: "There seems absolutely no semantic unity among these various phenomena, despite sharing the same syntax" (Jackendoff 2010: 249).

However, for a constructionist and usage-based approach to language, reconciling these three main perspectives need not be difficult, as they can be seen not as mutually exclusive but as complementary. Item-based, abstract syntactic knowledge, semantic and constructional knowledge form part of the inventory of 'symbolic units' that constitute language (Langacker 1987). Furthermore, it would be possible to establish the

connection between the six phenomena Jackendoff makes reference to by positing the meaning of the particle as the axis uniting and giving coherence to them.

In short, an analysis wanting to explore the acquisition of PVs will have to take this into account. Here a multiple perspective is adopted by first focusing on the acquisition of the adverbial particle *out* and then by analysing its different syntactic and semantic features when it collocates with a verb.

III. L2 ACQUISITION OF PVS

The research on the acquisition of PVs can be divided into two main strands. On the one hand, we have the analyses carried out within the tradition of SLA acquisition proper and, on the other, there is a certain amount of CL-inspired research mainly focusing on language instruction.

As already stated in the introduction, SLA research has mainly focused on the avoidance of PVs, defined as the preference by L2 learners for one-word verbs over multi-word verbs when these would be the typical choice by native speakers. In strict terms, avoidance does not mean lack of knowledge but strategic behaviour on the part of the learner, who perceives these units as difficult and opts for those he or she considers to be easier.

Factors that have been found to affect avoidance of PVs are: 1) the L1 of the learner, with learners whose L1 is closer to English showing less avoidance (Dagut and Laufer 1985, Hulstijn and Marchena 1989, Sjöholm 1995); 2) the proficiency level of the learner (Liao and Fukuya 2004, but see Siyanova and Schmitt 2007 for a different opinion); 3) the idiomaticity of the PV (Dagut and Laufer 1985, Liao and Fukuya 2004, however, see Ishii and Sohmiya 2006 for different findings); and 4) the degree of control used in the task administered (Liao and Fukuya 2004).

Other SLA researchers have focused on an aspect that is related to avoidance but does not presuppose previous knowledge or a strategic behaviour on the part of the learner, i.e. underuse (Alejo 2010a, 2010b, Cobb 2003). This concept can be defined as the tendency to use on average fewer PVs than native speakers and is related to the lack of formulaic competence by L2 learners.

Perhaps as a result of the methodology adopted, these SLA studies on PV acquisition do not touch on aspects that recent SLA research has highlighted. Thus, very little mention is made of frequency effects (see Alejo 2010, Alejo et al. 2010), Zipfian tendencies (Alejo et al. 2010) and other aspects such as saliency and construal. More importantly, the underlying assumption that these studies adopt is one whereby PVs are still perceived as a unitary phenomenon and not as a family of constructions (see Gries 2003, Dirven 2001) and pay little heed to the different sources of linguistic variation available for PVs in spite of their status as FS.

IV. RESEARCH QUESTIONS

In this paper, I intend to analyse how this variability in PVs, and more particularly in PVs using the particle *out*, affects the way in which NNS of English acquire and use these formulaic sequences. In this respect, the following hypotheses can be put forward:

1. Starting at the lower level, the level of the word and its collocates, *out* is hypothesized to be underused by learners, as it is a short form with low cue answer contingency, i.e. several meanings and functions correspond to one form.
2. In line with what has been found for other types of collocations (see section VI.4.1.c. below), all L2 learners of English will use PVs to a lesser extent than NS, while at the same time showing a tendency to overuse highly frequent PVs.
3. Given that PVs show different syntactic and semantic configurations, which by using Construction Grammar could be identified as different constructions (Gries 2003), which separate them from phraseology or contiguous collocations, overuse and underuse of PVs by L2 learners will be modulated by these specific configurations.

V. METHODOLOGY

V.1. Corpora used

In this study, three different corpora were used. On the one hand, the ICLE (International Corpus of Learner English 2002) was used to establish L2 learners' use of *out*-PVs, while both the LOCNESS (Louvain Corpus of Native English Essays) and the

university and school essay sections of the BNC served as the necessary benchmark against which learners' patterns of use would be compared.

The ICLE (2002) is a non-tagged corpus made up of short essays – 500 words – written by university students in Europe on different contentious topics. It is perhaps one of the best corpora available to study learner language and has a major advantage for the purposes of our study: it comprises texts from students of different L1 backgrounds. As stated in the introduction, language transfer plays a particularly important role in L2 use of PVs and therefore had to be factored out.

However, not all subcorpora included in the ICLE were selected, as this would have involved extensive work. At the same time a random selection was also methodologically problematic, given the demonstrated influence on PV acquisition of different L1 groups (cf. Dagut and Laufer 1985, Hulstijn and Marchena 1989), which has been confirmed and expanded by using cognitive criteria (Alejo 2010). As a result, in order to ensure a balanced sample of learner language, two subcorpora for each of the groups established by Alejo (2010b) were chosen (see Table 1).

Both the LOCNESS and the sections of the BNC used here fulfilled the requirement of comparability in terms of genre or text types. They mainly consist of argumentative essays like the ICLE and their total length is also equivalent to each of the individual subcorpora of the ICLE. The total numbers of words in the NS and NNS subsections are different but, as some of the calculations had to be performed on an individual basis (e.g. T-scores) and the overall figure was not very different, they were still deemed useful for comparative purposes.

Table 1. Corpora used.

	CORPUS	# WORDS
NS	BNC	202,183
	LOCNESS	288,177
NNS	DUTCHICLE	231,322
	SWICLE	198,705
	RUSSICLE	227,648
	BULGICLE	199,951
	SPICLE	200,931
	ITICLE	228,960

V.2. Procedure

Given its commitment to a usage-based approach, the present study aims to conduct a comprehensive analysis and comprises all the hits of the word *out* found in the corpora, irrespective of function or meaning. Its main focus, however, is restricted to *out*-PVs (i.e. PVs containing the word *out*). It is important to note that the scope of the present analysis and the terminology used is best defined by reference to Dirven's (2001) classification. Following mostly a cognitive linguistic approach, and therefore using semantic criteria (see section above), he also recognizes the special syntactic status of some of these constructions. Thus, he differentiates between PVs as a broad term including combinations of verbs and prepositions or particles and VPCs as a subcategory within that includes only particle combinations, the ones complying with syntactic tests (Dirven 2001: 5).

No other similar lexical items (e.g. *up*, *down, off,* etc.) were included in the analysis because a detailed usage-based analysis like the one proposed here would not be possible if the scope of analysis were wider. At the same time, selecting *out* fulfils some important conditions. In the first place, together with *up*, *out* is one of the most frequent particles (Gardner and Davies 2007, O'Dowd 1998) and is likely to provide us with a good example of what may happen with PVs made up of other constituents. Moreover, for the analyst, *out* provides the advantage of having neatly distinct particle and prepositional uses (nearly always followed by the preposition *of*) and therefore making it easier to distinguish between these two uses and categorize them. As some of the research on lexical acquisition has demonstrated, automatic extraction of VPCs is far from achieving a high degree of accuracy (cf. Villavicencio, Bannard, etc.) and in addition there are times where the analysis may be unclear (cf. O'Dowd 1998).

All instances of the word *out*, irrespective of meaning or function, were obtained by using the application *WordSmith Tools*. A first methodological step consisted in identifying its collocations and in measuring the collocational strength of the resulting pairs. For this, the programme *Collocate* was used and the test chosen to calculate the collocational strength was the T-score. Even though some flaws have been pointed out (Stefanovitch and Gries 2003), this test is still widely used and has the advantage of taking into account highly frequent collocations (cf. Durrant and Schmitt 2009). Given

the importance of frequency in constructional approaches (cf. Ellis 2002, Ellis and Ferreira-Junior 2009, Wulff 2008) and in the present paper, this test allowed us to select those instances we were more interested in.

However, as we are dealing with constructions, collocational strength was only useful to measure adjacent pairs since, as Durrant and Schmitt state, "combinations at a wider range of distances ran the risk of making association measures non-comparable between collocations" (2009: 166). In this case, raw and normalized frequencies were considered appropriate following standard procedures in corpus linguistics.

Once identified, all the instances of *out* were lemmatised and exported to Excel format by using a functionality to that effect. A database was created from the resulting Excel file and the following tags were added manually:

1. Meaning of the particle. A slight reformulation and simplification of the radial network provided by Tyler and Evans (2003). According to this classification, the central meaning or proto-scene of *out*, exteriority, is typically expressed in meanings of motion and location. This basic meaning is extended into various other meanings, which can be interpreted to have developed as meaning extensions. Among other meaning extensions, not included here given their low frequency, they mention the following major senses: a) perception and cognition (Tyler and Evans 2003) (e.g. find out the truth); b) exclusion and invisibility (e.g. he crossed out the typo); c) segmentation, which comprises distribution and reflexivity (e.g. the boy stretched out his hand); d) completion (e.g. this jacket needs to dry out); e) material source, which is the only meaning that is specific to the preposition *out of* included in this analysis, and refers to those instances where the preposition indicates what something is made of (e.g. the chair was made out of wood).
2. Grammatical constituency of *out* including three main categories: a) nominal, i.e. when *out* was part of a compound which was either a noun or an adjective (e.g. *crowding out*); b) adjunctive, when the preposition or adverb function is outside the scope of the verb usually functioning as an adjunct; and c) verbal (PVs), when *out* functions within the scope of the verb as a particle or as a

preposition. As suggested above (cf. Dirven 2001), this category includes VPCs but does not identify with them, as it subsumes them.

3. Grammatical status of verbal *out* differentiating between *out*-VPCs, where *out* has the syntactic and semantic properties of a particle, and 'verb+out' constructions, which comprise the rest of the uses.
4. Syntax of VPCs, which was tagged for the following structures: a) intransitive VPCs; b) contiguous, when the particle is placed after the verb and before the direct object (He sorted out the situation); c) split, when the direct object is placed before the particle (I sorted it out); and d) stranded (Something I did not find out).

VI. RESULTS AND DISCUSSION

VI.1. Frequency: how much do L2 learners use the word out?

Since the aim of this article is to study the acquisition of PVs comprising the particle *out*, it seems reasonable (and also appropriate from a usage-based perspective) to start at the lowest level by analysing the extent to which the word *out* is used by L2 learners. Its frequency of use may provide us with a first approximation to the knowledge they have of this form.

In ICLE, as already established by Granger and Rayson (1998), *out* ranks in the 96th position of the 100 most frequent words, which seems a clear indication that learners use it quite productively and that it constitutes one of the items of their basic vocabulary. This replicates, with a slight difference in rank, what happens with NS, where the word *out* is also included in the list of the 100 most frequent words.

However, the similarities with native speaker use of the word *out* disappear if we look at the actual normalized frequency with which both groups use it. As can be seen from Table 2, NNS use the word *out* per million words nearly half as much as NS. In fact, every 100 times *out* is used by NNS it will be used, on average, 140 times by a NS.

Table 2. Frequency of *out*.

	#	p.mil.
NS	876	1786
NNS	1612	1252

In short, L2 learners know the word *out* but underuse it. This is clearly related to an already established tendency in learner corpora to underuse function words and more particularly prepositions (Granger and Rayson 1998) and is also an indication that there is something in the way NS use *out* that escapes L2 learners. The present article will attempt to provide an explanation for this finding.

VI.2. Collocates: do learners know the company out keeps?

After considering *out* in isolation, the second level of analysis deals with the different words it associates with, i.e. its collocations. A collocational analysis may provide further clues as to the way *out* is used in constructions by NS and the way learners reproduce those constructions or deviate from them.

The results for the T-scores presented in this section have been calculated for each subcorpus and then averaged out for both NS and NNS. Thus, it was possible to compare T-scores, a measure which is dependent on corpus size. As some combinations of *out* are not found in all subcorpora, especially NNS subcorpora, I have only included collocates appearing a minimum of 4 times (1 NS subcorpus and 3 NNS subcorpora).

VI.2.1. Right collocates

The right collocates for *out* in NNS corpora roughly correspond with those in NS, as can be seen from Table 3. Thus, with the exception of ‘out what’, ‘out their’ and ‘out in’, the rank order is similar in both groups.

Table 3: right collocates for *out*.

	NS			NNS		
N.GRAM	**#**	**# corpora**	**T-Score**	**#**	**# Corpora**	**T-Score**
out of	196	2	8.5084455	459	6	7.658805667
out that	37	2	2.875499	141	6	3.631427833
out to	59	2	2.8077225	116	6	2.147978667
out on	18	2	2.2360315	16	3	1.592677333
out by	15	2	1.917134	17	4	1.56093275
out what	5	1	1.886924	19	4	1.7147175
out but	5	1	1.457633	15	3	1.400459
out their	10	2	1.44653	10	3	0.936769667
out in	28	2	1.3997625	47	6	0.562578667
out from	4	1	1.246068	17	4	1.666419
out there	4	1	1.212829	14	3	1.496769333
out for	14	2	1.128472	26	4	1.4979615
out the	68	2	1.0884425	106	6	0.5810205
out a	24	2	0.8578945	29	5	-0.294445
out as	11	2	0.6059145	15	3	1.252079667
out and	22	2	-0.4253065	48	6	-0.046282333

It is interesting to note that the high T-scores indicate that L2 learners are aware of 1) the strong association of *out* and *of*, forming what structural grammars (Quirk et al. 1985) call a complex preposition; and 2) the preference of *out* to be followed by clause initiators such as 'that', 'to' or 'what', which is also an indication of its preference to collocate with verbs on the left-hand side (see Figure 1).

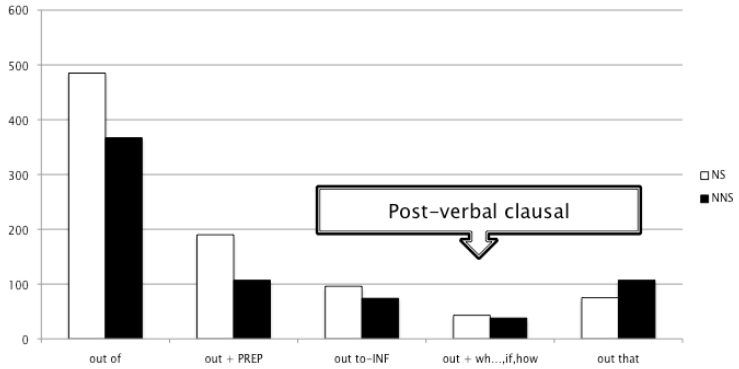

Figure 1. Summary of right collocations.

At the same time, learners show a weaker association of *out* with 'in', 'on' and 'by', which seems to indicate that the construction '*out* + preposition' is difficult for them, with the exception of *out of* (see Figure 1).

Table 4. Frequency of *out of*.

	#	p.mil.
NS	238	483
NNS	472	367

From a CL perspective, the underuse of *out* by NNS may be the result of a greater cognitive effort required, since when *out* is used intransitively the landmark must be retrieved from the context, whereas in the case of *out of* the landmark is always present.

VI.2.2. Left collocates

The left collocates for *out* are also very similar for both NS and NNS (see Table 5). Most of them correspond, with the exception of 'way out', to reporting forms of verbs, which are typical of argumentative texts. It can also be noticed that they are tokens of a small group of PVs whose use seems to be entrenched in both groups (*turn out*, *point out*, *find out* and *carry out*).

Table 5. Left collocates for *out*

	NS			NNS		
N.GRAM	#	cor-pora	T-Score	#	Cor-pora	T-Score
points out	43	2	4.5423	13	3	2.0548
carried out	34	2	4.1074	35	5	2.5338
way out	15	1	3.6875	60	6	2.8230
carry out	20	2	3.1276	30	5	2.4066
find out	20	2	3.0870	78	6	3.5141
go out	18	2	2.9113	60	5	3.3110
get out	18	2	2.7897	32	6	2.0882
pointed out	6	1	2.4438	35	5	2.6330
point out	6	1	2.3756	71	6	3.3527
turns out	11	2	2.2643	64	5	3.3507
turn out	8	2	1.9568	40	5	2.7333

them out	5	1	1.8580	17	4	1.6192
turned out	10	2	1.7987	30	4	2.6384
found out	7	2	1.7569	28	5	2.3009
it out	5	1	0.1441	12	3	0.0116
calling out				19	3	2.4227
work out				28	5	2.1211
going out				12	3	1.9081
is out				19	5	-0.8588

VI.3. Learner awareness of out constituency

At a higher level of abstraction, *out* enters three broad configurations: 1) nominal constructions such as noun compounds (*way out*, *time out*), nominalizations of PVs[1] (*her coming out*) and adjectival phrases functioning as complements or attributes of nouns (*out of control*, *out of the question*); 2) adverbial constructions which mostly comprise those instances where *out* is part of phrases functioning as an adjunct outside the scope of the verb (*we did it out of respect*); and 3) verbal constructions, which constitute the focus of the present article.

As can be seen from Figure 2, it is when *out* enters a verbal syntactic configuration that L2 learners have greater difficulty in reproducing native speaker use. The other configurations, mostly consisting in a reduced number of entrenched constructions, do not pose any problem for learners. Some instances of the latter are, for example, the *NUMBER out of NUMBER* construction (e.g. *three out of ten*).

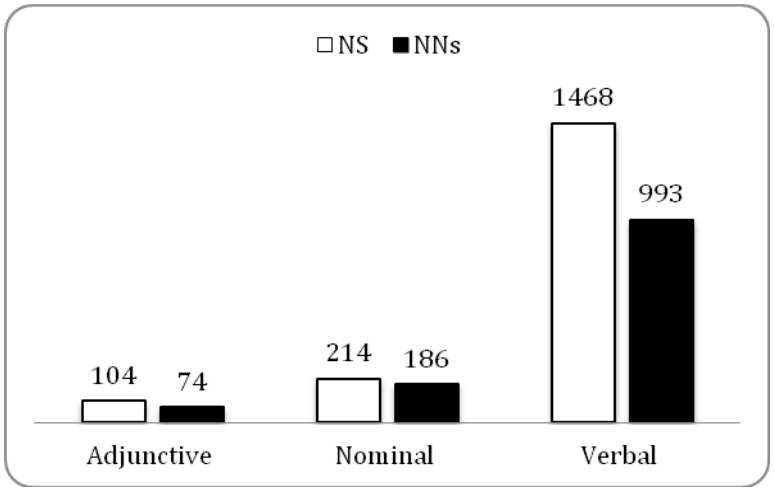

Figure 2: Syntactic configurations of *out*.

[1] I have not included nominalizations of PVs in my analysis following the arguments provided by Goldberg (2006: 23) that both the syntax and the semantics of derived nouns are different from their verbal counterparts.

To sum up, the great difference in the frequency of use of the word *out* between NS and NNS is not the result of a divergent use of specific collocations by NNS, but the consequence of underuse of the verbal schematic configuration this word usually enters. Whether this verbal schematic configuration can be equated with PVs is a question that is mostly decided on theoretical grounds, as we have seen in the introduction. In the next section, I will analyse the quantitative impact of such a decision.

VI.4. Verbal *out*

Once I have explored the different immediate linguistic contexts of the word *out*, I will focus here on what constitutes the centre of the present article, i.e. on *verbal out* or, using CL terminology, on *out*-PVs.

This analysis will involve situating ourselves at different levels of abstraction.

At the highest level of abstraction, I will consider the construction represented by a verb and the preposition *out [of]*, a schema that is mostly syntactic in nature and that – as we saw in the introduction – only captures the grammar.

However, given the understanding of PVs as a network of constructions I have adopted, the analysis can only proceed by taking into account other elements, such as frequency and meaning.

VI.4.1. Frequency and entrenchment

From a CL point of view, frequency is assumed to be an important factor insofar as it has a strong connection with usage-based approaches.

VI.4.1.a. Token/Type frequency

The frequency of *out*-PVs was already shown in Figure 2 above, where we can see a comparison of the verbal *out* construction used by both NS and NNS. Although *out*-PVs are highly frequent in both groups, especially if we compare them to the other configurations in which *out* appears, they are more frequent in the group of NS. NNS seem to experience greater difficulty with the acquisition of *out*-PVs, a corroboration of their problems with PVs in general.

However, as usage-based approaches have shown (Bybee 2007), the best indicator that a schematic construction has been acquired is its type frequency, as this figure is the one that expresses the productivity of a schematic construction. According to this, we can see (Figure 3) that NNS' mastery of *out*-PV constructions is further from NS use than token analysis initially pointed out.

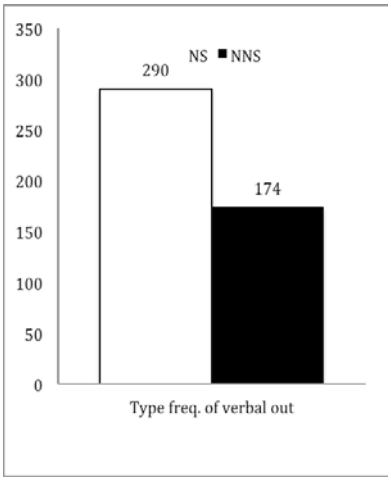

Figure 3. Type frequency.

VI.4.1.b. Frequency effects

The above results do not mean that NNS are totally unaware of the frequency with which NS use specific *out*-PVs. In fact, as can be seen from Figure 4, NNS' use of *out*-PVs shows frequency effects since, with the exception of some outliers such as *carry out* and *turn out*, the frequency band of the first 25 *out*-PVs is not very different from that of NS. Moreover, their frequency of use also represents a typical Zipfian curve, where a small number of items usually share the bulk of use.

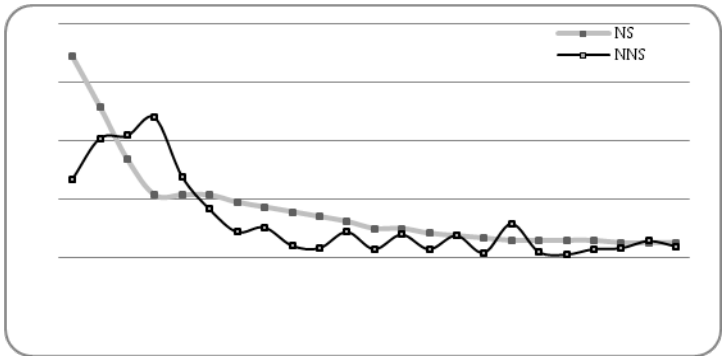

Figure 4. Most frequent *out*-PVs.

VI.4.1.c. Overuse as the flip side of underuse

A final consideration regarding the frequency of *out*-PVs concerns a special phenomenon identified in L2 use of formulaic language. L2 learners have been shown to overuse a small set of formulaic sequences in comparison with NS (Cobb 2003, Durrant and Schmitt 2009).

As can be seen from Table 6, this is also the case of the particular formulaic sequences analysed in this article, i.e. *out*-PVs. Thus, the most frequent verbs (40) used by NNS account for nearly 90% of all out-PV tokens, whereas the same number of types only accounts for just over 75% in NS essays. In other words, in acquiring *out*-PVs, learners seem to have the same difficulties they have when acquiring other formulaic expressions. They can be successful in acquiring a small set of formulae but seem to strive to achieve a native or native-like mastery of these formulae. This finding is complementary to the low type frequency detected in section VI.4.1.a.

Table 6. NNS' overuse of the most frequent *out*-PVs.

	NS		NNS	
	#	%	#	%
Top 40 PVs	379	76.25	769	88.18
Rest of PVs	118	23.75	103	11.82
Total	497	100	872	100

This phenomenon of overuse is not restricted to a number of types of *out*-PVs. It bears upon the different morphological variants or forms of the verbs. Thus, while there are certain forms that are dispreferred by NNS, such as the gerund or the past participle, the infinitive is clearly overused.

A similar overuse of the infinitive, and concomitant underuse of the other verb forms, was already a trend in learner language for all lexical verbs (Granger and Rayson 1998: 129). However, the pattern found for *out*-PVs may be considered as more marked (see Figure 5).

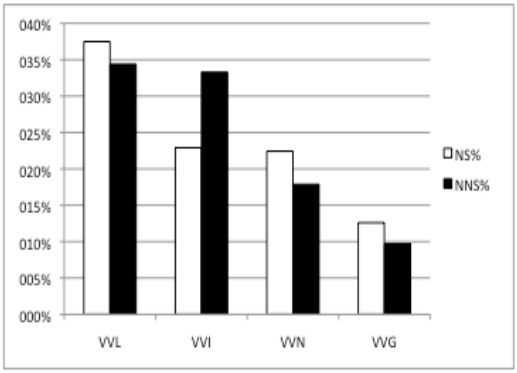

Figure 5. Percentage of verbal tags.

VI.4.2. Syntax

The role of syntax in the acquisition of PVs can be noticed, in the first place, by looking at the two broad subgroups that can be defined by drawing a distinction between verbs followed by particles, i.e. Verb Particle Constructions or VPCs (see Dirven 2001), on the one hand, and those followed by adverbs and prepositions, on the other. Thus, the former group would have a greater degree of fixedness since, even though transitive verbs allow the discontinuous configuration, particle movement is limited and no adverbial phrases are allowed between the verb and the particle. On the other hand, the latter group would allow a greater degree of syntactic freedom since, for example, both adverbs and prepositions can be fronted (e.g. *out they went*).

As can be seen from Figures 6 and 7, the combination of verbs and particles is by far the most frequent construction in both NS and NNS writing and is also the most productive, as is shown by the greater number of types. This was to be expected given that *out*, unlike similar function words such as *in* or *off*, is not frequently used as a preposition or as an adverb, as shown by O'Dowd (1998).

However, even though NNS realize the frequency of VPCs, they underuse them by comparison with NS. The extent of underuse is already noticeable if the number of tokens is considered (see Figure 6), but becomes really remarkable when we look at the number of types (see Figure 7). If *out*-PV was already a very low productivity schema for NNS, VPCs are even less productive.

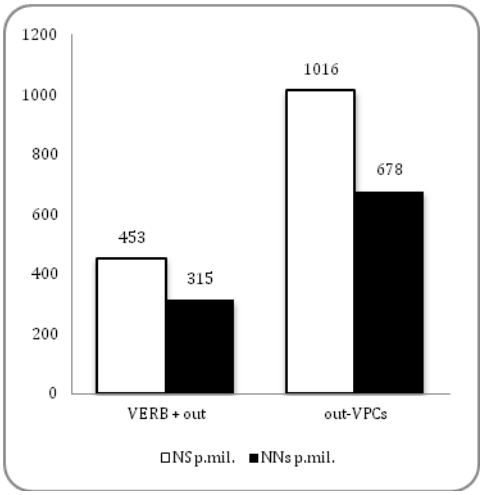

Figure 6: *out* tokens.

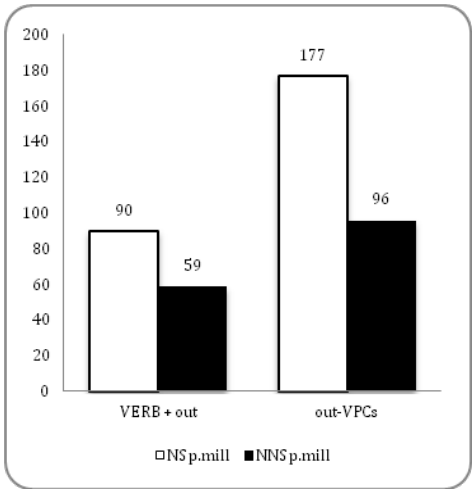

Figure 7: *out* types.

Table 7: Syntactic configurations of PVs

out-VPCs	NS		NNS		Ratio
	#	p.mil.	#	p.mil	
CONTINUOUS	229	467	558	433	1.1
INTRANSITIVE	130	265	151	117	2.3
SPLIT	36	73	28	22	3.4
STRANDED	102	208	135	105	2.0

When the specific syntax of the VPC subgroup is analysed (see Table 7), we can observe that NNS show a strong preference for the transitive continuous construction (e.g. 'He finds out that Jim is hidden' DUTCHICLE), particularly when followed by a clause, as already indicated in section VI.2.1 above. However, the rest of the syntactic configurations are much less frequently used by NNS, especially when the direct object is inserted between the verb and the particle in the split construction (e.g. 'They can vote representatives out' BNC), where the proportion of underuse goes from 1 to nearly 3 and a half.

Some of these results are somewhat surprising. Thus, one would presume that both the transitive continuous and the intransitive configurations would pose the same degree of

difficulty for NNS. In both cases, the verb and the particle are not separated and the main task of the L2 learner is to parse them as a unit. The underuse of split and stranded configurations were much more expected for precisely the opposite reason.

The CL perspective adopted here can shed some light on both results. Thus, what we have called split corresponds to construction 2. As Gries (2003) points out, this construction is preferred when the direct object is easily retrievable from the discourse context or/and has a high degree of entrenchment. This is why it is more appropriate for objects requiring a limited amount of consciousness. It seems only natural that NNS have more difficulty in retrieving the context and possess fewer well-entrenched objects when writing and their written production would rely more on conscious elaboration (hence the overuse of the continuous configuration), rather than on automatic processing, which would explain why they underuse the split construction.

The greater underuse of the intransitive VPCs poses a greater challenge for a CL explanation. It could be that, as Dirven (2001) explains, intransitive constructions are the farthest from the original construction, where the preposition retained the prototypical locational meaning.

VI.4.3 Semantics of prepositions

From a CL point of view, a key factor to explain the acquisition of PVs lies in the meaning of the prepositions, as they are considered to carry a great deal of the meaning of the whole multi-word verb. It is by analysing the radial network of meaning a preposition has that we can begin to understand the radial network of PV constructions to which they give rise.

Overall, NNS' use of the different meanings of *out* found in *out*-PVs reproduces the shape of NS radiality of meanings (see Figure 8), although with areas in which this NNS shape clearly shrinks with respect to that of NS. In other words, NNS seem to be aware of the frequency of the different meanings of *out*, but their actual use fails to reproduce NS use, except for those instances where *out* expresses perception/cognition (e.g. *point out*). Particularly noticeable is the scarce use of motion/location and completion *out*-PVs.

All the different meanings, except again for perception/cognition, have a lower productivity in NNS writing than in NS, as shown by Table 8. It would appear that NNS have only become aware of the productivity of this meaning.

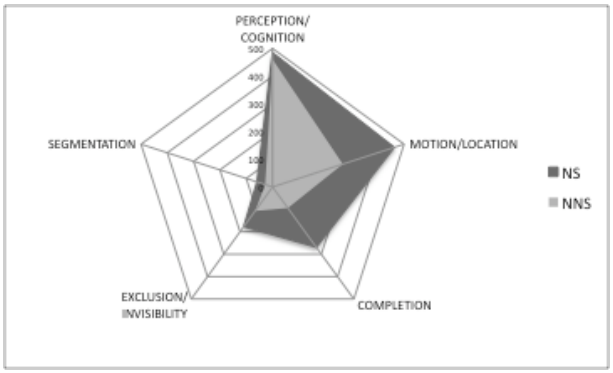

Figure 8. Radiality of meanings.

Table 8: Token frequency of meanings.

Tokens	**NS**		**NNS**		**Ratio**
	#	**p.mil.**	**#**	**p.mil**	
PERCEPTION/COGNITION	238	485	593	461	1.1
MOTION/LOCATION	227	463	344	267	1.7
COMPLETION	132	269	121	94	2.9
EXCLUSION/INVISIBILITY	87	177	138	107	1.7
SEGMENTATION	29	59	36	28	2.1
M-SOURCE	7	14	46	36	0.4

Table 9: Type frequency of meanings.

Types	**NS**		**NNS**		**Ratio**
	#	**p.mil.**	**#**	**p.mil**	
MOTION/LOCATION	72	103	68	60	1.7
EXCLUSION/INVISIBILITY	45	64	42	37	1.7
PERCEPTION/COGNITION	37	53	39	34	1.5
COMPLETION	31	44	24	21	2.1
SEGMENTATION	15	21	12	11	2
M-SOURCE	3	4	13	11	0.4

VII. CONCLUSION

Taking the word *out* as the starting point of my research, this paper compares the way in which it collocates in the language used by NS and NNS of English, with special attention to its verbal collocations. Following a usage-based approach, this comparison has attempted to include all the possible levels of analysis, ranging from its participation in low scope constructions (*way out*) to the more abstract syntactic and semantic levels.

I thus aimed to reveal some of the linguistic factors that may play a role in L2 learners' acquisition of variable formulaic sequences such as PVs.

The main purpose of this paper has been to show how the linguistic behaviour of PVs can have an impact on their acquisition by NNS of English. On this point it can be said that I adopt a different perspective from the research on PV acquisition, which, as shown in the introduction, has mostly focused on extralinguistic factors such as the L1 of the learners or the amount of exposure, typically represented by the length of residence in an English-speaking country or the level of the students.

From the analysis at the lowest level of schematicity, the one that focuses on the collocates of *out*, we can see that L2 learners use *out* in similar ways to NS, especially when it appears in the complex preposition *out of* or in combination with words marking a clause boundary (i.e. followed by *to-inf*, *wh-* words, *if*, *that*, etc.). The first finding is not difficult to explain, as *out of* poses fewer cognitive demands on the learners, since the landmark is expressed and it is perceptually more salient than *out*. The second result is less obvious, but may be related to the strength of collocation of *out* with argumentative verbs, which are frequent in the text types used in our corpus (e.g. *turn out*, *point out*, *find out*, etc.).

However, even if learners are aware of the collocation of *out* with these argumentative verbs, the present research also shows that they mostly underuse *out* when it is employed in the context of a verbal phrase. This general trend of underuse is combined with an apparently contradictory tendency to overuse the most frequent verbs. This is confirmation of previous findings in the literature on formulaic language (Cobb 2003, Durrant and Schmitt 2009). NNS do not just avoid using *out*-PVs as was suggested by earlier literature (see section on PV acquisition above). Rather they rely on a small group, which is very frequent in their input. On the other hand, they have more difficulty with the ones in the low frequency band. Following Ellis and Ferreira-Junior (2009), it could be suggested that learners overuse the prototypical exemplars of argumentative discourse, while at the same time failing to be aware of the full range of verbs that are used by NS. In other words, learners show low type frequency and this indicates that they have not fully developed an abstract representation of the verbal+*out*

construction yet. They seem to rely more on memorized chunks than on a productive use of this construction (cf. Goldberg 2009).

Further confirmation of this lack of abstract representation, i.e. of a construction that is more schematic, is provided by the frozen morphological and syntactic use of these verbs. NNS' preference to use *out*-PVs in the infinitive and their bias for the continuous syntactic order are a clear indication that they avoid variability and that they prefer to adopt a conservative stance as regards formulaic language (cf. Durrant and Schmitt 2009) not only by actively producing a small number of *out*-PV types, but also in the way they use them.

Finally, from a semantic point of view, learners seem to reproduce the frequency of meanings used by NS, but clearly underuse less prototypical meanings such as completion and segmentation.

REFERENCES

Alejo, R. 2010a. "L2 Spanish acquisition of English phrasal verbs: A cognitive linguistic analysis of L1 influence". In Campoy, M.C., B. Bellés-Fortuno and M.Ll. Gea-Valor (Eds.) *Corpus-Based Approaches to English Language Teaching*. London/New York: Continuum, 149-166.

Alejo, R. 2010b. "Making sense of phrasal verbs: A cognitive linguistic account of L2 learning". *AILA Review* 23: 50-71.

Alejo, R., Piquer, A. and Reveriego, G. In press. "Phrasal verbs in EFL course books". In De Knop, S., F. Boers and A. De Rycker (Eds.) *Fostering Language Teaching Efficiency through Cognitive Linguistics*. Berlin/New York: Mouton de Gruyter.

Barlow, M. 2004. *Collocate 1.0.* Athelstan. http://www.athel.com/colloc.html

Brugman, C. 1981. *Story of Over*. M.A. thesis, Department of Linguistics, Berkeley: University of California.

Bybee, J. 2007. *Frequency of Use and the Organization of Language.* New York/Oxford: Oxford University Press.

Campoy, M.C. 1996. *Semantic Analysis of Adverbial, Prepositional and Adverbial Prepositional Verbs*. Castellón: Unversitat Jaume I.

Cappelle, B. 2005. *Particle Patterns in English. A Comprehensive Coverage*. Ph. D. Dissertation, Faculteit Letteren, Leuven, Belgium: 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.

Coventry, K.R. and Garrod, S.C. 2004. *Saying, Seeing, and Acting: The Psychological Semantics of Spatial Prepositions*. New York: Psychology Press, Taylor & Francis.

Cuyckens, H., Sandra, D. and Rice, S. 1997. "Towards an empirical lexical semantics". In Smieja, B. and M. Tasch (Eds.) *Human Contact through Language and Linguistics*. Frankfurt am Main: Peter Lang Verlag, 35-54.

Dagut, M. and Laufer, B. 1985. "Avoidance of phrasal verbs: A case for contrastive analysis". *Studies in Second Language Acquisition* 7: 73-79.

Deane, P.D. 1993. "*At*, *by*, *to*, and *past*: An essay in multimodal image theory". *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 19: 112-124.

Deane, P.D. 2005. "Multimodal spatial representation: on the semantic unity of *over*". In Hampe, B. and J.E. Grady (Eds.) *From Perception to Meaning. Image Schemas in Cognitive Linguistics*. Berlin/New York: Mouton de Gruyter, 235-282.

Dirven, R. 2001. "English phrasal verbs: Theory and didactic application". In Pütz, M., S. Niemeier and R. Dirven (Eds.) *Applied Cognitive Linguistics* (2 Vols.). Berlin/New York: Mouton de Gruyter, 3-27.

Durrant, Ph. and Schmitt, N. 2009. "To what extent do native and non-native writers make use of collocations". *IRAL* 47, 157-177.

Ellis, N.C. 2002. "Frequency effects in language acquisition: A review with implications for theories of implicit and explicit language acquisition". *Studies in Second Language Acquisition* 24, 143-188.

Ellis, N.C. and Ferreira-Junior, F. 2009. "Constructions and their acquisition: Islands and the distinctiveness of their occupancy". *Annual Review of Cognitive Linguistics* 7: 187-220.

Evans, V. and Green, M. 2006. *Cognitive Linguistics. An Introduction*. Edinburgh: Edinburgh University Press.

Gibbs, R.W. and Nayak, N.P. 1989. "Psycholinguistic studies on the syntactic behavior of idioms". *Cognitive Psychology* 21:100-38.

Gardner, D. and Davies, M. 2007. "Pointing out frequent phrasal verbs: A corpus-based analysis". *TESOL Quarterly* 41: 339-359.

Granger, S. and Rayson, P. 1998. "Automatic profiling of learner texts". In Granger, S. (Ed.) *Learner English on Computer*. London/New York: Longman, 119-131.

Gries, S. 2003. *Multifactorial Analysis in Corpus Linguistics: A Study of Particle Placement.* London/New York: Continuum.

Gries, S. 2008. "Phraseology and linguistic theory: A brief survey". In Granger, S. and F. Meunier (Eds.). *Phraseology: An Interdisciplinary Perspective.* Amsterdam/ Philadelphia: John Benjamins, 3-25.

Hampe, B. 2002. *Superlative Verbs: A Corpus Based Study of Semantic Redundancy in English Verb Particle Constructions.* Tübingen: Narr.

Huddleston, R.G. and Pullum, G.K. 2002. *The Cambridge Grammar of the English Languag*e. Cambridge: Cambridge University Press.

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 Yoshitomi, A. (Ed.) *Readings in a Second Language Pedagogy and Second Language Acquisition: In Japanese Context.* Amsterdam/Philadelphia: John Benjamins, 381-402.

Jackendoff, R. 1997. "Twistin' the night away". *Language* 73: 534-59.

Jackendoff, R. 2002. "English particle constructions, the lexicon, and the autonomy of syntax". In Dehé, N., R. Jackendoff, A. McIntyre and S. Urban (Eds.) *Verb-particle explorations*. Berlin/New York: Mouton de Gruyter, 67-94.

Jackendoff, R. 2010. *Meaning and the Lexicon. The Parallel Architecture 1975-2010*. Oxford: Oxford University Press.

Konopka, A. and Bock, K. 2009. "Lexical or syntactic control of sentence formulation? Structural generalizations from idiom production". *Cognitive Psychology* 58:68-101.

Lakoff, G. 1987. *Women, Fire, and Dangerous Things: What Categories Reveal About the Mind*. Chicago: University of Chicago Press.

Langacker, R.W. 1987. *Foundations of Cognitive Grammar: Theoretical Prerequisites*. Standford, CA: Standford University Press.

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.

Liao, Y. and Fukuya, Y.J. 2004. "Avoidance of phrasal verbs: The case of Chinese learners of English". *Language Learning* 54: 193-226.

Lindstromberg, S. 1998. *English Prepositions Explained*. Amsterdam/Philadelphia: John Benjamins.

Moon, R. 1998. *Fixed Expressions and Idioms in English*. Oxford: Clarendon Press.

Morgan, P.S. 1997. "Figuring out figure out: Metaphor and the semantics of the English verb-particle construction". *Cognitive Linguistics* 8: 327–357.

Navarro, I. 2002. "Towards a description of the meaning of *At*". In Cuyckens, H. and G. Radden (Eds.) *Perspectives on Prepositions*. Tübingen: Max Niemeyer Verlag, 211-230.

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. and Svartvik, J. 1985. *A Comprehensive Grammar of the English Language* London/New York: Longman.

Rice, S., Sandra, D. and Vanrespaille, M. 1999. "Prepositional semantics and the fragile link between space and time". In Hiraga, M., C. Sinha and S. Wilcox (Eds.) *Cultural, Typological and Psycholinguistic Issues in Cognitive Linguistics*. Amsterdam/Philadelphia: John Benjamins, 107-127.

Sandra, D. and Rice, S. 1995. "Network analyses of prepositional meaning: Mirroring whose mind – the linguist's or the language user's?" *Cognitive Linguistics* 6: 89-130.

Schmitt, N. and Carter, R. 2004. "Formulaic sequences in action". In Schmitt, N. (Ed.) *Formulaic Sequences.* Amsterdam/Philadelphia: John Benjamins, 1-22.

Silvestre, A.J. 2009. *Particle Semantics in English Phrasal and Prepositional Verbs: The Case of In and On*. Saarbrücken, Germany: VDM Verlag.

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*. Åbo, Finland: Åbo Akademi University Press.

Stefanowitsch, A. and Gries, S. 2003. "Collostructions: investigating the interaction between words and constructions". *International Journal of Corpus Linguistics* 8: 209-243.

Svorou, S. 1994. *The Grammar of Space*. Amsterdam/Philadelphia: John Benjamins.

Tomasello, M. 2000. "Do children have adult syntactic competence". *Cognition.* 74: 209-253.

Tomasello, M. 2003. *Constructing a Language*: *A Usage-Based Approach to Child Language Acquisition*. Cambridge, MA: Harvard University Press.

Tyler, A. and Evans, V. 2003. *The Semantics of English Prepositions*. Cambridge: Cambridge University Press.

Vandeloise, C. 1991. *Spatial Prepositions: A Case Study from French*, Chicago: Chicago University Press.

Vandeloise, C. 1994. "Methodology and analyses of the preposition *in*". *Cognitive Linguistics* 5:157-184.

Verhagen, A. 2007. "Construal and perspectivization". In Geeraerts D. and H. Cuyckens (Eds.) *The Oxford Handbook of Cognitive Linguistics*. Oxford: Oxford University Press, 48-81.

Waibel, B. 2007. *Phrasal verbs in Learner English: A Corpus-Based Study of German and Italian Students*. Freiburg, Germany: Albert-Ludwigs-Universität Freiburg.

Wray, A. 2002. *Formulaic Language and the Lexicon*. Cambridge: Cambridge University Press.

Wulff, S. 2008. *Rethinking Idiomaticity: A Usage-based Approach*. London/New York: Continuum.

Zlatev, J. 2007. "Spatial semantics". In Geeraerts, D. and H. Cuyckens (Eds.) *The Oxford Handbook of Cognitive Linguistics*. Oxford: Oxford University Press, 319-350.

Corpora

BNC, *The British National Corpus*, version 3 (BNC XML Edition). 2007. Distributed by Oxford University Computing Services on behalf of the BNC Consortium. http://www.natcorp.ox.ac.uk/

ICLE (International Corpus of Learner English) 2002. Centre for English Corpus Linguistics. Université Catholique de Louvain, Belgium

LOCNESS (Louvain Corpus of Native English Essays). Centre for English Corpus Linguistics. Université Catholique de Louvain, Belgium

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Conceptualizing humans as animals in English verb particle constructions

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ABSTRACT

Verb particle constructions with animal names used as verbs ('VPrt critter constructions'), such as *horse around*, *clam up*, and *rat out*, are interesting because of their (i) grammatical structure, (ii) pragmatic function, (iii) conceptual content, and (iv) the cultural knowledge they reflect. This chapter focuses on the latter two aspects of critter constructions. More specifically, we assume that an adequate analysis of critter constructions requires folk or cultural models of the animals in question, spatial schemas for the particle, metaphorical mappings and metonymic inferences, and aspectual categories in the sense of Vendler (1957). We place our findings in the larger context of the status of cultural and cognitive models in general. Such models (including animal folk models) are often outdated and reflect centuries-old beliefs that have left their traces in lexico-grammatical structure, in this case, critter constructions.

Keywords: *aspect, critter construction, cultural model, metaphor, metonymy, noun-verb conversion*

I. INTRODUCTION

The conceptualization of humans and even divinities in terms of animals is a plausible candidate for a cultural universal. In many cultures, e.g. in ancient Egypt, gods and goddesses were pictorially and sculpturally represented as animals (or hybrids of humans and animals) such as falcons, cows, rams, lions, and crocodiles. Their visual representation as animals does not mean that they were categorized as animals but that they possessed certain characteristics rightly or wrongly attributed to the animals in question (Ris-Eberle 2004: 50).

Goatly (2006: 32) distinguishes among three interpretations of the formula HUMAN IS ANIMAL. It may be a statement of hyponymy, i.e. 'a human is a kind of animal', one of near-identity, i.e. 'humans are more or less like animals', or a metaphor, i.e. 'humans are like animals'. The metaphoric interpretation presupposes similarity but also

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distinctness of conceptual domains. It entails that humans are essentially different from animals; otherwise, it would make no sense to assume cross-domain mappings linking presumed animal properties with human characteristics. In the Western Judeo-Christian tradition, on which many folk models of animals are at least partially based, animals are indeed – in contrast to humans – typically regarded as lacking a soul or lacking reason. This conception is still found in the 17th century in Descartes' *Discours de la méthode*, where it is claimed that animals have no "âme raisonnable" and are ontologically comparable to clockworks (*horloges*) (Bridoux 1953: 166).

In the domain of literature, animals occupy a prominent position, e.g. in fables, a genre that, in the Western tradition, goes back at least to the Greek poet Aesop (6th century B.C.). Fables are usually short narratives with animal characters that end with a moral lesson for humans. Jean de La Fontaine (1621–1695) is often praised as "the greatest of all modern fable writers" (Drabble 2000: 344), and his second fable *Le corbeau et le renard* (English translation by Elizur Wright (1804–1885)) is a prime example of the narrative structure of fables and the moral lessons they convey:[1]

Le corbeau et le renard	**The raven and the fox**
Maître corbeau, sur un arbre perché,	Perch'd on a lofty oak,
Tenait en son bec un fromage.	Sir Raven held a lunch of cheese;
Maître renard, par l'odeur alléché.	Sir Fox, who smelt it in the breeze,
Lui tint à peu près ce langage:	Thus to the holder spoke: –
« Hé! bonjour, monsieur du corbeau.	"Ha! how do you do, Sir Raven?
Que vous êtes joli! que vous me semblez beau!	Well, your coat, sir, is a brave one!
Sans mentir, si votre ramage.	So black and glossy, on my word, sir,
Se rapporte à votre plumage,	With voice to match, you were a bird, sir,
Vous êtes le phénix des hôtes de ces bois. »	Well fit to be the Phoenix of these days."
A ces mots le corbeau ne se sent pas de joie,	Sir Raven, overset with praise,
Et, pour montrer sa belle voix,	Must show how musical his croak.
Il ouvre un large bec, laisse tomber sa proie.	Down fell the luncheon from the oak;
Le renard s'en saisit, et dit:	Which snatching up, Sir Fox thus spoke: –
« Mon bon monsieur, Apprenez que tout flatteur	"The flatterer, my good sir,
Vit aux dépens de celui qui l'écoute.	Aye liveth on his listener;
Cette leçon vaut bien un fromage, sans doute. »	Which lesson, if you please,
Le corbeau, honteux et confus,	Is doubtless worth the cheese."
Jura, mais un peu tard, qu'on ne l'y prendrait	A bit too late, Sir Raven swore
plus.	The rogue should never cheat him more.

[1] The source of the original fable, the English translation, and the illustration is: http://chef-doeuvre.blogspot.com/2007/04/le-corbeau-et-le-renard.html (accessed December 27, 2011).

Figure 1. The sly fox "outfoxes" the raven.

The fox is a skilled rhetorician, who showers the raven with insincere and excessive praise and as a result of his cunning gets the desired cheese. Despite this unfortunate outcome for the raven, the bird grasps the moral lesson 'Never trust a flatterer' and vows to adjust his future behavior accordingly. The moral lesson easily *transfers* to human affairs and it is describable in terms of metaphorical mappings from the animal domain into the human domain (see section III). The interpretation of the fable draws heavily on a folk model or cultural model of foxes. In a nutshell, this cultural model is captured and evoked in expressions such as *sly fox* and verbs such as *to fox* or *to outfox* (see Figure 1).

The present chapter is concerned with a subclass of verb-particle (VPrt) constructions, such as *rat out*, *beaver away*, and *horse around* that reflect "frozen" cultural models, in the sense described in the preceding paragraph. These constructions consist of a verb converted from an animal noun and a particle, which, in its source sense, denotes a spatial schema that is metonymically linked to an aspectual target sense.[2] In what follows we use the term 'critter constructions' as shorthand for 'VPrt critter constructions'.

To conclude this part of the discussion, we claim that diverse phenomena like religious and philosophical schools of thinking, literary genres, and, on a micro-level, lexico-

[2] Related to VPrt critter constructions are critter constructions with a preposition (e.g. *rat on* 'inform on') and transitive critter constructions (e.g. *fox sb.* 'deceive, baffle'); these are not considered in the present chapter.

grammatical codings such as critter constructions have more in common than meets the eye. Indeed, a deeper understanding of their meaning has to be sought in the larger context of human thinking (cognition), and how it relates to culture and language. Figure 2 is an attempt to diagram some aspects of this relationship.

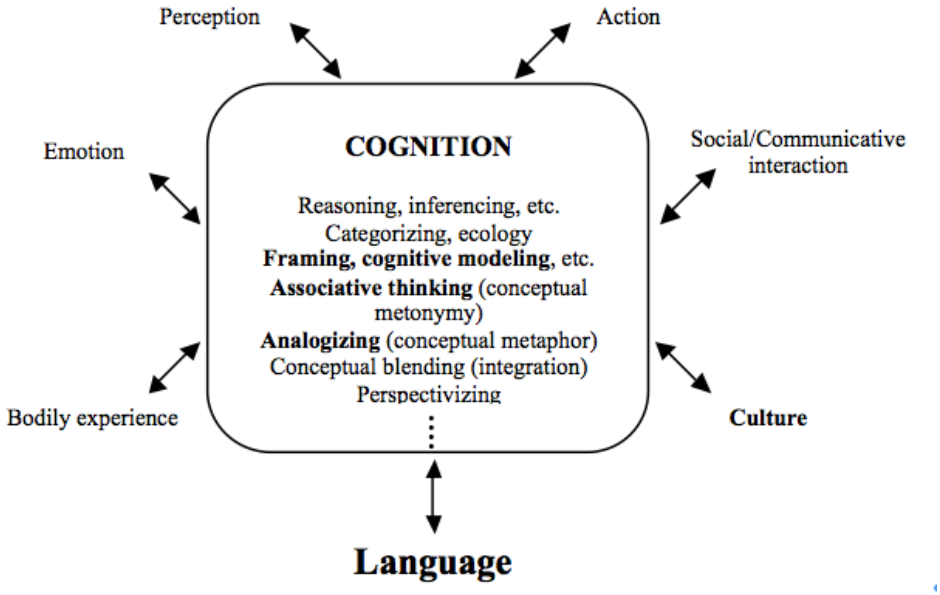


Figure 2. Language and cognition (adapted from Panther and Radden 2011: 2).

Following Panther and Radden (2011), cognition is here understood as a cover term for the higher human faculties of reasoning, e.g. drawing inferences, constructing and interpreting cognitive models, linking concepts associatively (metonymy), and drawing analogies between distinct conceptual domains (metaphor). These faculties interact with 'peripheral' systems such as emotion, bodily experience, perception, action, culture, social interaction, and language.

Our understanding of the notion of cultural model, which we use interchangeably with the term 'folk model' in this chapter, follows Quinn and Holland (1987: 4):

> *Cultural models* are presupposed, taken-for-granted models of the world that are widely shared (although not necessarily to the exclusion of other, alternative models) by the members of a society and that play an enormous role in their understanding of that world and their behavior in it.

This chapter is organized as follows. In section II we briefly note the use and the meaning of animal terms in a variety of lexico-grammatical constructions. Section III

investigates the semantics of critter constructions in more detail. Section IV summarizes the results and concludes with some reflections on folk models and linguistic coding.

II. SOME CONSTRUCTIONS INVOLVING ANIMAL TERMS

Given the hypothesized universal that humans are conceptualized or represented as animals, it does not come as a surprise that animal terms are in fact used in various lexical, morphological, and syntactic environments:

(1) John really *made a **pig** of himself* at the party. (LDAE) (lexical construction)

(2) John is *a **pig***. (predicate nominal construction)

(3) You ***pig***! (epithet construction)

(4) She is ***pig**-headed*. (compound construction)

(5) John ***pigged** out* at the party. (VPrt critter construction)

It is the type of construction illustrated in (5) that is examined in more detail in section III. One important fact about the use of *pig* in sentences (1)–(5) is that its respective meanings vary from context to context. While *pig* in (1) and (5) may refer to a person who overindulges in food, in (2) and (3) *pig* could be interpreted as a despicable person holding sexist or racist views, and in (4), according to the *New Oxford American Dictionary*, *pig-headed* means 'stupidly obstinate'. Similarly, while a critter construction like *monkey around* means 'behave in a silly and playful way', the prepositional verb *monkey with* has the sense 'to touch, use, or examine […] without skill and so possibly causing damage' (LDAE).

The lesson to be learned from examples (1)–(5) and the various uses of *monkey* as a verb is that the figurative meanings of animal terms are not predictable but rather are context- and construction-specific. However, non-predictability does not entail 'arbitrariness'. Indeed, we claim that the use of animal terms as verbs is *motivated*, in that it can be traced back to a folk model of the animal in question, from which certain components are selected and eventually end up as conventionalized senses in individual constructions.

III. CRITTER CONSTRUCTIONS IN ENGLISH

To begin, critter constructions tend not to be used literally, due to a principle of redundancy avoidance. Formulations such as **The squirrel squirreled away some acorns*, **Those pigs are pigging out again today*, and **Don't let that cat cat around!* are infelicitous.[3] Moreover, critter constructions seem to be more frequent in English as compared to languages like German and French. Table 1 lists a number of such constructions (in alphabetical order), commonly found in English, and their translations into German and French.

Table 1. Some critter constructions in English and their equivalents in German and French.*

	ANIMAL	ENGLISH	GERMAN	FRENCH
Eng Ger Fr	beaver Biber castor	beaver away (at)	schuften	travailler d'arrache pied
Eng Ger Fr	Cat Katze chat	cat about/around	herumtreiben, anmachen	draguer
Eng Ger Fr	chicken Küken poulet	chicken out	kneifen, aussteigen	se dégonfler
Eng Ger Fr	clam Muschel moule	clam up	keinen Piep mehr sagen	ne plus piper mot
Eng Ger Fr	ferret Frettchen furet	ferret about ferret out	herumstöbern jm. aufspüren	**fureter** (dans) découvrir, dénicher
Eng Ger Fr	fish Fisch poisson	fish around (for) fish out sb.	kramen (nach) etw. etw. herausholen	farfouiller sortir qch. de
Eng Ger Fr	fox Fuchs renard	fox sb. out (of)	jm. täuschen, jm. hereinlegen	dérouter, désarçonner qn.
Eng Ger Fr	horse Pferd cheval	horse around/ about	herumalbern	chahuter
Eng Ger Fr	hound Jagdhund chien de chasse	hound sb. out (of) hound sb. down	jm. hinausjagen, vertreiben jm. zur Strecke bringen	chasser qn. (de) débusquer qn.
Eng Ger Fr	monkey Affe singe	monkey around	herumalbern	faire l'idiot
Eng Ger	pig Schwein	pig out (on)	sich den Bauch vollschlagen (mit)	se goinfrer, s'empiffrer (de)

[3] The principle of redundancy avoidance is also operative in constructions with subject incorporations such as **The dog dog-paddled across the pond*, **The birds bird-chirped all morning*, and **Look, the bear is bear-hugging the trainer* (see Thornburg and Panther 2000).

Fr	cochon			
Eng Ger Fr	rat Ratte Rat	rat sb. out rat around	jm. verpfeifen herumlungern	dénoncer, moucharder qn. glandouiller
Eng Ger Fr	squirrel Eichhörnchen écurueil	squirrel sth. away	aufbewahren, einlagern	mettre qch. de côté
Eng Ger Fr	weasel Wiesel belette	weasel sb. out of sth. weasel out of sth.	jm. etw. ablisten sich drücken vor	soutirer qch. de qn. se défiler
Eng Ger Fr	wolf Wolf loup	wolf down sth.	etw. hinunterschlingen	dévorer qch.

* *Abbreviations*: English: sb. = somebody, sth. = something; German: jm = jemand(en) 'somebody', etw. = etwas 'something'; French: qn. = quelqu'un 'somebody', qch. = quelque chose 'something'

Interestingly, the English critter constructions in Table 1 have no literal counterparts in German and French. For example, *chicken out* 'lose one's courage (in the face of an enemy, or a dangerous situation)' (Cowie and Mackin 1975) translates as *kneifen* (lit. 'feel a pinch') in German, and *se dégonfler* (lit. 'deflate oneself') in French. The only exception in the table is *ferret about*, which has a more or less literal counterpart in French: *fureter (dans)* (lit. 'ferret in').

Critter constructions thus seem to be more frequent in English than in German and French.[4] It is unlikely that this skewing is caused by *cultural* differences, since the same or similar cultural models involving animals are available for German and French language users. We assume here that the reasons for this asymmetry between English, on the one hand, and German and French, on the other, are due to grammatical differences. English is a language with little inflectional morphology, and it allows conversion from nouns to verbs more easily than languages with richer morphology, like German and French. As is well known, conversion is an extremely productive word-formation process in English (Clark and Clark 1979, Dirven 1999).

[4] There are, however, German verbs derived from animal nouns that have no literal equivalents in English: e.g. *büffeln* (lit. 'to buffalo') 'cram', *ochsen* (lit. 'to ox') 'work hard', *wurmen* (lit. 'to worm') 'rankle'. In other words, the claim that English has more critter constructions than German must be supported by further evidence.

III.1. General characteristics of critter constructions

The general conceptual schema for critter constructions that we use as a template for the discussion of individual cases is given in Figure 3.

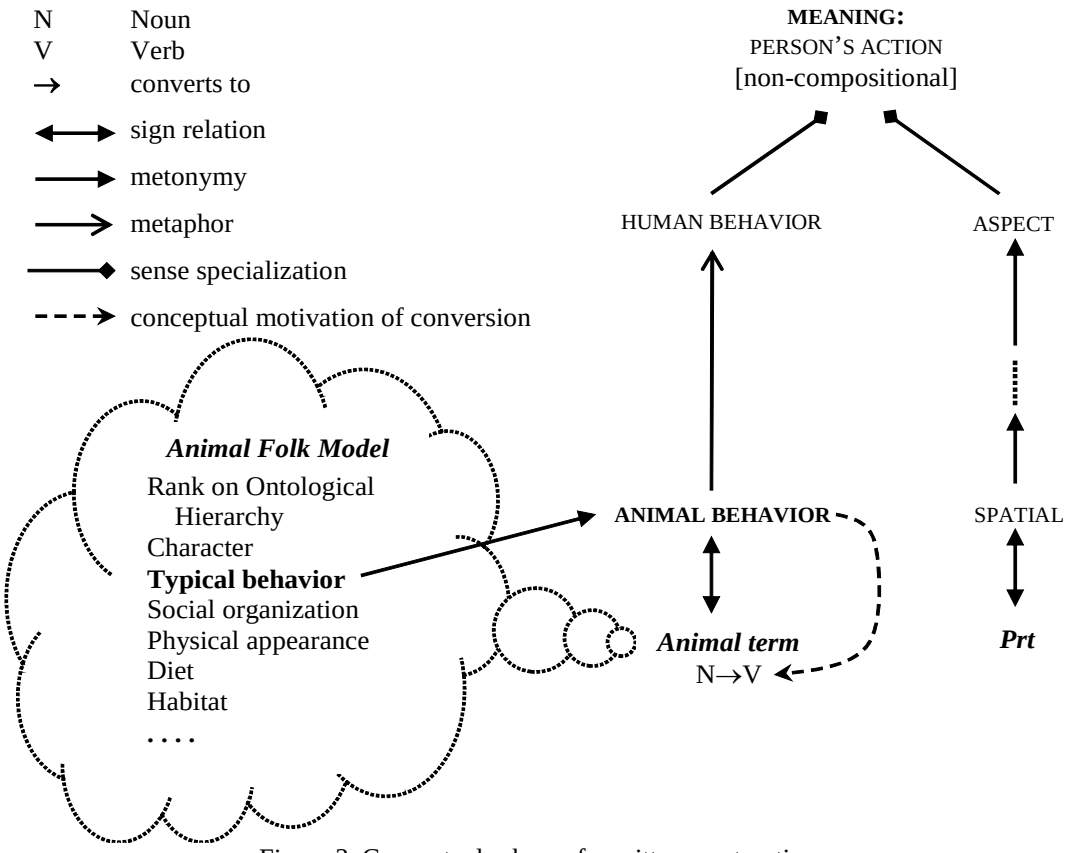


Figure 3. Conceptual schema for critter constructions.

The descriptive apparatus diagrammed in Figure 3 includes an animal folk model, i.e. more or less entrenched beliefs about animals, their character, their typical behavior, and their value on an ontological hierarchy or on the 'Great Chain of Being', in the terminology of Lakoff and Turner (1989: ch. 4). For example, one can safely assume that humans are universally higher-ranked than domesticated animals like dogs and cats, which, in turn, are higher-ranked than, say, rats and cockroaches. The ranking may however differ from culture to culture. In Western mythology, dragons are monstrous reptiles that have to be slain by valiant knights, whereas in the Chinese tradition the dragon is considered to be a friendly and benevolent animal. Rats, which are generally regarded as despicable and unclean creatures in Western culture, enjoy, according to *Wikipedia*, a much better reputation in China, and are endowed with mostly positive

character traits. The rat is the first animal (of twelve) in the Chinese zodiac and "[p]eople born in [the year of the rat] are expected to possess qualities associated with rats, including creativity, intelligence, honesty, generosity, ambition, a quick temper and wastefulness."[5] A final point to be made with regard to models is that, intraculturally, beliefs about animals (as about anything else) may change, and it is an interesting question if, when, and how such changes in a cultural model affect the linguistic system as such. This issue is briefly touched upon in section IV.

We assume that folk models of the sort described in the preceding paragraph feed into the semantic reading of the animal term used as a verb in critter constructions, as depicted in Figure 3. The diagram should be read from bottom to top. First, the ***Animal term*** and the ***Prt*** are linked via double-headed arrows (representing the sign relation) to their respective meanings, rendered in small capital letters. Second, the ***Animal term*** evokes a cultural model, represented by propositional information inside the 'cloud'. Third, a salient *behavioral* component of the folk model is selected as the crucial meaning element of the semantic representation (viz. ANIMAL BEHAVIOR). This selection process can be called metonymic because it is brought about by a WHOLE-PART operation (WHOLE ANIMAL FOLK MODEL FOR SOME ELEMENT OF THE ANIMAL FOLK MODEL). Thus the change of word class from noun to verb in critter constructions is *motivated by metonymy*, not by metaphor (as assumed by Deignan 2006). Fourth, the component ANIMAL BEHAVIOR is metaphorically mapped into the human domain via the metaphor HUMANS ARE ANIMALS or, more specifically, BEHAVIOR OF HUMANS IS BEHAVIOR OF ANIMALS. This metaphor is then applied to a particular situation to describe an animal-like action of a person (or group of persons).

As to the particle ***Prt***, its source sense starts out as a spatial image schema and develops, via metonymic chaining, into an aspectual meaning (Brinton 1988: ch. 4), i.e. it determines whether the behavior denoted by the critter verb is to be interpreted as an activity, an accomplishment, or an achievement, in the terminology of Vendler (1957). We elaborate the metonymic chaining leading to the aspectual target sense of the particle in section III.2.

[5] Source: http://en.wikipedia.org/wiki/Rat#In_Asian_cultures

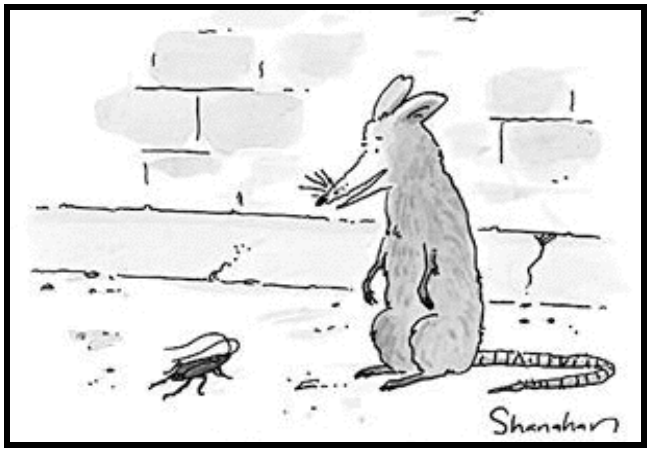
To conclude, we emphasize again that the overall meaning of a critter construction is not determined compositionally. Rather, the construction of its meaning involves an operation of 'sense specialization', which provides for the idiosyncratic, non-predictable but motivated meaning of the verb+particle 'gestalt'. This point is taken up again in section III.2, where specific critter constructions are discussed.

III.2. Three case studies

In the following three subsections we analyze three critter constructions in more detail, by applying the template presented in Figure 3.

III.2.1. Rat out

A good starting-point for the analysis of the critter construction *rat out* is a cartoon from the *New Yorker*, shown in Figure 4.[6]



"I love your work."
Figure 4. Humor based on a negative *rat* model.

Animal cartoons are a rich source for the identification of underlying animal folk models because their humorous effects often rely on a stereotypical conception of the animal in question. In Figure 4, one despicable animal, the rat, addresses perhaps an

[6] Source: gc.allpostersimages.com/images/P-473-488-90/60/6010/6J5B100Z/posters/ danny-shanahan-i-love-your-work--new-yorker-cartoon.jpg

even more despised critter, a cockroach, praising its 'work'. Both critters have traditionally been ranked very low on the Great Chain of Being.

With respect to the particle verb *rat out* 'inform on', it comes as no surprise that its meaning is pejorative; morally reprehensible actions such as informing on somebody are committed by morally depraved persons – and rats are believed to embody vile character and behavioral traits. The description of such vile actions as *rat out* is therefore highly motivated (although not predictable; see section III.1).

Figure 5 diagrams the conceptual structure of *rat out*.

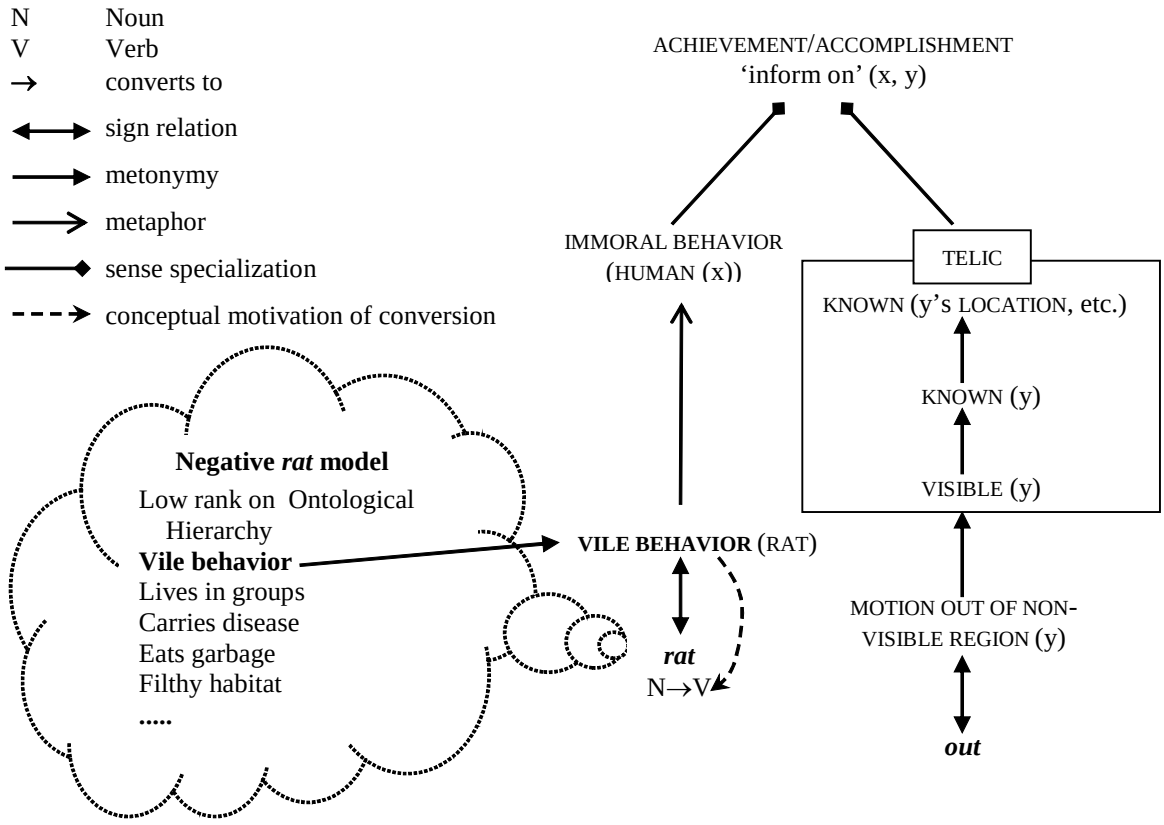


Figure 5. Conceptual structure of *rat out*.

The analysis of *rat out* proposed in Figure 5 reads as follows. We begin with the meaning contribution of *rat*. The relevant component of the rat model for the interpretation of *rat* is the attribute VILE BEHAVIOR. This negative rat attribute is metaphorically mapped onto the human property IMMORAL BEHAVIOR. The final operation (sense specialization) narrows down the general sense IMMORAL BEHAVIOR OF A HUMAN to the specific immoral action of INFORMING ON some fellow human.

The spatial source sense of the particle *out* contributes an aspectual value to the overall meaning of *rat out* via a series of metonymies. In its source sense, *out* designates the motion of some object *y* (here, the patient *y*) from a non-visible region into a region where *y* can be seen by some third party; VISIBILITY of *y* is then, via metonymic inference, linked to KNOWLEDGE about *y*; and finally, there is an inference from KNOWN (y) to KNOWN (y's LOCATION, INTENTIONS, etc.), i.e. the patient's location, plans, etc. are revealed to some third party by the informer *x*.[7]

The final product of the above metaphoric and metonymic mechanisms is a specialized idiosyncratic meaning. The particle *out* contributes to the construction a telic aspect and the aspectual meaning ACHIEVEMENT or ACCOMPLISHMENT.[8] The specific verbal meaning 'betraying someone by informing a third party on someone's location, plans, etc.' is motivated by the vile and morally depraved behavior of the informer, but is not strictly predictable from the cultural model of rats.

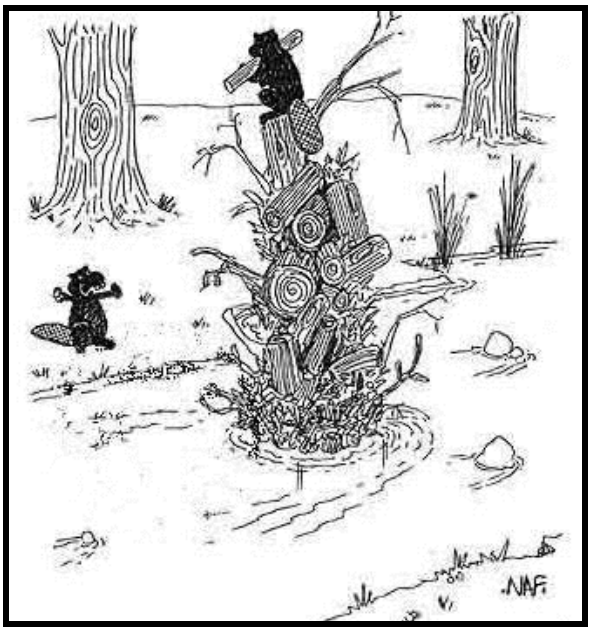
Note that what is coded in the critter construction *rat out* is one salient negative aspect of the rat model. But, in fact, in other constructions *rat* can also have a more positive connotation, e.g. in compounds such as *rugrat* 'toddler, child crawling on the floor', which evokes a potentially more endearing model of rats than the one conveyed by *rat out*. We return to this point in section IV.

III.2.2. Beaver away

The critter construction *beaver away* evokes a folk model of beavers as industrious, hard-working animals. The cartoon in Figure 6 presupposes such a model and exploits it for humorous purposes.

[7] As proposed by various scholars, e.g. Barcelona (2000), Radden (2002), Panther (2006), the relation between VISIBILITY and KNOWLEDGE is basically metonymic rather than metaphoric (as assumed by Sweetser 1990: 37–40).

[8] *Rat out* can be used as an achievement in sentences like *At midnight he ratted out his accomplices* (punctual interpretation) or as an accomplishment in *Within three days he ratted out all his accomplices.*



"Not *up* the way, you idiot, *across* the way!"
Figure 6. The industrious (but stupid) beaver.

The conceptual structure of *beaver away* is diagrammed in Figure 7.

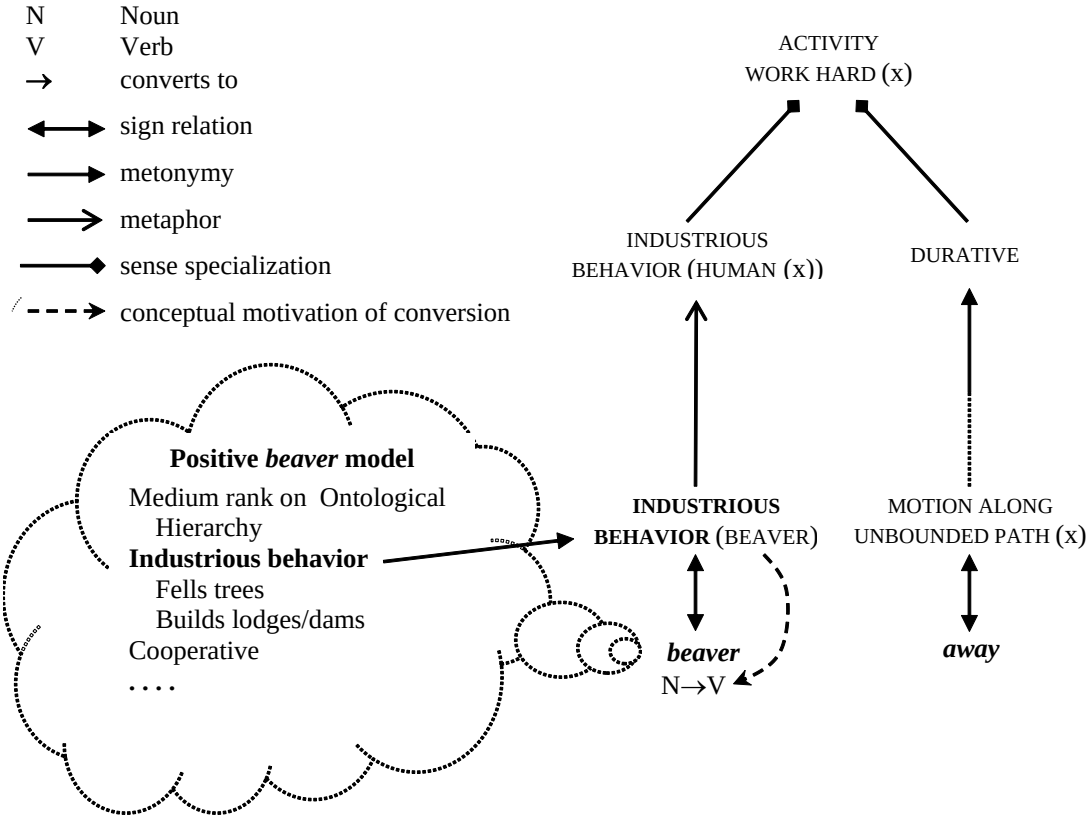


Figure 7. Conceptual structure of *beaver away*.

The feature selected from the beaver model in *beaver away* is INDUSTRIOUS BEHAVIOR, which is metaphorically mapped into the human domain and used to conceptualize the human activity of working hard. The particle *away* marks the aspect of the event coded by *beaver* as DURATIVE. How is it possible for *away* to code the durative aspect? We propose that it has a dynamic meaning, evoking the motion of some *x* (the agent of the activity) along an unbounded path. In Figure 7 we again interpret the relationship between the spatial particle, in this case *away*, and its aspectual target meaning as metonymic. In other words, the movement of an object along a path invites the metonymic inference of (unbounded) temporal extension. An alternative way of interpreting the relation between the source and target sense of *away* would be to regard it as a metaphor that establishes correspondences between the movement of *x* along an unbounded path and an unbounded activity of *x*. In our view, however, conceptual metonymy is the more basic cognitive mechanism to account for the relationship between source and target meanings of *away* in *beaver away*. Given our knowledge of the world, we have an immediate spontaneous association between the motion of an object along a trajectory and its temporal extension. This associative linking is a typically metonymic process (see Figure 2).

III.2.3. Clam up

The folk model of clams that is relevant to the *source* meaning of *clam up* is nicely illustrated by the cartoon in Figure 8:

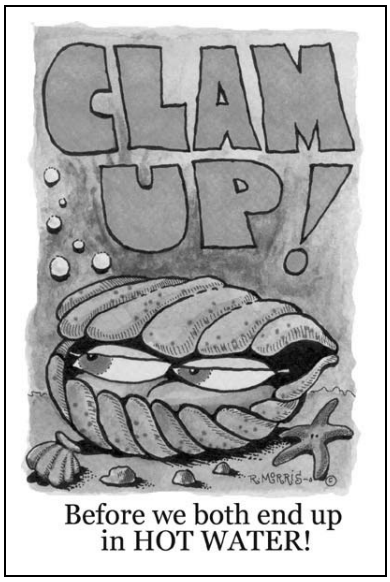


Figure 8. Clam issuing a warning to take protective action (i.e. close shells).

The *target* sense of *clam up*, i.e. 'abruptly stop talking', is diagrammed in Figure 9.

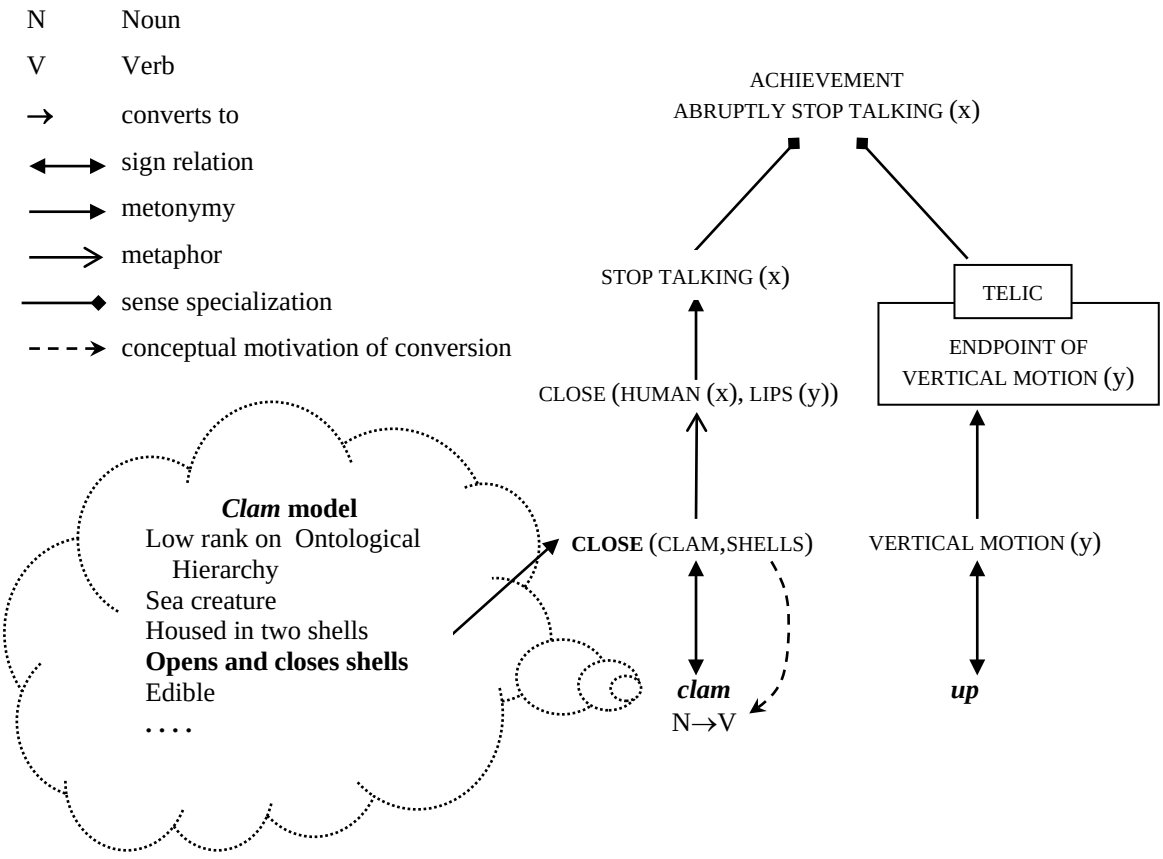


Figure 9. Conceptual structure of *clam up*.

Being a bivalve mollusk, the clam is presumably low on the ontological hierarchy; however, unlike rats and cockroaches, it is not associated with any particular negative attributes. The feature in the folk model that has become conventionalized in *clam up* is the capability of clams to close their shells instantaneously when under threat, and it is this attribute that is likened to the action of a person suddenly closing his or her lips. This action stands metonymically for 'stop talking' or 'falling silent'. The aspectual meaning of *clam up* is contributed by the particle *up*, which evokes vertical movement (of *x*) toward a completion point (marked as TELIC in Figure 9). Since *clam up* is conventionally interpreted as 'abruptly stop talking', it has the aspectual feature PUNCTUAL, which accounts for its ACHIEVEMENT sense or, more generally, perfective meaning. The punctual aspect of *clam up* is depicted in detail in Figure 10.

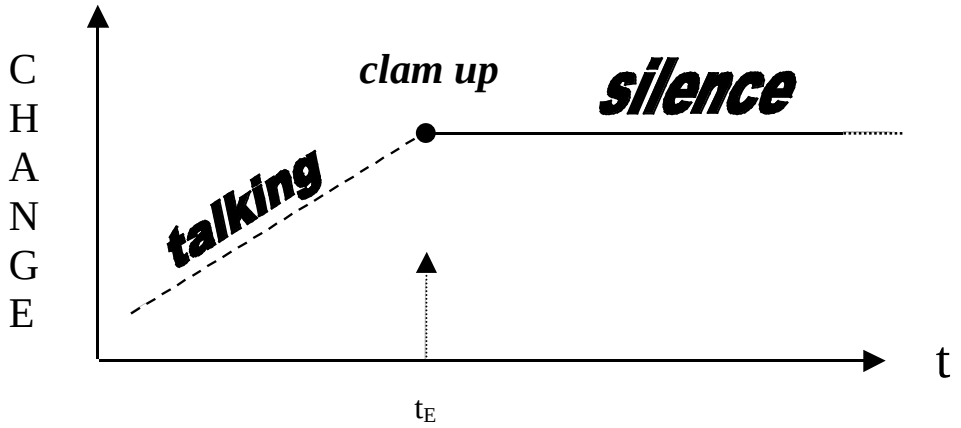


Figure 10. Punctual aspect of *clam up*.

In Figure 10, the sloped dashed line represents a backgrounded (or presupposed) phase of the *clam up* event, namely talking. The large dot marks the moment (t_E) at which talking ceases. It is this point of change that is actually coded by the expression *clam up*. After this culmination point, a state of silence ensues, which is marked in Figure 10 by an indefinitely extended horizontal line.

IV. CONCLUSIONS

In this chapter we have shown that the meanings of the converted animal terms in critter constructions are not predictable, but are *motivated* by animal folk models. One behavioral component of an animal folk model is *metonymically* selected and *metaphorically* projected into the human domain as HUMAN BEHAVIOR. Thus the change of word class (N → V) in critter constructions is motivated by metonymy, not by metaphor.

The particle in critter constructions has an aspectual value, e.g. TELIC, DURATIVE, or PUNCTUAL. It is derivable via metonymic inference(s) from a spatial image schema. The aspectual value of the particle thus motivates the lexical aspect of the whole critter construction as ACTIVITY, ACHIEVEMENT, or ACCOMPLISHMENT, for example.

The folk models that are evoked by VPrt critter constructions (at least the ones investigated herein) appear to be extremely conservative. They are susceptible to 'cultural lag', that is, they are neither immediately influenced by new scientific insights nor by innovative cultural developments leading to changes in the attitudes toward animals. To limit our discussion to just one example, rats could plausibly be characterized as very industrious (just like beavers) and one might expect that *rat away* could mean, in some contexts, 'work industriously'. Although one could argue that *rat away* is 'blocked' by the pre-existing *beaver away*, that does not preclude the possibility that there exists another blocking factor, namely the negative cultural model of rats. Likewise, scientific models of rats characterize these rodents as being smart and resourceful, in fact capable of finding their way out of complicated mazes. Given that many educated speakers are most likely familiar with such studies popularized in the media, one might expect that sooner or later the linguistic community would coin the expression *rat one's way out* meaning 'find a solution to a difficult problem', which in fact has not happened. Likewise, the creation of a related particle+verb expression *outrat* in the sense of 'outfox' or 'outsmart' seems to be highly unlikely. In its usage as a verb, the semantics of *rat* seems to be constrained by the negative folk model discussed in section III.2.1.

Yet, as also noted in section III.2.1, constructions other than the VPrt critter construction – specifically, compounds with *rat(s)* functioning as the morphological

head in the previously mentioned *rugrats* (‘toddlers/young children who play on the floor’) – seem to be a linguistic vehicle through which a less negative image of rats may be conveyed. Similar neologisms are *mallrats* (‘adolescents/teenagers hanging out at the mall’ and *sprawlrats* (‘college students who share suburban housing’). In its function as the head in compounds, *rat(s)* evokes the social organization of rats (living in groups) while the modifier (*rug*, *mall*, and *sprawl* – ‘sprawling suburban neighborhood’) references the habitat where the metaphorized ‘rats’ spend large amounts of their time. ‘Group’ and ‘habitat’ *per se* are relatively neutral meaning components in these compounds despite their origin in the rat model. In contrast, when *rat* functions as a modifier in compounds, e.g. *rat-infested, rat-hole* (‘squalid habitat/hiding place’), *rat race* (‘fiercely competitive struggle for wealth/power’), and *rat bag* (Br. ‘unpleasant/disliked person’), to name but a few, extremely negative components of the rat model, like ‘squalid’, ‘vile, ‘diseased’, and ‘fiercely combative’, are evoked. These observations show that different types of grammatical constructions containing *rat* as a noun or verb interact differentially with the rat folk model (see also the discussion of sentences (1)–(5) in section II). Exploring this question would constitute an interesting line of research.

In general, however, we hypothesize that linguistic codings have a tendency to ‘freeze’ cultural models, sometimes from centuries past, and thus quite often reflect outdated worldviews and theories – including biological models. In contrast, in other *semiotic* systems, e.g. the visual arts, new cultural models may be adopted and implemented more readily than in the language system. To see this, consider Figure 11, which shows a lab rat ‘out of work’.

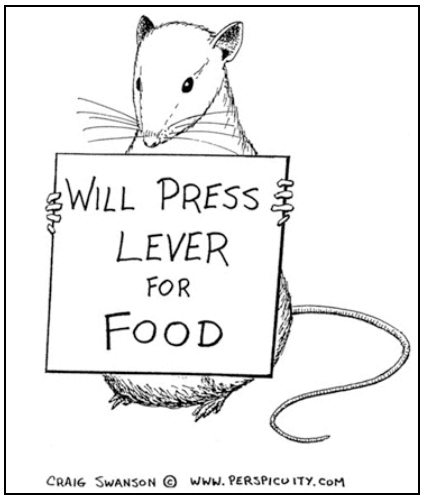


Figure 11. A empathetic *rat* model.

The rat image in Figure 11, a Beatrix Potter-like depiction of the animal, empathetically represents a situation with which humans, in a period of economic stress, can readily identify. The cartoon captures an aspect of the 21st century human condition (the desperate search by many people for any kind of work, even if it is inhumane, unpaid, and humiliating) and, in so doing, stands the centuries-old folk model of rats on its head.

REFERENCES

Barcelona, A. 2000. "On the plausibility of claiming a metonymic motivation for conceptual metaphor". In Barcelona, A. (Ed.) *Metaphor and Metonymy at the Crossroads: A Cognitive Perspective*. Berlin/New York: Mouton de Gruyter, 31–58.

Bridoux, A. (Ed.) 1953. *Oeuvres et lettres de Descartes*. Paris: Gallimard.

Brinton, L.J. 1988. *The Development of English Aspectual Systems*. Cambridge: Cambridge University Press.

Clark, E.V. and Clark, H.H. 1979. "When nouns surface as verbs". *Language* 55, 767–811.

Deignan, A. 2006. "The grammar of linguistic metaphors". In Stefanowitsch, A. and S.T. Gries (Eds.) *Corpus-Based Approaches to Metaphor and Metonymy*. Berlin/ New York: Mouton de Gruyter, 106–122.

Dirven, R. 1999. "Conversion as a conceptual metonymy of event schemata". In Panther, K.-U. and G. Radden (Eds.) *Metonymy in Language and Thought*, Amsterdam/Philadelphia: John Benjamins, 275–287.

Drabble, M. (Ed.) 2000. *The Oxford Companion to English Literature*. Oxford/New York: Oxford University Press.

Goatly, A. 2006. "Humans, animals, and metaphors". *Society and Animals* 14 (1), 15–37.

Lakoff, G. and Turner, M. 1989. *More than Cool Reason*: *A Field Guide to Poetic Metaphor*. Chicago: The University of Chicago Press.

***Longman Dictionary of American English* (LDAE)**. 1983. White Plains, NY: Longman.

***New Oxford American Dictionary*.** 2010. Stevenson, A. and C.A. Lindberg (Eds.). Oxford: Oxford University Press.

***Oxford Dictionary of Current Idiomatic English*. Vol. 1: Prepositions & Particles.** 1975. Cowie A.P. and R. Mackin (Eds.). London: Oxford University Press.

Panther, K.-U. 2006. "Metonymy as a usage event". In Kristiansen, G., M. Achard, R. Dirven, and F.J. Ruiz de Mendoza Ibáñez (Eds.) *Cognitive Linguistics: Current Applications and Future Perspectives.* Berlin/New York: Mouton de Gruyter, 147–185.

Panther, K.-U. and Radden, G. 2011. "Introduction: Reflections on motivation revisited". In Panther, K.-U. and G. Radden (Eds.) *Motivation in Grammar and the Lexicon*. Amsterdam/Philadelphia: John Benjamins, 1–26.

Quinn, N. and Holland, D. 1987. "Culture and Cognition". In Holland. D. and N. Quinn (Eds.) *Cultural Models in Language and Thought*. Cambridge: Cambridge University Press, 3–40.

Radden, **G**. 2002. "How metonymic are metaphors?". In Dirven, R. and R. Pörings (Eds.) *Metaphor in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 407–434.

Ris-Eberle, S. 2004. "Tiere in der Religion Ägyptens: Tiere als Götter im Alten Ägypten?" *UniPress* 122. Bern: Universität Bern, Abteilung Kommunikation, 50–53.

Sweetser, E.E. 1990. *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.

Thornburg, L.L. and Panther, K.-U. 2000. "Why we subject incorporate (in English): A post-Whorfian view". In Pütz, M. and M.H. Verspoor (Eds.) *Explorations in Linguistic Relativity*. Amsterdam/Philadelphia: John Benjamins, 319–343.

Vendler, Z. 1957. "Verbs and times". *The Philosophical Review* 66, 143–160.

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Verb-particle constructions in the language of business and finance

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ABSTRACT

Although verb-particle combinations are generally relatively uncommon in formal English, they occur with a certain frequency in texts related to the economy, and specifically in journalism and academic analysis focusing on the financial markets. The first part of this paper consists of a corpus study of the verb-particle combinations found in two 200,000 word corpora of business English, one consisting of market reports from the Financial Times, the other of academic research papers on economics from a series of peer-reviewed journals. The particles UP, DOWN, OFF, OUT, BACK and AHEAD are found to be particularly frequent, in combination with a wide range of verbs, mainly verbs of motion. The last section of the paper provides some models for creating exercises for teaching purposes, which start from an analysis of the metaphors associated with each particle and progress to comprehension of real examples from market reports published in the Financial Times.

Keywords: *Verb-particle constructions, phrasal verbs, cognitive metaphor, financial English, business English*

I. INTRODUCTION

Traditional semantic approaches to the meaning of verb-particle constructions often consider them to be arbitrary. However, research in the area of cognitive metaphor has shown that particles may operate in a more systematic way than is initially apparent, reflecting the logic of what has been termed "spatial grammar" (Lindner 1983, Morgan 1997). This approach appears to offer considerable pedagogical benefits (Alejo 2011). Unfortunately, progress in this area has been limited, partly because of the complexity of the phenomenon of the verb-particle construction (VPC) itself, which resists categorical delimitations (Lipka 1972), and partly because verb-particle usage is chiefly found in the spoken language, where it is highly idiomatic and subject to many regional and other sociolinguistic variations. For this reason, it could be argued that specialised language offers a particularly useful scenario for exploring cognitive approaches to teaching VPCs (Campoy 2002, Porto and Pena 2008), since the lexical range is more constrained and the VPCs may be more likely to conform to a particular set of

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metaphorical meanings. Within this limited framework, it may be possible to provide some cognitive scaffolding which will help readers to identify the metaphors that are being activated by specific particles, with a view to facilitating comprehension of specialised texts.

This paper makes a contribution to the study of verb-particle combinations by focusing on phrasal verb use within a specialised area of formal written English. Although VPCs are generally quite uncommon in formal English, they occur with a certain frequency in texts related to the economy, and specifically in journalism and academic analysis focusing on the financial markets. The VPCs that occur most frequently in financial writing are studied here using corpus techniques, and then analysed in terms of cognitive metaphor.

II. CORPUS STUDY

II.1. Corpus and method

Two 200,000-word corpora were constructed from different genres in the general area of financial English. The first of these consisted of texts from the "market report" section of the Financial Times. All the texts available on the online version of this newspaper were downloaded on two days each week from January to September 2007, and stored as text files. The second corpus consisted of the same number of words taken from academic articles relating to the discipline of business and finance from the Business and Economic Journal and the British Journal of Management, published in the years 2007-2009.

WordSmith tools were used to identify a wide range of VPCs. In particular, searches were conducted using the WordSmith concordance tool to obtain all the combinations of verbs with prepositions, and the concordance files were then scanned manually in order to collect the relevant examples. These were then analysed and sorted into categories based on the possible underlying cognitive metaphors. Basic or prototypical meanings were mapped out and, where possible, metonymic or metaphorical extensions of these were suggested for the non-prototypical VPCs.

II.2. Results and analysis

Particles were found to be much more frequent in the FT corpus than in the academic corpus. The most frequent particles in both corpora were IN and TO, but on consultation of the concordance lists it was found that these were not as generative of VPCs as some other particles, since IN was generally used to denote position, and TO was usually part of the infinitive. In the FT market reports corpus, the particles UP, DOWN, OFF, OUT, BACK and AHEAD were found to be particularly frequent, and were used in combination with a wide range of verbs, many of which belong to the field of motion. Table 1 shows the relative frequency of these particles in the two corpora (raw figures were normalised to frequency per 10,000 words).

Table 1. Frequency of particles in the academic and the FT corpus (per 10,000 words).

	Academic corpus	**FT corpus**
Ahead	0.1	9.2
Back	0.6	6.6
Down	1.5	19.1
Off	2.2	10.6
Out	5.9	8.9
Up	5.1	33.4

It is evident from these figures that a study of VPCs is particularly useful and interesting in the context of financial journalism. The frequent use of VPCs appears not to be a feature of economic language as such, but to be dependent on genre. It is generally accepted that academic genres make little use of VPCs. It is less widely recognised that VPCs play a significant role in written media genres, and that this holds even for publications that are considered to use a relatively formal level of language. In what follows, the majority of the examples are drawn from the FT corpus, because of the abundance of data from this source.

First, a number of cognitive schemata were identified which started from a prototypical meaning and then gave rise to semantic extensions by metonymy or metaphorisation. An overview of the different cognitive schemata identified in the context of these particles is provided in Tables 2 to 7 below. For example, the primary metaphor UP IS

MORE and DOWN IS LESS was found to be expressed in many different ways, often through a manner of motion verb in combination with UP and DOWN. A total of 13 verbs were used with UP and 16 with DOWN, which referred to upward/downward movement or position to convey an increase or decrease. The most frequent examples were manner-of-motion verb combinations such as "move up/down", "shoot up" or "go down". However, it was notable that transitive verbs implying the influence of external forces were also commonly used, and were particularly frequent in combination with DOWN, an example being "push up/down". There were also many combinations implying negative use of force, such as "beat down", "drag down" and "weigh down".

However, these schemata were not the only cognitive metaphors associated with these particles, since UP was also associated metonymically with greater visibility ("came up with"), with intensification ("hot up"), with the forging of a link ("join up", "team up", "link up", "make up") and with a perfective sense implying the definitive completion of an action ("break up"). The range of uses for UP in these texts thus extends beyond those defined by Lee (2001) and Neagu (2007), and involves a wide and somewhat contradictory range of metaphors.

In the case of the particles AHEAD and BACK, the dominant schema UP IS MORE and DOWN IS LESS was mirrored by typical uses of the path metaphor FORWARD IS MORE and BACKWARD IS LESS. Examples of this included "race ahead" and "go ahead", for positive stock movements, and "fall back", "drop back" and "edge back" for a decline in share prices. However, the implications of this second metaphorical schema were found to be slightly more complex than might appear at first sight, since they sometimes had the additional connotation of progress in the face of adversity (FORWARD), as in the example "press ahead". Moreover, the particle BACK was found to have two contradictory uses, since it sometimes indicated regress to an earlier low point, as in the example "fall back", while it sometimes denoted recovery or resurgence, as in the case of "bounce back".

The particles OUT and OFF were more challenging to analyse. The VPCs including these particles tended to rely on an underlying container metaphor, and most of the uses found in the texts appear to reflect some aspect of this. Of the two, OFF offers the simpler schema, since OFF generally reflects separation from the container, and is used

with a wide range of verbs to this effect (e.g. "split off", "shrug off", "hive off", "brush off", "dust off"). However, the case of OUT was more complex. The most obvious set of VPCs contain OUT used to denote escaping from containment ("go out", "break out") and OUT used with transitive verbs to indicate removal from containment ("strip out", "squeeze out"), both of which have their basis in the schematic meaning of "out" which can be visualised from the mental image of the container (Tyler and Evans 2003). Nevertheless, these are harder to reconcile with OUT as gradual transition into non-availability ("peter out", "die out"), which arguably relates to OUT as expansion ("spread out", "draw out") or distribution ("eke out") (Morgan 1997, Rudzka-Ostyn 2003). Although all of the schemata seem to be loosely related to the containment metaphor, the resulting VPCs do not follow a consistent pattern, since in some cases OUT indicates being or going out of containment ("break out"), while in other cases, OUT indicates being or going out of existence ("peter out"). Furthermore, this material also contained some atypical combinatory uses of OUT such as "point out", which is hard to place within the available schemata, although it has been suggested that the underlying pattern is still a variant on the container metaphor, but that the kind of containment indicated here reflects accessibility to cognition, rather than physical availability (Lindner 1983). As Neagu (2007) notes, the range of meanings associated with OUT tends to reflect two opposing tendencies. In one of these, the metaphorical landmark is existence, knowledge, availability, and so on, and OUT adds to the verbal meaning by indicating escape from concealment ("break out") or extension over space or time ("eke out"). In the other tendency, OUT indicates disappearance or unavailability ("go out", "die out"), that is, OUT in the sense of making an exit from existence or consciousness. To a certain extent, the range of use of OUT seems to mirror the applications of the prefix "ex" in verbs derived from Latin: for example, "extend" is "spread out"; "exit" is go out, "extinguish" is "put out", "extinct" is "died out", and so on. Perhaps the simplest explanation of the behaviour of OUT is that it usually indicates that a border is being crossed, between what is available and what is not, or what is contained and what is not. The problem is that in the case of an unfamiliar combination, it is not easy to determine which way the transition goes. As in the case of the prefix "ex", it is clear that OUT denotes the crossing of a border between accessibility and inaccessibility, but it is not clear in which direction.

Table 2. VPCs with UP.

UP	UP IS MORE – movement (“go up”/ “put up”) or position (“be up”)
	UP IS ACCUMULATION (“build up”)
	UP IS VISIBLE (“turn up”)
	UP IS MORE INTENSE (“heat up”)
	UP IS RESISTANCE – maintaining strength (“face up”)
	UP IS CONTINUITY (“keep up”)
	UP IS LINK – union with others (“join up”)
	UP IS PERFECTIVE – action is completed (“finish up”)
	UP IS DISINTEGRATION (“break up”)

Table 3. VPCs with DOWN.

DOWN	DOWN IS LESS – movement (“go down”/ “push down”) or position (“be down”)
	DOWN IS LESS INTENSE (“calm down”)
	DOWN IS FOUNDATION – basic or permanent (“settle down”)
	DOWN IS PERFECTIVE – action is completely finished (“break down”)

Table 4. VPCs with AHEAD.

AHEAD	AHEAD IS MORE – path metaphor (“go ahead”)
	AHEAD IS OVERCOMING RESISTANCE (“press ahead”)
	AHEAD IS FUTURE (“look ahead”)

Table 5. VPCs with BACK.

BACK	BACK IS LESS – path metaphor (“drop back”)
	BACK IS RETURN – (“bounce back”)

Table 6. VPCs with OFF.

OFF	OFF IS SEPARATION – part/whole metaphor (“split off”)
	OFF IS DEFENCE – (“fend off”)
	OFF IS NEGATION – (“call off”)
	OFF IS PERFECTIVE – action is completed (“finish off”)

Table 7. VPCs with OUT.

OUT	OUT IS ESCAPE FROM CONTAINMENT – inside/outside metaphor (“break out”)
	OUT IS REMOVAL FROM CONTAINMENT – (“throw out”)
	OUT IS TRANSITION TO NON-AVAILABILITY – (“fizzle out”)
	OUT IS EXPANSION – (“spread out”)

	OUT IS TRANSITION TO AVAILABILITY – (“point out”)
	OUT IS RESISTANCE – (“hold out”)
	OUT IS RESCUE – (“help out”)
	OUT IS ORDER – (“sort out”)
	OUT IS PERFECTIVE – action is completed (“buy out”)

The generation of substantive forms involving a verb and particle (sell-off, buy-out, spin-off) is a particular feature of financial English. In the present corpus, it appears that this is only generative in certain cases, particularly those involving verbs indicating financial transactions related to buying, selling or rescuing companies. The vast majority of VPCs which occur in these corpora are not found in substantive form, and seem not to offer this potential. Table 8 provides a list of the verb-particle combinations used as nouns found in the present corpus. In the corpus, various orthographic variants occurred (e.g. “crackdown”, “buy out”), but for reasons of style, all the examples are presented here with hyphens.

Table 8. Substantives formed with VPCs.

UP	break-up, build-up, catch-up, pick-up, tie-up
DOWN	crack-down
AHEAD	go-ahead
BACK	buy-back, set-back, claw-back, cut-back
OFF	sell-off, spin-off, split-off
OUT	bail-out, buy-out, clear-out, stand-out

III. IMPLICATIONS FOR TEACHING

In this section, the implications of these findings for teaching are discussed, and some exercises are presented which exploit the potential offered by cognitive linguistics in this area (Alejo 2011).

The notion that cognitive metaphor could be used to shed light on the meaning of VPCs for the benefit of learners is not new (Kövecses and Szabó 1996, Kurtyka 2001, Dirven 2001, Rudzka-Ostyn 2003, Pavlović 2010). If the underlying notion is that “prepositions encode mental idealisations of spatial scenes whose meanings, through a process of

abstraction, can be extended to other domains to express more abstract concepts" (Porto and Pena 2008), then these "idealisations" may be accessible to second language learners as well as to native speakers. Some studies have shown promising results (Nhu and Huyen 2009), while others found little difference in terms of outcomes between teaching methods designed to exploit the potential of metaphor and those that did not, particularly in studies which focused on productive language use rather than comprehension (Juchem-Grundmann 2009). The examples offered here are underpinned by the notion that it is pedagogically useful to find means of sensitising students towards the ways in which certain particles modify the meaning of the verb. They follow the principle that students should be encouraged to learn VPCs in groups that follow a similar pattern, rather than groups which simply share the same verb or particle.

Example 1. Sensitising students to the function of certain particles.

A. When a verb is used with the particle UP, we often expect it to indicate upward movement or a high position, because we associate UP with MORE: if a number increases, it goes up. Look at the following examples from market reports that contain the particle UP. Which of the examples follow this pattern? Which do not?

a. McDonalds edged up 0.9%, reaching its highest point of the week.

b. Tullow oil moved up 3.5% to 409p amid speculation about a take-over bid.

c. Falling equity markets pushed up short-term bond prices.

d. The online poker company shot up to 42p to a record high.

e. There were rumours that News of the World had teamed up with a high street retailer to offer an exclusive package.

f. M&S are believed to be planning to link up with a Dutch company to facilitate European expansion.

g. The consortium is likely to break up ABN if its bid is successful.

h. The two companies appear to have reached an agreement to carve up the utility between them.

B. Look at the examples which do not follow the pattern UP IS MORE. Can you see any other patterns? What functions does UP have in these examples?

C. Now look at the examples below. These new examples follow the same patterns as some of the examples in a-h. Can you identify them and match them with similar examples in a-h?

i. The two companies' decision to join up was confirmed by management spokesmen today.

j. There were fears that politicians would rip up the eurozone's current policy agreements.

D. Which of the following patterns is exemplified by each example?

UP IS LINK

UP IS DISINTEGRATION

E. What would happen in the case of examples g, h and j if the particle UP were removed? Would the meaning of the sentence be changed in any way?

Example 2. Presenting patterns of VPC use.

A. Look at the following examples. The particle OUT is often used to indicate that something has crossed a border or made a transition. What kind of transition can you conceptualise in each case?

a. Oil prices will rise if war breaks out.

b. Economic coordination has gone out of fashion.

c. The Prime Minister ruled out a possible intervention.

B. Another idea that is often associated with OUT is the notion that something is being spread or extended over time or space. Look at the following examples to see how this works.

a. The construction work may well stretch out beyond the first half of the year.

b. The Nikkei managed to eke out a small rise on Monday.

C. One further idea that is sometimes conveyed by OUT is that something crosses the border into unavailability or disappears. Here are two examples to illustrate this.

a. A two-day rally petered out despite heavy bidding.

b. MMO2's early gains fizzled out, leaving the stock lower than last week's prices.

We can summarise the three patterns described in A, B and C as:

OUT IS LEAVING A SPACE

OUT IS EXTENSION

OUT IS DISAPPEARANCE

D. Which role of OUT is found in each of these examples?

a. All 120 000 tickets were sold out in the first few hours.

b. The acquisition process was drawn out over several months.

c. Stocks flicked in and out of positive territory.

Example 3. Reading comprehension exercise.

Read the market report from the Financial Times, and complete the tasks below.

Wall Street draught cools Tokyo rally

1. Tokyo shares fell on Thursday as the momentum behind a two-day rally **petered out** in spite of continued bullishness in the banks sector.

2. The Nikkei average lost 64.51 points, or 0.7 per cent, to close at 8,599.66, while the Topix index closed down 0.5 per cent at 853.01. Analysts said the market **pulled back** as there was little good news to justify an extension of the rally which lifted shares by 2.5 per cent on either side of the Tuesday holiday. Electronics exporters were **knocked back** by an overnight fall on Wall Street that brought US shares to their lowest level since October. Toshiba and Fuji Photo Film both lost 1.9 per cent, falling to ¥364 and ¥3,650 respectively, while Sony dropped 1.7 per cent to ¥4,620.

3. A more precipitous fall was averted by further gains in the Topix banks index, which has risen 4.4 per cent since the start of the week. The sector has been buoyed by capital raising plans at Japan's big four banks which investors believe will **ward off** the need for government financial support.

1. What is the general picture of the Tokyo stock exchange painted by paragraph 1? What happened to the "two-day rally"? What can we infer from the context about the meaning of the verb "to peter out"? What metaphorical meaning is conveyed by the particle OUT?

2. What is the general trend reported in paragraph 2? What relationship is established between Wall Street and Japanese electronics exports? How can we picture the meanings of the verbs "to pull back" and "to knock back"? In what way do the two verbs differ in this paragraph? What metaphorical meaning is conveyed by the particle BACK?

3. Unlike paragraphs 1 and 2, paragraph 3 reports some positive news: the biggest Japanese banks will probably not need government support. Which words tell us this in the text? What metaphorical meaning is conveyed by the particle OFF?

4. Now that you have understood the general meaning of the text, look at the headline. The headline is also metaphorical: a "draught" is a current of cold air, which might "cool" someone who is sitting in the wrong place. How does this reflect the ideas in the text? Can you draw this metaphor?

IV. CONCLUDING OBSERVATIONS

This paper identifies the VPCs with UP, DOWN, AHEAD, BACK, OUT and OFF that appear in two corpora of texts related to economics and finance, and maps out the principal conceptual metaphors associated with these particles in the language domain of financial reports. This information is then used to develop pedagogical activities to raise students' awareness of the different metaphors associated with some of these particles. This theoretically-grounded approach to the teaching of phrasal verbs offers

an improvement on the random approximations offered by many current textbooks, and provides a model for further work. This makes a small contribution towards the ultimate aim of developing a comprehensive explanation of phrasal verbs that is wholly satisfactory to non-native students.

REFERENCES

Alejo, R. 2011. "Making sense of phrasal verbs: A cognitive linguistic account of L2 learning". *AILA Review* 23, 50-71.

Campoy Cubillo, M.C. 2002. "Phrasal and prepositional verbs in specialised texts: A creative device". *Ibérica* 4, 95-111.

Dirven, R. 2001. "English phrasal verbs: Theory and didactic application". In Pütz, M., S. Niemeier and R. Dirven (Eds.) *Language Pedagogy*. Berlin/New York: Mouton de Gruyter, 3-28.

Juchem-Grundmann, C. 2009. "Dip into your savings. Applying cognitive metaphor theory in the business English classroom. An empirical study". Ph. D. dissertation, Koblenz-Landau, Germany: University of Koblenz-Landau.

Kövecses, Z. and Szabó, P. 1996. "Idioms: A view from cognitive semantics". *Applied Linguistics* 17 (3), 326-355.

Kurtyka, A. 2001. "Teaching English phrasal verbs: a cognitive approach". In Pütz, M., S. Niemeier and R. Dirven (Eds.) *Language Pedagogy*. Berlin/New York: Mouton de Gruyter, 29-54.

Lee, D. 2001. *Cognitive linguistics: An introduction*. Oxford: Oxford University Press.

Lindner, S. 1983. *A lexico-semantic analysis of verb-particle constructions with UP and OUT*. Bloomington, IN: University of Indiana Linguistics Club.

Lipka, L. 1972. *Semantic Structure and Word- Formation: Verb- Particle Constructions in Contemporary English.* Munich: Wilhelm Fink Verlag.

Morgan, P. 1997. "Figuring out "figure out": Metaphor and the semantics of the English verb-particle construction". *Cognitive Linguistics* 8 (4), 327-358.

Neagu, M. 2007. "English verb particles and their acquisition: A cognitive approach". *RESLA* 20, 121-138.

Nhu, N. and Huyen, P. 2009. Conceptual Metaphor and Its Application in Teaching Phrasal Verbs to English Majors at Thuc Hanh High School, HCMC. Dissertation, Ho Chi Minh, Vietnam: Ho Chi Minh City University of Education.

Pavlović, V. 2010. "Cognitive linguistics and English language teaching at English departments". *Facta Universitatis, Linguistics and Literature* 8 (1), 79-90.

Porto, D. and Pena, C. 2008. "A cognitive approach to some phrasal verbs in English for specific purposes". *Ibérica* 16, 109-128.

Rudzka-Ostyn, B. 2003. *Word Power: Phrasal Verbs and Compounds. A Cognitive Approach.* Berlin/New York: Mouton de Gruyter.

Tyler, A. and Evans, V. 2003. *The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning and Cognition.* Cambridge: Cambridge University Press.

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A semantic and pragmatic approach to verb particle constructions used in cartoons and puns

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ABSTRACT

The aim of this paper is to discuss a special type of verb particle construction in English; namely, phrasal verbs used in cartoons and puns. Granted that the meaning of phrasal verbs may range from literal to idiomatic, their use in cartoons is artistically and linguistically exploited through a combination of verbal and non-verbal cues to convey humor, satire and fun. Our assumption is that this combination rests on the premise that a double reading of phrasal verbs in certain cartoons and puns is possible. To illustrate this, a sample of cartoons using phrasal verbs and puns (taken from www.ecenglish.com, *English Teacher Online LLC*) will be analyzed showing how the correspondence between the cartoon as a visual mode and the phrasal verb as a linguistic form can yield both literal interpretations and idiomatic ones. Phrasal verbs are also shown to violate Gricean maxims and to depend largely, in their interpretation, on extra linguistic factors.

Keywords: *cartoons, puns, phrasal verbs, Gricean maxims, (un)marked*

I. INTRODUCTION

There is an extensive body of literature dealing with phrasal verbs. Moreover, the manifold approaches towards such constructions seem to be controversial. Yet, it must be pointed out that in the treatment of phrasal verbs two major points should be stressed: 1) the problem related to their grammatical status and 2) The problem of their idiomaticity.

Some[1] consider that phrasal verbs are very different from verbs with prepositions both semantically and syntactically'. They see that in phrasal verbs the particle is intrinsically connected to the verb to form a single semantic unit. With verbs followed by prepositions, the preposition is part of a prepositional phrase and does not change the

[1] See **Leila Ranta**'s 2008 article "Figuring Out Phrasal Verbs: Practical Ideas from Research" where she states that "Many ESL textbooks make no distinction between phrasal and prepositional verbs calling them both 'phrasal verbs'. Unfortunately, this simplification may lead to greater confusion in the long run because phrasal and prepositional verbs have different characteristics" p. 1. And for a more elaborate and detailed discussion see Biber et al. 1999; especially Section 5 on multi-word lexical verbs pp.360-402, and section 13 on idiomatic phrases and free combinations pp. 990- 1028.

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meaning of the verb. Others[2], however, include both the adverb and the preposition as constituents of a phrasal verb.

If some linguists disagree on what elements constitute a phrasal verb, what they seem to disagree more about is whether to include those constructions having a literal meaning within the sphere of phrasal verbs or to consider them otherwise.

They have adopted two main positions with regard to the nature and use of phrasal verbs:

They see that the literal use of a form like *lift up, put down* and a host of others do not constitute a phrasal verb as such, but a verb operating with a particle and that the term *phrasal verb* should properly be reserved for figurative and idiomatic uses (Cf. Martha J. Kolln, and Robert W. Funk 2008: 35).[3] Others would consider that phrasal verbs may range from totally transparent to totally opaque. (Cf. McArthur 1992: 773).

Our aim in this paper is not to examine the problems in detail or to review the literature. Since this paper is concerned primarily with phrasal verbs used in cartoons and not with the theoretical aspects of phrasal verbs, our discussion will thus be related only to a clarification of points and concepts required for an understanding of the topic. We shall, therefore, focus on relevant points and mainly the transparency and idiomaticity of phrasal verbs and the role that contextual factors can play. Let us begin by the first element, the label *phrasal verbs*. For us, this term covers both the literal and figurative/idiomatic uses, and therefore includes syntax, morphology, and semantics.

Based on their approach, linguists refer to the combination of a basic verb and another word or words by using various labels, the most widely used of which is *phrasal verb*, the term we will be using in our analysis. Other labels used are *compound verbs, verb-adverb combinations, verb-particle constructions* (VPCs), or *two-part verbs* and *three-part verbs* (depending on the number of particles used). [4]

It is also commonly thought that almost every phrasal verb has a corresponding equivalent single verb. For example, *search* could be used instead of *look for*, as could

[2] Cf. **McArthur, T. (**1992) *The Oxford Companion to the English Language*. Oxford University Press.
[3] **Martha Kolln** and **Robert Funk** (2008: 35) suggested that "phrasal verbs define only those combinations that form an idiom, a phrase whose meaning cannot be predicted from the meaning of its parts."
[4] Cf. McArthur (1992:pp.72-76)

extinguish be used instead of *put out* and *continue* as an equivalent to *carry on* and the list of examples is long. However, the status assigned to phrasal verbs is somewhat prejudiced: they are said to be "informal, emotive and slangy" (McArthur 1992: 774), and are "extremely common, especially in spoken English. They are used more informally than their Latinate synonyms".

Fletcher (2005: 11) considers this to be an oversimplification and he considers that phrasal verbs, (which he calls Multiple Word Verbs)

> are used across all types of text, even when the writer or speaker has the option of choosing a single-word alternative. They tend to enter the language through casual speech, but gradually become accepted across a wider range of texts, reaching even the most technical or conservative text types.

Dwight Bolinger (1971) also notes that phrasal verbs are more expressive than the synonyms they replace. He contrasts *insult* with *jump on*; *exult* with *jump up and down with joy*; and *assault* with *jump at* (Cf. also Claridge[5] 2000, quoted in Lary Ceplair 2008, for a similar point).

It is not really true anymore to say that a phrasal verb always has a formal equivalent. The form you use or choose often depends on the context. There are now many phrasal verbs such as *check in*, *plug in* or *log on* that have come into English over the last years from science, technology and computing and they are known to have no alternative forms expressed in simple verbs. So when you use any of these phrasal verbs above you are not using a slang word that should be replaced by a formal verb since the phrasal verb is the only way of describing these actions.

Hence, it is simply not true to say that phrasal verbs are always slang and poor-quality English, since, as shown above, they may be the only way to express an idea. A wide range of phrasal verbs are metaphorical and ambivalent and therefore prone to diverse interpretations, which makes them more appropriate and playful in particular contexts and situations, as in jokes and cartoons.

[5] In her article "Multi-Word Verbs in Early Modern English" (2000), quoted in Larry Ceplair 2008, Claudia Claridge cites several phonic and syntactical reasons for the shift from single verbs to phrasal verbs. First, there was the lack of a fitting, one-word synonym for the thought to be expressed.: "Take advantage of" by "exploit"; "find fault with" by "criticize"; "fall short of" by "fail"; and "lay about" by "loll". Second, phrasal verbs are more precise and to the point. Her third reason is that phrasal verbs provide additional meaning. And her fourth reason is that phrasal verbs are more expressive, emphatic, playful, and metaphorical.

Phrasal verbs may range from totally transparent constructions to totally opaque ones with those at the opaque end of the scale as pure idiomatic phrasal verbs. The categorization of phrasal verbs as transparent or opaque depends on the contribution of the verb and particle to the overall meaning. When both of these keep their original concrete meaning, the phrasal verb is considered literal (Frazer 1976). If it is only the verb that retains its original meaning, however, it is then called semi-idiomatic (Spasov 1966). Finally, when neither verb nor particle keep their basic meaning, and a new meaning is assigned to the combined elements of the phrasal verb, it is known as idiomatic.

A different categorization also based on the combination and contribution of verb and particle yields four categories rather than just three. This alternative way of classifying such elements was suggested by Bannard et al. (2003), and quoted in Patrick and Fletcher (2006: 6), who see that phrasal verbs "can be sub-classified into four compositionality classes based on the independent semantic contribution of the verb and particle". They roughly categorize them in the following way (examples from Barnard et al. 2003):

(1) Both the verb and particle contribute semantically. For example, *Peter put the picture up*.

(2) Only the verb contributes semantically. For example, *Susan finished up her paper*.

(3) Only the particle contributes semantically, as when you say: *the thief made away with the case.*

(4) Neither the verb nor the particle contributes semantically. For example, *Barbara and Simon made out*.

Yet, the problem with these categorizations is that idiomaticity in phrasal verbs is more complex than that. Quite often, one and the same phrasal verb may have both a literal and a figurative meaning, depending on context, as the following examples can show:

Literal meaning	**Figurative meaning**
She **put down** the book	The army could not **put down** the rebellion in Libya.
She **looked into** a mirror	We will **look into** the problem together.
They **live on** the fourth floor.	They are poor and **live on** rice and beans.

Ambivalence is another characteristic of phrasal verbs. Some may have a wide range of different meanings depending on their use in the context. One notorious example is the phrasal verb *pick up,* which is frequently listed with around 20 different meanings in dictionaries: (understand/comprehend, retrieve from the ground, etc.). So it seems that the variety of meanings of a phrasal verb has more to do with contextual factors than with the construction itself.

How can we then draw a line between literal and figurative/ idiomatic uses of phrasal verbs and is it possible to do so? The answer seems to be far from positive because, as shown above, the same phrasal verb may have multiple meanings and may once be used literally and on other occasions metaphorically or idiomatically. Another reason is to be found in the semantic meaning of the parts that constitute the phrasal verb (verb + particle) and their contribution to the overall meaning (Barnard et al. 2003). Other contextual factors may also be involved when uttering the phrasal verb, as in cases of irony, jokes and cartoons.

This continuum from literal (transparent) to idiomatic (opaque) illustrated in the phrasal verbs above and the multiplicity of meanings of one and the same phrasal verb make them an interesting linguistic phenomenon. Phrasal verbs are exploited in diverse domains of language use, mainly in advertising and cartoons to convey double messages. For example, the phrasal verb "You can **count on** us" used to advertize calculators shows that this phrase could be interpreted literally and/or metaphorically. Also in cartoons a double message is conveyed through the visual image presented through caricature and the linguistic message presented in the caption accompanying the cartoon. Let us then see how these are illustrated in cartoons.

II. PHRASAL VERBS IN CARTOONS

In cartoons, meaning is conveyed through the verbal and the visual. Due to this interaction between what is said and what is seen, between language and image, attention should be paid to the visual message and to exaggeration, contradiction, and metaphor as mechanisms to create humor.

Cartoons, like jokes, are often based on a deliberate confusion of phrasal-verb meanings. They are widely used as a means of social satire to comment on political events, domestic or family matters, and undesirable behaviors such as cheating and immorality.

Phrasal verbs can also be used to enhance teaching. Among the possible reasons for using cartoons as authentic material in teaching, one can cite the following:

Since phrasal verbs are highly used in informal situations by native speakers, their teaching/ learning through the visual context of cartoons would allow teacher and students to deal with them easily as they are used to represent concrete and authentic situations. Consequently, students would comprehend them better and could use them in real-to-life situations with much ease. Also, given that cartoons are usually humorous, dealing with them in such contexts would surely make learning fun and would help and stimulate students to learn. The visual context within which phrasal verbs appear in cartoons would probably help students to memorize and recall such structures better than when they are merely presented as lists. Additionally, cartoons, in general, thanks to their visual property, illustrate aspects of culture and values of the targeted people and language (the way people are clad, proximity and many other non-linguistic features). Another important component that cartoons as visuals can provide is their ability to show non-verbal aspects of communication: facial expressions, body postures and relevant gestures. All these can be exploited along with the linguistic components and can help students develop an accurate communicative competence. The phrasal verbs used in cartoons in this paper can help students perceive the ambiguity and contrast between the literal and metaphorical uses of phrasal verbs and in what situations they are appropriately used. Some other possible ways of how to use them in teaching is to elicit the possible meaning of a phrasal verb based on the visual information in the cartoon, and if used for a review, to ask the students to match non-

captioned cartoons with the phrasal verbs that would go with them. Obviously, the choice of the cartoon and the phrasal verb should match the level of the students and the targeted skill(s).

The samples of cartoons discussed in this paper represent a clash between the conventional/metaphorical and/or idiomatic meaning of a phrasal verb and the meaning provided by the visual information in the cartoon, which is a literal one. Students with an advanced level could be taught or asked to detect such a difference based on the information of what is linguistically said in the phrasal verb and the plausibility of what is illustrated or inferred from the message/illustration in the cartoon. For example, situation number one, where in the cartoon a policeman is shown as physically holding a car in his hand, is implausible. Therefore, it is not a likely expected interpretation of the phrasal verb, but one that is meant to be a joke since, in this case, it is taken literally. This will help students develop their competencies to understand literal and metaphorical uses of language thanks to the context of use of phrasal verbs and the extra linguistic context provided by cartoons.

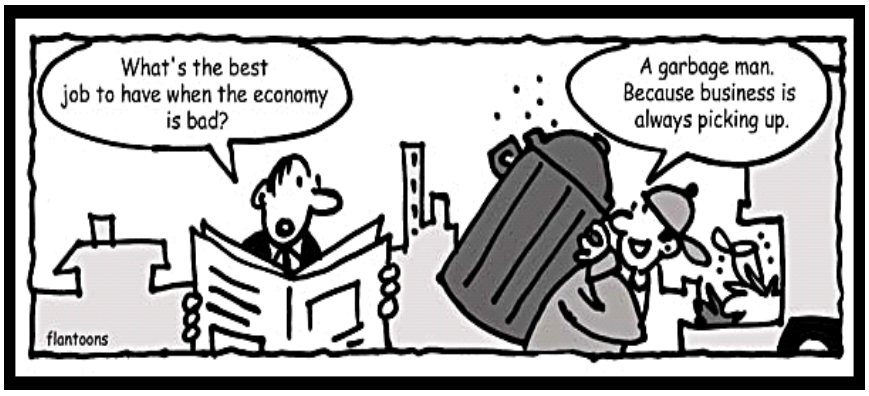
Humor is of paramount importance to cartoons, and both the verbal and the visual cues in cartoons are fertile grounds for such humor. Cartoons also materialize conceptual metaphors.

To illustrate this, I have selected instances of phrasal verbs used in cartoons and puns taken from the web site www.ecenglish.com and *English Teacher Online LLC*, respectively.

Situation 1: **"Hold up"**

In the interaction of this cartoon (situation 1) a question is posed asking about when traffic police are strong. The given reply "when they hold up cars with one hand" evokes two images: one based on our experience with traffic police, who with their authority can raise their hand as a signal for a driver to stop and the latter has to obey the traffic police (hence their authority). The second image is the 'distorted', funny image in the cartoon representing a policeman physically and literally holding a car in his hand (hence his physical strength). So, here, the cartoon enhances the literal meaning of the phrasal verb making the situation funny due to its unusualness.

Situation 2: "Pick up"



Here again we find that the question being asked is about the best job to have when the economy is bad. It is taken in a humorous way when the answer "pick up" does not refer, as we expect, to improvement of the bad situation (an idiomatic meaning). Rather, it refers to the literal meaning of "pick up" which is "lifting up" and this meaning is contrary to our expectations, but is supported by the image in the cartoon representing a man lifting up (raising from the ground) a garbage can.

Situation 3: **"Step on"**

The customer's question "I asked you to bring my order quickly, but why is all the food on my plate squashed?", is a reproach that is made clear by the juxtaposed statement emphasized by the use of the word 'but', as well as by the expression on his face, which is clearly depicted in the cartoon, and which shows the customer's anger. All these extra linguistic factors make it clear that the waiter misunderstood the meaning of "step on". His reply "Well sir, when you ordered your food, you told me to step on it" shows that he understood the phrasal verb literally and thus pressed his foot on the food rather than doing his best to bring it quickly. Once again, fun and humor are the result of taking the idiomatic phrasal verb literally.

Situation 4: "Put down"

The phrasal verb "put down" is usually employed in the negative form and is commonly collocated with books or reading matter. So, to express that we get so engrossed with what we are reading that it was difficult to stop reading it, we usually say that *it is so interesting that we cannot put it down*. In the cartoon, the man's use of "glue" and the depicted image of the man's hand glued to the book both emphasize the literal interpretation "to physically stop holding what we have in our hand". Here again, from the visual elements in the cartoon, it becomes clear that the idiomatic phrasal verb has been interpreted literally.

Situation 5: "Stand in the way"

This phrasal verb has two basic interpretations: one purely literal in the sense that to stand in someone's way could mean to be placed physically as an obstacle in someone's pathway. So if you stand in my way, you prevent me from moving past you or getting through somewhere. The other meaning is metaphorical and refers to preventing an event from happening, such as attempting to prevent someone's plans from taking place by refusing or causing problems. Based on the information in the cartoon and since it is a child who expresses his future desire to drive an army tank, the father's statement sounds more of a self-assurance than a promise not to intervene with the child's wish. What also emphasizes this idea is the presence of extra linguistic factors; namely, the physical presence of individuals in the cartoon portrayed as standing in front of vehicles: a car and a tank. The purpose is to emphasize the literal meaning.

Situation 6: **"See through"**

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In this cartoon, there is a picture of a woman and a ghost. They are depicted as having a conversation. Ghosts are assumed to be transparent so that we can see through them. Therefore nothing on the other side can be hidden. We can see through ghosts, fake things and lies, just as we can see what is on the other side of a piece of glass by looking through it. Hence the woman's statement "We can see through them", refers to being able to detect a lie when we hear one because it is poorly disguised: the pun revolves around "them" in this case because, depending on whether we choose to interpret it as "ghosts" or "lies", we interpret the phrasal verb accordingly.

Because such cartoons seem to show exactly what those phrasal verbs literally say, not what they metaphorically mean, and because such an interpretation is implausible, they create fun and humor. Humor is pragmatically the result of a violation of our expectation of how the real world is. The depiction of a policeman holding a car (situation 1) or a waiter stepping on food (situation 3) is incompatible with our knowledge of the real world just as any other humorous situation may be. Thus, a comprehensive understanding of phrasal verbs in cartoons as those illustrated above necessitates a consideration of what is linguistically said, and what is illustrated: the visual context. When these two are put together, we have a combination of the linguistic context, which is the phrasal verb with its syntactic form and its conventional or metaphorical meaning, and the presence of an unexpected or forced literal meaning brought forth in the cartoon.

Another means of humor is the use of puns. A **pun** is defined as:

> "a humorous use of a word in such a way as to suggest two or more of its meanings or the meaning of another word similar in sound" (source: *Merriam Webster's dictionary online*: http://www.meriam-webster.com/dictionary/pun).

Humor here is based on the wrong assumption that sounding alike means being alike. A combination of puns and cartoons is possible as the following example can illustrate:

Situation 7: "Go on strike"

"When do we learn how to go on strike?"

"To go on strike" is employed to make a pun in this example where a young baseball player is depicted as addressing the question to his coach, asking him "When do we learn how to go on strike?" thereby evoking two different meanings: On the one hand, a strike in baseball results when a batter:

a) swings at and misses a pitch,

b) doesn't swing at a pitch in the strike zone or

c) hits a foul ball that is not caught

(Source: *Online Sports Dictionary: SportsDefinitions.com* http://www.sportsdefinitions.com/baseball/strike.htlm)

On the other hand, "to go on strike" is "a period of time when workers stop work in order to force an employer to agree to their demands" (source: *Merriam Webster's Learner's Dictionary* http://www.learnersdictionary.com/com/search/strike2).

Obviously, without the visual presentation depicted in the cartoon, which evokes the meaning associated with a strike in baseball, the linguistic message (the caption) would hardly yield a double meaning and so, no pun would take place in this case mainly because of the nature of the structure "to go on strike", which is idiomatic.

This double interpretation in each of these cartoons leading to fun and humor is due to the use of phrasal verbs which can have more than one interpretation and to the contribution of the image(s) in the cartoon. Yet, it is the visual content of the cartoon which conveys humor and fun. Many comic situations conveyed by cartoons owe their capacity to amuse more to the visual context in which they appear than to purely linguistic reasons. The phrasal verbs above used in cartoons would, out of that specific context, be most likely interpreted in their metaphorical or idiomatic meanings.

Although phrasal verbs are ambivalent and sometimes have multiple meanings to the extent that they can be used literally or metaphorically, they usually have a primary conventional meaning. This meaning can be the literal one or the metaphorical / idiomatic one. So, to say that traffic police can hold up cars, or that with certain jobs business is always picking up when the economy is bad, or to order someone to bring food and to step on it, or it's impossible to put down a book you are reading, etc. outside the cartoon context would hardly make you think of another interpretation than the one these phrasal verbs are usually associated with, namely, their primary conventional meaning. The role of the cartoons is to exploit these phrasal verbs with their metaphorical or idiomatic meanings and to use them in a context where a literal interpretation is made possible. This is in a sense just like when in conversation people use utterances in an indirect way only to find out that their addressees take them literally, that is, as direct speech acts. For example, if, to the conventional indirect request "Can you pass the salt?", you get no compliance or action, but a mere response

of the type "Sure, I can", you realize that your addressee is interpreting a request for action as if it were a mere question asking for information, just as anyone would use an idiom or metaphorical phrasal verb with its literal interpretation.

The questions concerning why phrasal verbs are exploited in this fashion in cartoons and why a metaphorical or idiomatic meaning is used to convey a literal meaning arise naturally at this point. A possible answer to these questions may be that phrasal verbs, in general, with sufficient context, can convey a literal interpretation even when their primary meaning is metaphorical or idiomatic. It is basically almost always possible to twist the meaning of an utterance that is taken as non-literal-metaphorical or idiomatic, and make it sound literal. Only, in doing so, fun or humor may be intended, and it becomes more striking, more humorous and more common if it is enhanced by its use within the framework of a cartoon.

Second, cartoons are used, regardless of their domain of use, to make fun, to entertain and even to criticise. To do so, they have to alter reality or exaggerate it. This is why a lot of caricature is used in cartoons.

Finally, cartoons allow us to use our imagination and to think of alternative views and interpretations of what we see, read or even know.

III. GRICE'S COOPERATIVE PRINCIPLES AND MAXIMS

Grice (1975) saw that conversation held between people is based on a shared principle of cooperation. He formulated it in the following way: "Make your contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged."

The Cooperative Principle is intended as a description of how people normally behave in conversation. Observing it serves to enhance effective communication. It consists of four maxims, which should be taken as assumptions about the way people will talk, rather than prescriptions for how they ought to talk. When these maxims are violated, people make inferences which Grice called *implicatures.*

Conversationalists can assume that when speakers intentionally flout a maxim, they do so with the aim of expressing some thought or idea. Thus, the Gricean maxims serve a

purpose both when they are followed and even when they are flouted. Speakers who deliberately flout the maxims usually do so with the intention of getting their listener(s) to understand their underlying implication(s). The Gricean maxims are therefore often purposefully flouted by comedians and writers as well as by cartoonists, who may use linguistic devices such as metaphor, irony and puns, and manipulate their words for specific effects, depending on their readers or audience. Seana Coulson (in print) says in this respect:

> (t)he cartoon presents itself as a puzzle for the viewer to solve. The challenge, it seems, is to activate the appropriate information in response to the imagery and the verbal cues, and to integrate it with abstract narrative structure….Because the cartoonist must provide the viewer with just enough information to reconstitute the input spaces, humorous examples necessarily depend on viewers having relevant knowledge and shared understandings about these domains.

Conversational implicatures are always indirect: we imply one thing by saying or communicating another. Cartoons using phrasal verbs work in this way. What is said has a meaning and what is implied has a different meaning when enhanced by the visual images in the cartoon.

Grice's maxims and rules of conversation:

- Maxims of Quantity:

  1. "Make your contribution as informative as is required" (for the current purposes of the exchange)

  2. "Don't make your contribution more informative than is required"

  In other words, do not say more or less than what you should. Do not state the obvious.

- Maxims of Quality: Be truthful

  1. "Don't say what you believe to be false"

  2. "Don't say that for which you lack adequate evidence"

That is, do not lie or advocate what you are not sure about.

- Maxim of Relation:

  "Be relevant"

- Maxims of Manner: "Be perspicuous"
    1. "Avoid obscurity of expression"
    2. "Avoid ambiguity"
    3. "Be brief (avoid unnecessary prolixity)"
    4. "Be orderly"

In the cartoons above, there is, for each phrasal verb as a construction, a "logical"/ common interpretation and an "implied" one, that is to say, one that is specifically dependent and based on the visual context. For example, upon hearing me say "I really could not put down that book", the first thought you would have is the idiomatic meaning of my statement which amounts to saying "the book is so interesting that I cannot put it down". However, if I wanted to convey the literal interpretation of "I could not put it down" roughly meaning something like "I could not stop holding it, it has to be glued to my hand" (see cartoon above, situation 4) that would be a literal expression. In a similar way, the idiom "kick the bucket" would be highly likely to be interpreted as "die". Yet, it is not impossible to use it literally and to mean 'hitting a bucket with one's foot' as in saying 'he kicked the bucket nervously and hurt his foot'. Here it is used literally and not as meaning "he died". Only context would make it clear which of the two interpretations is meant, though it is the conventional meaning that we think of first.

In terms of Grice's theory of conversation when people are interacting, they have expectations that amount to understanding and being understood. When someone asks you about the time, they expect you to tell them the time, but, of course, a different answer may be given for some reason. This different, unexpected answer is a breach, a violation of one of Grice's maxims. In our view, the use of phrasal verbs in cartoons in an ambiguous way with other possible interpretation(s) is also a violation of Grice's maxim. This other interpretation is supported by the image(s) in the cartoon: the visual context. For example, (see cartoon above, situation 5), the father's statement that he would not stand in the way of his child's wish to drive a tank may be ambiguous in the sense that the child understands it one way (idiomatically): *that his father would not interfere* and the father means another way (literally). This is a violation of the maxim of Manner, due to the ambiguity in the father's utterance.

Moreover, when it comes to phrasal verbs themselves, a good range of them have a redundant particle. Fowler (1996: 594) notes that "one of the main objections raised to phrasal verbs is that they are used when the simple verb alone would suffice" (see also Beecher 2008 for a similar point). The examples below, quoted from Fowler (1996: 594), illustrate the redundancy of some phrasal verb combinations to the extent that the phrasal verb with or without the particle would be understood in the same way.

meet up with = meet	lose out = lose	miss out on = miss
visit with = visit	rest up = rest	drop off = drop, fall
divide off/up = divide	measure off/out = measure	select out = select

So here again there is a violation of Grice's maxims and mainly the Maxim of Quantity, which states that one should not say more than what is required:

1) Make your contribution as informative as is required
2) Do not make your contribution more informative than is required.

So, if I can say any of the phrasal verbs above without a particle and mean the same thing I am being redundant, and from a Gricean perspective, being intentionally redundant is not cooperative. Therefore, the unnecessary presence of a redundant particle makes the speaker's contribution more informative than is required, thereby violating the Gricean Maxim of Quantity.

The contrast between phrasal verbs used by native speakers in normal situations: as in a conversation and many other types of discourse and their use in cartoons could also be explained in terms of "marked" and "unmarked" concepts. A lot of words in language stand in binary opposition. For example, there is "old" and "young"; there is "tall" and "short"; there is "deep" and "shallow" etc. just as there are direct and indirect speech acts and literal and non-literal phrasal verbs. The choice of one or the other depends on which is appropriate in the given context of use. For example, when we ask people about their age or their height, we say "how old are you?" rather than "how young are you?" Even for babies' age we ask how old they are. We also use "how tall rather than how short to ask for height. This is because "old", "tall" and "deep" are unmarked

(neutral), while their opposites are marked. They require a specific reason or context to be used. Obviously, there could always be a reason why we would do the reverse and ask how young or how short someone is. Context and other extra linguistic factors may determine which choice is appropriate. People can use "how young" to ask about age as in the following situation: "how young do people get married in X country?" Similarly, some speech acts may be issued directly and be considered normal like the use of some directives to children. Yet, if context requires that we be polite, we may have to formulate them indirectly. As for phrasal verbs that may be literal or non-literal, the tendency with those phrasal verbs above is to use them metaphorically; that is, as non-literal. Yet, the context within which they were analyzed favors the literal interpretation; partly because of their contextual setting, the cartoons, and partly because humor is sought. An essential part of jokes, punning and humor in general is surprise. Markedness sometimes carries this aspect of surprise. So, I believe that the phrasal verbs above, as used in cartoons, may be considered as marked because of the humor and surprise they display.

IV. CONCLUSION

Phrasal verbs used in cartoons represent a special class of verb particle construction in the sense that they have to be able to express at least two meanings, one literal and the other metaphorical or idiomatic. This is because cartoons play on the existence of a double context: a linguistic one, expressed verbally through the caption and a visual context represented through the image(s) or caricature used. Based on these two elements of context, which are usually in contrast, cartoonists draw the strings and send messages that create fun, humor and may even serve to criticize. This dichotomy of what is said and what is illustrated with its double message –one stated and one implied– gives room for the flouting of Grice's maxims, that of Quality in this case. We have suggested that phrasal verbs used in ordinary interactions are common and unmarked; whereas their special use in cartoons may be considered as marked because the purpose here is occasional and specific and aims at joking and humor in general. Additionally, there is a category of phrasal verbs, the particle of which can be redundant (see pg. 114 in this article for examples), and which in turn also flouts Grice's Maxim of

Quantity. This type of phrasal verb did not appear in any of our cartoon examples but it is worth further investigating in a separate paper since although we may admit that the particle seems to be redundant, there must be a reason why it is used. In my view, the case of redundant phrasal verbs can better be explained in terms of the "marked/ unmarked" dichotomy. This point of redundant particles and (un)markedness is worth further investigation.

REFERENCES

Bannard, C., Baldwin, T. and Lascarides, A. 2003. "A statistical approach to the semantics of verb-particles". In *Proceedings of the ACL-2003 Workshop on Multiword Expressions: Analysis, Acquisition and Treatment*, Japan, Sapporo, 65-72.

Beecher, H. 2008. **"**Pragmatic licensing of redundant VPCs". USCD. Linguistics Department. <www.docin.com/p-114154131.html>

Biber, D., Johansson, S., Leech, G., Conrad, S., and Finnegan, E. 1999. *Longman Grammar of Spoken and Written English*. Harlow: Pearson Education Limited.

Bolinger, D. 1971. *The Phrasal Verb in English*. Harvard, USA: Harvard University.

Ceplair, L. 2008. "Linking up (combining) words: Phrasal verbs usage". *The Unpublished Manuscripts of Larry Ceplair*. <www.larryceplair.com/ articles/ phrasals.php>

Claridge, C. 2000. *Multi-Word Verbs in Early Modern English: A Corpus Based Study*. Amsterdam/Atlanta: Rodopi.

Coulson, S. In press. "What's so funny: conceptual blending in humorous examples". In Herman, V. (Ed.) *The Poetics of Cognition: Studies of Cognitive Linguistics and the Verbal Arts*. Cambridge: Cambridge University Press. <http://cogsci.ucsd.edu/%7Ecoulson/funstuff/funny.html>

Fletcher, B. 2005. "Register and phrasal verbs". *MED Magazine* 33, Sept. <http://www.macmillandictionary.com/MED-Magazine/September2005/33-Phrasal-Verbs-Register.htm>

Fowler, H.W. 1996. *The New Fowler's Modern English Usage*. 3rd ed. R.W. Burchfield (Ed.). Oxford: Clarendon Press.

Frazer, B. 1976. *The Verb-Particle Combination in English*. New York: Academic Press.

Grice, P.H. 1975. "Logic and conversation". In Cole, P. and J.L. Morgan (Eds.) *Syntax and Semantics III: Speech Acts*. New York: Academic Press, 41-58.

Kolln, M.J. and Funk R.W. 2008 *Understanding English Grammar*. Longman Publishing Group.

McArthur, T. Ed. 1992. *The Oxford Companion to the English Language*. Oxford/New York: Oxford University Press.

McCarthy, D., Keller, B. and Carroll, J. 2003. "Detecting a continuum of compositionality in phrasal verbs". In *Proceedings of the ACL-2003 Workshop on Multiword Expressions: Analysis, Acquisition and Treatment*, Japan, Sapporo, 65-72.

Patrick, J. and Fletcher, J. 2004. "Differentiating types of verb particle constructions". In *Proc. of Australasian Language Technology Workshop*, 2004 (ALTW2004). <http://aclweb.org/anthology-new/U/U04/U04-1022.pdf>

Spasov, D. 1966. *English Phrasal Verbs*. Sofia, Bulgaria: Naouka Izkoustv.

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BOOK REVIEW

Macmillan Phrasal Verbs Plus

Michael Rundell (Editor-in-Chief)
Macmillan Education: Oxford, 2005. 522 pages. ISBN: 978-1-405-06390-6

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I. INTRODUCTION

"Phrasal verb" is a term that refers to those units of verbs and particles, i.e. prepositions and adverbs, that have more or less different meanings from those of the verbs alone. Phrasal verbs are extremely significant in the English language. According to Biber et al. (1999: 408-409, 415), more than 2,000 phrasal verbs, items consisting of a verb (and a complement) followed by an adverb in their definition, and over 5,000 prepositional verbs, items consisting of a verb followed by a preposition in their definition, are used in every one million words in fiction and conversations.

Macmillan Phrasal Verbs Plus is a specialized dictionary of English phrasal verbs ("PVs", henceforth) and other structurally similar phrases of verbs and particles. This dictionary is "specially designed to help learners of English deal confidently with phrasal verbs" (page vi). In this review, we will concentrate on three aspects of this dictionary: the coverage of its entry items, the effectiveness and uniqueness of the characteristic features adopted in this dictionary, and a problematic strategy found in the macrostructure of headword PV items. By considering these aspects, we will be able to see whether it is really an effective learning tool for learners.

II. COVERAGE OF PV ITEMS

The reviewer compared the headword items in five PV dictionaries published by the "Big Five" EFL dictionary publishers (Ishii 2009). The targets of this survey were

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Cambridge Phrasal Verbs Dictionary covering about 3,300 items, *Collins COBUILD Dictionary of Phrasal Verbs* covering around 3,300 PVs, *Longman Phrasal Verbs Dictionary* covering some 3,800 entry items, *Macmillan Phrasal Verbs Plus* covering approximately 4,000 items, and *Oxford Dictionary of Phrasal Verbs* covering about 5,000 PV items.

This survey found that about 7,000 types of PV items are covered in the five dictionaries, around 2,000 of which are covered in all five dictionaries, about 800 PVs are covered in four dictionaries, approximately 700 in three, another roughly 700 in two, and the remainder of some 2,700 are in only one. One reason why these dictionaries differ considerably in their coverage is the difficulty in defining PVs; we often have difficulty in deciding whether or not a unit of a verb and particle is a PV. PV dictionaries have their own criteria to distinguish PVs for inclusion from other units, which makes a big difference in the coverage of items.

In order to look at the difference in more detail, the reviewer made a list of those PVs that are covered as headword items only in *Macmillan Phrasal Verbs Plus*. It contains about 400 PV items: **absolve of**, **accommodate to**, **acknowledge as**, **act as**, **add on to**, **address as**, **address by**, **advise against**, **agonize about**, and **agonize over**, to give the first ten items. Some of the items listed here are given three stars, which means that they are among the most frequent PVs (see below). They are **act as**, **combine with**, **connect to**, **do to**, **end with**, and **be known for**.

On the other hand, there are also some items that are covered as headword items in the other four dictionaries, but not in this dictionary: **break in on**, **cast round** (**cast round for** is included), **catch up on**, **come forth**, and **dawn upon** (**dawn on** is included), to give the first five items. Although many of them are included as variant forms in *Macmillan Phrasal Verbs Plus*, it is true that some important items are missing altogether. There are also some highly frequent items that may well be covered in PV dictionaries, but not included in many dictionaries: **adapt to**, for example, is covered in *Oxford Dictionary of Phrasal Verbs* alone. This may be because the other dictionaries deem this item just a prepositional verb, not a PV. Likewise, "be constituted of" (cf. **consist of** is covered in four dictionaries) and "start with" (cf. **begin with** is also covered in four) are not covered at all, although they are in the top 200 items of verb (+

complement) + particle in Web 1T 5-gram Version 1[1], a huge collection of n-gram data offered by Google.

It is considerably difficult to rigidly and objectively distinguish among PVs, prepositional verbs, idioms, and mere combinations of verbs and particles, but all highly frequent composite phrases are important for learners irrespective of whether they are PVs or not. *Macmillan Phrasal Verbs Plus*'s claim that it "provides all the information that is needed to *understand* phrasal verbs and to *use* them well" (page vi) can well be justified in that it covers not only a fairly wide range of PV items, but also some frequent items that are usually classified as collocations. At the same time, however, it also has some room for improvement in terms of usefulness for learners; all highly frequent PV candidates should be considered for inclusion from the viewpoint of learners that would use this dictionary.

III. CHARACTERISTIC FEATURES

There are a number of key features touted in the front matter and on the back cover of this dictionary. We will focus on some of them below: frequency markings, "menus", collocations, special entries on the 12 most common particles, the index of single-word equivalents, and "Language Study" pages on metaphors.

As frequency markings, three stars are given to "the most common and basic phrasal verbs", two stars are for "very common" items, and one star for "fairly common" ones (inside back cover). Each frequency band consists of about 350 verbs (the website for *Macmillan Phrasal Verbs Plus*[2]). This is unique to this dictionary; *Collins COBUILD Dictionary of Phrasal Verbs* and *Longman Phrasal Verbs Dictionary* also have markings for frequent items, but they do not show more than one frequency band.

When an entry has five or more senses, this dictionary gives a "menu" before the first sense; for instance, the entry for **come over** has a box giving brief summaries for each sense as follows: "1 be affected by a strong feeling, 2 react, 3 visit sb's house, 4 travel to a place far away, 5 have a particular opinion of sb/sth, + PHRASE". This feature is surely useful when searching through long entries, and this is also unique to this dictionary.

Another feature of *Macmillan Phrasal Verbs Plus* is collocation boxes, which show frequent objects and subjects of PVs. It is surely of value, but the problem is that the number of the boxes is too small; *Oxford Dictionary of Phrasal Verbs* and Oxford's other, more learner-friendly reference work, *Oxford Phrasal Verbs Dictionary for Learners of English*, provide many more entries with collocations.

At the end of the dictionary, *Macmillan Phrasal Verbs Plus* has a 7.5-page-long single-word index with PV equivalents. This is useful when we want to know synonymous PVs of single-word verbs. The number of verbs given in this list is about 550, which cannot be said to be sufficient for encoding purposes, but much more useful than *Cambridge Phrasal Verbs Dictionary*'s similar list of about 80 single-word verbs.

One of the most effective features unique to this dictionary is special entries on the 12 most common particles (**around**, **away**, **back**, **down**, **in**, **into**, **off**, **on**, **out**, **over**, **through**, and **up**). Although *Collins COBUILD Dictionary of Phrasal Verbs* and *Oxford Phrasal Verbs Dictionary for Learners of English* also contain special articles on various senses of common particles and give PVs based on each sense of the particles, only *Macmillan Phrasal Verbs Plus* depicts the development of figurative senses from the core literal meaning, which would help the users get overviews of each particle. This feature can be valuable especially for advanced learners.

Still another interesting feature of this dictionary is a special article on metaphors, which is closely related to the above-mentioned special entries on particles. This article by Dr. Rosamund Moon is based on Lakoff and Johnson's *Metaphors We Live by* (1980), and gives an essence of metaphors found in the meanings of particles. For example, the reason why **up** means 'powerful' is explained as follows: "… if two people fight and one of them is physically on top of the other, that person usually wins" (page LS6). This article would help learners understand the nuances underlying the particles in PVs.

IV. PROBLEMATIC FEATURE CONCERNING HEADWORD ITEMS

On the macrostructure concerning the headword items, there is a potential problem. When there is more than one stress pattern for a PV item, it is divided into different entries; for example, ˈ**come to** is followed by ˌ**come** ˈ**to**. This is not user-friendly in

terms of accessibility; users might overlook the correct entry if it follows a different entry of the same form. Giving numbers to those items, as in ˈ**come to**[1] and ˌ**come** ˈ**to**[2], for example, would solve this problem.

V. OVERALL EVALUATION

Macmillan Phrasal Verbs Plus is a good dictionary containing a wealth of essential and useful information not only on phrasal verbs but also on other verb-particle phrases, polysemy of particles, and metaphors found in phrasal verbs. It is also handy and easy to scan due to its two-color printing. Although there is some room for improvement as described above, this dictionary is recommendable to all learners of English at intermediate and upper levels.

REFERENCES

Biber, D., Johansson, S., Leech, G., Conrad, S. and Finegan, E. 1999. *Longman Grammar of Spoken and Written English*. Harlow: Pearson Education Limited.

***Cambridge Phrasal Verbs Dictionary*.** 2006. 2nd ed. Cambridge: Cambridge University Press.

Collins COBUILD Dictionary of Phrasal Verbs. 2002. 2nd ed. Glasgow: HarperCollins Publishers.

Ishii, Y. 2009. "Making a list of essential phrasal verbs based on large corpora and phrasal verb dictionaries". In Kawaguchi, Y., M. Minegishi and J. Durand (Eds.) *Corpus Analysis and Variation in Linguistics*. Amsterdam/Philadelphia: John Benjamins, 121-140.

Lakoff, G. and Johnson, M. 1980. *Metaphors We Live by*. Chicago/London: The University of Chicago Press.

***Longman Phrasal Verbs Dictionary*.** 2000. Harlow: Pearson Education Limited.

[1] 30 Nov. 2011 <http://www.ldc.upenn.edu/Catalog/CatalogEntry.jsp?catalogId=LDC2006T13>
[2] 30 Nov. 2011 <http://www.macmillandictionaries.com/about/phrasal-verbs-plus/>

Oxford Dictionary of Phrasal Verbs. 1993. Oxford: Oxford University Press.

Oxford Phrasal Verbs Dictionary for Learners of English. 2006. 2nd ed. Oxford: Oxford University Press.

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