Language as a human cognitive capacity is one of the basic tools for externalizing the way we conceptualize the world for communicative purposes. No matter how complex and encyclopedically rich our situated knowledge is, in “thinking for speaking” (Slobin 1987: 435; 2003: 158) we constrain our knowledge in ways that the symbolic inventory of our language affords to us. This symbolic inventory reflects the numerous attentional acts that have been conventionalized in alternative construals (Evans 2009, Langacker 2008, Marchetti 2006, Talmy 2000).

Construal captures the conceptual-linguistic interface and describes how elements from the symbolic inventory of language engender specific manipulations of cognitive content by the cognizing subject. Compound verbs (CVs) represent special construal mechanisms and their cognitive function is best understood if they are studied as actualizing a constructional idiom and constituting a cognitively homogeneous class. For the purposes of the current discussion by CV is understood a compound which irrespective of its derivational pattern (composition proper, conversion or back-formation) has as its core meaning a verbal meaning and can be used in all finite forms.

“[S]emantic analyses prove to depend crucially on what construals of objects and events are possible and salient” (Jackendoff 2010: 8; emphasis added). The structuring of linguistic concepts is contingent on the distinction between event construals and object construals (Evans and Green 2006; Langacker 1987, 2008; Radden and Dirven 2007, Talmy 2000), which hinges on alternative acts of profiling executed by the activation of features of several construal types, with only the ones most relevant for the study of CVs listed below:

1. ON CONSTRUAL

The argument in the paper is based on the lexico-semantic analysis of a self-compiled corpus of 239 CVs. All primary sources from which the CVs have been excerpted are listed as primary sources in the References section.

CVs belong to the *composites* class of linguistic units as defined by Lampert (2009: 62-63) “[t]wo categories relevant for linguistic representations at all levels [...] must [...] be kept apart: First, those that result from an ‘additive’ (or: computational) combination of semantically and/or formally simplex items, yielding, [...], compositions of variable complexities in accordance with combinatorial rules; second, there are *composites*, which cannot readily be analyzed in terms of a ‘simple’ (additive) computation of their formal constituents and/or semantic components, but only as ‘wholes’ or Gestalts.”
Figure-ground\(^3\) (profile-base opposition)
Granularity – filtering against a frame
Degree of schematicity

“[C]onstrual phenomena [...] variously impose structure on conceptualizations in ways that do not immediately follow from their content” (Verhagen 2007: 51). Symbolic units mould conceptualizations and impose focal adjustments by instructing interactants as to which are the central components to be attended to in a given conceptualization accessed via that particular symbolic unit. In analyzing different types of construal phenomena two dimensions of particular pertinence\(^4\) for the study of CVs are frame of knowledge (or ICM) and composition of the conceptualization. Verbs are by definition focal adjusters as their role “in a construction is to provide specifics to the schematic conceptualization evoked by the construction” (Verhagen 2007: 51). CVs are special in terms of composition, since they combine a thing/property and event construal for which they provide special constructional scaffolding. This specificity determines the marked degree of granularity associated with CVs which expand the profiling of a frame and which, in terms of figure-ground perspectivization, might (or at least one of the CV prototypes in English does) include as foregrounded a chosen component of an already profiled event (see 4.3. and 5).

CVs in English provide a finely-granulated structure to conceptualizations which either specifies values for variables from underlying frames (subclassification CVs) or create novel blended conceptual spaces (superclassification CVs), i.e. novel conceptualizations. A heightened resolution effect can only be observed with subclassification verbs (e.g. drip-dry, deep-fry, spoon-feed, etc), which are characterized by lowered schematicity as they are bi-focal perspectivizers. Superclassification verbs on the other hand are not characterized by reduction in schematicity as their semantics captures a novel conceptualization (e.g. brown-bag, hag-ride, moon-light, high-tail, etc.). The two types constitute construal CV prototypes, which with their contingent radial networks instantiate the constructional idiom CV.

Verhagen (2007: 48) contends that “the best way to make these notions [of construal phenomena] relevant for linguistic analysis is not given a priori and thus requires empirical investigation.” In keeping with such desiderata in the remainder of the paper CVs are analyzed with the aim of elucidating their special properties as

\(^3\) It is of paramount importance in the study of CVs to distinguish between concept-type profiling (i.e. external) and compound internal figure-ground profiling. The first kind of profiling relates to the profiling of the verbal concept against the frame which it is evoked by and which it evokes, while the second captures the constituency-internal relative profiling within the emancipated profile (i.e. composition).

\(^4\) These are the two parameters generally utilized for the initial classification of different kinds of construal phenomena. Among the focal adjustments suggested by Langacker (1987: 116–37), Talmy (2007: 276-277) and Croft and Cruse (2004: 46; 63-66) extremely pertinent for the analysis of CVs are components of the perspective construal variables – figure/ground, configuration (composition) and constitution/gestalt (or profiling).
construal mechanisms used to conceptualize situations or rather conceptual cores as finely granulated relations.

In discussing the ways in which “units of thought relate to language” Radden and Dirven (2007: 41) claim that we do not need “more than two basic types of conceptual units things and relations” in order to establish linguistically relevant conceptual distinctions. These are combined into complex “conceptual cores” that are ultimately expanded to “situations” (i.e. clausal descriptions). In view of this claim CVs pose a problem for neat dichotomous treatment as they very often both conceptually and in terms of form include a “thing” (e.g. flat-hunt, house-sit, fellow-feel, case-harden) and thus come closer to a “conceptual core”/“situation” than to a “relation”. It is exactly because of the fact that CVs profile/perspectivize “situations” as “relations” that they appear to possess both morphological and syntactic properties and to structure in a “relational” profiling conceptual content partaking of a “situation”.

2. ON COMPOUND VERBS

Masini (2009: 256) holds it that

compounds may be the product of both productive rules and lexicalization processes, whereas phrases are fully productive; also, compounds may be both semantically transparent and idiomatic, whereas phrases are generally transparent; finally, parts of compounds cannot undergo syntactic operations.

Compounds seem to differ significantly from phrases. At the same time it has been stated that they have internal structure which displays syntactic properties, i.e. “genuinely syntactic combination of lexical items” (Anderson 1992: 292), so they can’t possibly also be simply words. Thus CVs appear to realize constructional idioms both in terms of construal mechanisms and in terms of their position within the hierarchical network of the symbolic inventory.

Schmid (2011: 122) contends that “there are no typical verbal compounds in English” in terms of the following criteria:

i) derivational morphology – bi-constituency;
ii) inflectional morphology – grammatical categories marked on the head constituent;
iii) phonology – single intonation unit, with main stress on the modifier;
iv) semantic structure – not strictly compositional and semantically lexicalized;
v) sociopragmatic perspective – naming, not deictic function, high level of institutionalization;
vi) cognitive perspective – entrenched concept, stored in the mental lexicon (ibid. 121-122)

5 “Compounding ... involves the combining of stems from the lexicon into a quasi-syntactic structure. This word-internal structure seems to be unique to compounds, in fact.... The formation of compounds seems to involve a genuinely syntactic combination of lexical items below the level of the word (perhaps along lines like those explored in Selkirk 1982), while non-compounds have only a phonological structure.” (Anderson 1992:292; emphasis added).
Actually, CVs are not typical compounds according to one of the criteria in the above list. CVs might be considered atypical compounds in relation to derivational morphology as they constitute a heterogeneous class resulting from conversion, back-formation and compounding, even though they conform to the bi-constituent criterion. In view of this conflict, it might do justice to CVs if we make provisions for accounting for compound lexemes and compounding as a word-formation pattern separately. The grounds for such a step can be found in the following:

a) the uniformity of the nature of the meaning composition in diverse CVs (where diversity is captured in i) internal constituency (NV; AdjV, VV, PV, NN(v), NumV); ii) pattern of derivation (conversion, back-formation, analogy, compounding); iii) development of the word-formation paradigm associated with the CV (agent noun, activity noun, etc.);

b) distinctions between the cognitive function of a word-formation pattern and of types of complex words (Schmid 2011: 18-19);

c) a distinction in degree of ecological validity can be postulated between a word-formation pattern (compounding) and its products (compound lexemes). In the f-mind of speakers the latter are a lot more prominent, directly available and amenable to various cognitive operations, while the former is more likely to be part of a logical and neat linguistic model which accounts for the meaning of complex lexical items in language;

d) after all “the goal is an account of compound meaning that is as rich as the account of word meaning” Jackendoff (2009: 115).

With the advent of cognitive linguistics, it has been established that conversion mechanisms operate at the conceptual level and surface as profiling preferences in construal operations (Evans and Green 2006; Langacker 1987, 2008). Thus conceptualizing and linguistically encoding a knowledge structure as a nominai or verbal lexeme is an underspecified option of alternation (Farrell 2001). Admitting the possibility for alternative encodings does away with the necessity to account for the cog-

<table>
<thead>
<tr>
<th>N + V</th>
<th>carbon-copy, carbon-date, babysit, head-hunt, blockbust</th>
</tr>
</thead>
<tbody>
<tr>
<td>A + V</td>
<td>free-associate, double-book, soft-land, crash-land, fine-tune, whitewash</td>
</tr>
<tr>
<td>Prt + V</td>
<td>outnumber, overachieve, overeducate, overcook, underrate</td>
</tr>
<tr>
<td>V + V</td>
<td>drink-drive, crash-land, dry-clean, stir-fry</td>
</tr>
<tr>
<td>A + N</td>
<td>brown-bag, bad-mouth, blacklist, mainstream</td>
</tr>
<tr>
<td>N + N</td>
<td>breath-test</td>
</tr>
<tr>
<td>Num + V</td>
<td>double-cross, double-check</td>
</tr>
</tbody>
</table>

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6 The phonological criterion is not taken into consideration as it constitutes the form pole in the symbolic pairing of meaning and form and is considered beyond the scope of the present argument.
nitive effects of a specific word-formation pattern and allows us to concentrate on
the products, i.e. on CVs as construal mechanisms.

The special cognitive function of CVs thesis can easily be corroborated on semantic
grounds. Cruse (2004: 222-227) in defining philonyms, xenonyms and tautonyms,
postulates that “it is the duty of a non-head to bring information not available in the
head.” If the semantic non-head brings into the composition information which is
already contained in the head, the result will be a tautonymy. In some cases it is pos-
sible for a selectee of the semantic verbal head (selector) to express meaning already
contained in the head, on condition that the selectee highlights a special aspect of
the action denoted by the verb (e.g. shrug one’s shoulders vs. *smile one’s lips).

Many CVs contain as first constituent a foregrounded element of the frame which
an associated simplex verb profiles (e.g. deep-fry, force-feed, sun-dry, etc.). Contrary to
expectations for pleonastic semantic effects, even such subclassification CVs are
meaningful and informative, which requires that the foregrounded element be rele-
vant, unexpected, unpredictable or highly specific. Kiefer’s (1993: 46) definition of
argument relevance to the head in a compound best generalizes these requirements:

An argument in a compound is said to be relevant with respect to the head if it is not pre-
dictable on the basis of the meaning of the head and world knowledge. It is also possible
to define a scale of relevance: the more predictable an argument is with respect to a head
the less relevant it is.

This broad definition dependent on world knowledge is further refined by the
postulation of a “a scale of relevance on the basis of the range of possible arguments.
The wider the range R of the arguments A_i admitted by the head H is, the more rel-
vant an argument A_k out of R will be” (Kiefer 1993: 50). Relevance is associated
with and motivated by ontological salience\(^7\).

In this way the range of foregrounded constituents in a CV appears to be regulat-
ed by system-external constraints, most probably stemming from general cognitive
abilities. As Kiefer (1993: 55) himself admits, “the selection of arguments in com-
pounds is thus only in part a matter of grammar, it is to a large extent determined
by extralinguistic considerations.” Besides being recognized as heavily influencing
compounds, system-external considerations have been pointed out as an indispens-
ible analytical heuristic by Bundgaard et al. (2006: 369) who insist that “any attempt
to define a combinatorial rule in terms stemming exclusively from the linguistic sys-
tem as such (qua a self-contained formal system) is doomed to fail.”

\(^7\) “[O]ntological salience,” is not related to temporary activation states of concepts but to more or
less stable properties of entities in the world. The idea is that by virtue of their very nature, some
entities are better qualified to attract our attention than others and are thus more salient in this
sense” (Schmid 2007: 120).
3. FRAMES, CONCEPTUAL CORES AND CVS

The most widely accepted operationalization of extralinguistic factors that have direct bearing on linguistic units is the frame as the most prominent unit of conventionalized background knowledge at the conceptual level. Within the cognitive linguistic enterprise it has become customary to assume that “frames structure our conceptual and social life” (Fauconnier and Turner 1998: 236). Frames underlie the profiling and resultant construal in different pairings of meaning and form. Fillmore (2006: 378) defines the correlation between construal mechanisms and lexical items as a mutually implicating one,

[u]sing the word ‘frame’ for the structured way in which the scene is presented or remembered, we can say that the frame structures the word-meanings, and that the word ‘evokes’ the frame.

CVs profile frames in two distinct ways, either by constituent foregrounding (subclassification CVs) or by engendering a novel blend (superclassification CVs). The type of frame which is captured in a CV is the event schema. The latter is defined as the abstracted, recurrent conceptual pattern (prototype) we associate with situations. As Dirven and Verspoor (2004: 75) state “our language shows that we tend to group events according to a limited number of types, called “event schemas””. These are traditionally encoded in clausal patterns in which arrangement of symbolic units is aligned with anthropocentricity-driven salience profiling. Simplex verbs profile a temporal relational concept exclusively, while CVs profile a larger part of the “conceptual core” of a situation. Since “[p]rofiling amounts to nothing more than the relative prominence of substructures within a conceptualization, and is inherently a matter of degree” (Langacker 1990: 208), CVs seem to occupy a fuzzy area between relational concepts and conceptual cores, i.e. they constitute construal mechanisms unto themselves.

The best way to illustrate this claim is to compare the profiling provided by a simplex verb and a compound verb both evoking the same frame. The degree understanding of profiling allows for the postulation of a cline which captures the fine-grained degrees in which different CVs display “relational” vs. “conceptual core/situational” profiling.

Feature foregrounding:

[ss v]

[T]he two old celebrants argued vociferously and at length about who should hold the knife to make the first cut.

[They] even out-argued or outmaneuvered that wild-eyed White House bunch for a change...

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8 All the sentence examples analyzed immediately below have been excerpted from Corpus of Contemporary American.
In the first sentence the verb names an activity of angrily showing one’s disagreement with another participant in the situation. In the second, the embedding of the verb’s frame in a spatial specifier frame in the constitution of the CV projects the feature TO DEFEAT OR GET THE BETTER OF by a complex metathonymic scenario (described in 5).

\[ [x,y,z]v \] spoon-feed

\textit{He fed himself on plankton, seaweed, and an occasional fish.}

\textit{My friend Kristin spoon-fed her older son, Cole, until he was 4.}

In this non-metaphoric constitution of the CV, the feature-foregrounding is achieved by the emancipation of a secondary figure (the instrument), which accounts for the bi-focal perspectivization in the construal of the single-scope CV blend.

\textit{Reality television has fed what he calls people’s voyeuristic impulses.}

\textit{In the new arrangement, reporters had to wait to be spoon-fed, and the White House made only minimal efforts to do even that.}

In the metaphoric constitution of the CV, the inclusion of the instrument in the construal creates a novel meaning feature relating to manner. The second sentence exemplifies the conceptual metaphor \textsc{knowledge is food}, while the first one is based on \textsc{interest is appetite}, both rooted in the same source domain \textit{food}. The meaning of the CV is fully lexicalized as the \textsc{in a simplified manner} semantic component cannot be directly computed by the combination of the constituents or through the conceptual metaphor itself.

Novel conceptualization:

\[ [xy]v \]

\textit{He footed it on dusty roads, or sped magnificently in freight cars, counting time as of no account.}

\textit{So I doubt you need to pussyfoot around the issue as much as you think.}

It is difficult for a relation (even a metathonymic one) to be established between the two sentences in the pair. The CV’s meaning \textsc{avoid making a decision or expressing an opinion because of uncertainty or fear} is an entirely novel conceptualization which is not associated with any of the involved input frames separately. It arises out of a complex series of metathonymies engendered in the elaboration of the blend.

As is obvious from the above analysis, CVs are onomasiologically special in relation to simplex verbs. They \textit{name} a situation with salient features explicitly designated in the naming unit.
Words are tools to pilot attention. The elements composing the meanings of words are attentional operations: each word conveys the condensed instructions on the attentional operations one has to perform if one wants to consciously experience what is expressed through and by it (Marchetti 2006: 163, emphasis added).

The special status of CVs becomes extremely important, since in a clausal representation of a situation the attention is distributed over several pivots in the symbolic unit, while in a CV the feature/participant secondary trajector is condensed into a naming unit.

4. THE SEMANTICS AND CLASSIFICATION OF CVS IN ENGLISH

In such context CVs are expected to have special lexical semantics due to their status as complex words involving composition. Actually, non-compositionality, or not strict compositionality, is promoted as a defining feature of compoundhood. Jespersen notes that “we may perhaps say that we have a compound if the meaning of the whole cannot be logically deduced from the meaning of the elements separately” (Jespersen 1954: VI, § 8.1.3). For the study of the whole we can adopt two distinct approaches – account for the semantics on the basis of the word-formation pattern recognized and start the analysis from the source or constituent elements or take the complex word as a unified symbolic unit and study its profiling and the lexical concept which results from that.

4.1 Meaning mechanisms in conversion and back-derivation

If we adopt the former approach, we need to postulate three different mechanisms of meaning generation for the three groups of CVs we have to recognize on the basis of different types of word-formation:

CVs arising from

\textit{back-derivation}

<table>
<thead>
<tr>
<th>Back-derivation</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>babysit</td>
<td>babysitter/baby-sitting</td>
</tr>
<tr>
<td>bottle-feed</td>
<td>bottle-feeding</td>
</tr>
<tr>
<td>stage-manage</td>
<td>stage-managing</td>
</tr>
</tbody>
</table>

\textit{Conversion}

<table>
<thead>
<tr>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>sandbag</td>
</tr>
<tr>
<td>blackball</td>
</tr>
<tr>
<td>railroad</td>
</tr>
</tbody>
</table>

9 Lexical meaning is a special type of data structure which is associated with an emergent or ad hoc concept for whose generation the lexical item functions as an instructional sign-post which directs the listener in constructing the ad hoc concept on the basis of the perceptually presented stimulus (the lexical form) with its prototypical lexical concept which might or might not undergo significant modification in the particular instance of language use of the units in the f-mind as tools to pilot attention (Evans 2006, 2007, 2009; Marchetti 2006; Jackendoff 2002).
Lieber (1981: 186) defines the following semantic interpretation rule for denominal, conversion verbs, "given a semantically specified noun X, and a related, but semantically underspecified verb Y, X must serve as an argument in the interpretation of Y". Though this may work for simplex verbs, it often fails with CVs. It would be difficult for any linguistic theory to establish railroad as an argument of the CV railroad with its meanings (OED): orig. U.S. TO ACCOMPLISH (AN ACTION) WITH GREAT SPEED; TO ‘RUSH’ (A PERSON OR THING) TO OR INTO A PLACE, THROUGH A PROCESS; TO HUSTLE, TO COERCE; TO SEND (SOMEONE) TO A PLACE OF PUNISHMENT WITH SUMMARY SPEED OR BY MEANS OF FALSE EVIDENCE.

The belief that the parent noun is necessarily involved in the meaning generation mechanism of a denominal CV leads to implausible lexical semantic interpretations of attested CVs: e.g. Nagano\textsuperscript{10} (2007: 65) classifies as LOCATUM verbs air-condition, face-lift, ill-treat, ill-use, pressure-treat, triple-tongue, turbocharge and valet-park, while tailor-make, jam-pack and hard-boil appear as GOAL and prize-fight is classified as SOUND-SYMBOLISM. As is intuitively obvious such classification based on supposedly uniform meaning associated with word formation specifics do not actually reveal much about the semantics of the CVs.

The more or less agreed upon meaning generation mechanism for back-formed CVs is dependent on the fact that back-formation in compounding phenomena operates on synthetic compounds. The cognitive procedure involved is counterintuitive as back-formation for CVs occurs with secondary compounds in whose analysis linguists of quite diverse persuasions recognize a motivating link usually associated with argument readings of the first constituent, i.e. a verbal element is necessarily recognized in the initial composition of the synthetic compound. We can safely claim that a compound CV is postulated (though generally not acknowledged) in backstage cognition which drives the semantic computation/analysis of secondary compound nouns (both -er agentive and -ing activity ones) or adjectives. In their it is generally assumed that they,

\begin{itemize}
  \item do express a straightforward semantic relation. Secondary compounds are characterized by an argumental relation between the constituents: it is a logical condition of this type
\end{itemize}

\textsuperscript{10} In the article “Marchand’s analysis of back-formation revisited: back-formation as a type of conversion” Nagano develops a theory of back-formation as conversion and adopts for the semantic classification of CVs Clark and Clark’s (1979) list for converted denominal verbs. Even though the theory does away with the necessity for distinct approaches to back-formed and converted CVs, it leads to unconvincing semantic interpretations of attested CVs. What is more, conversion is traditionally associated with root compounds giving rise to CV, while the bases in back-formation are classified as synthetic compounds.
of compound that at least one of the constituents is of verbal nature (i.e. a pure V, or a deverbal derivative)” (Guevara and Scalise 2004: 8).

In the composition of synthetic compounds a verbal component is necessary for the conceptualization of the cognitive content which is subsequently profiled or coerced as a nominal, thing-construal. It appears that in back-formation we exert cognitive effort to re-profile or reverse a profiling procedure from nominal construal back to an earlier stage in the meaning composition of the profiling. Thus the adoption of the word-formation pattern based approach leads to an impasse of unsatisfactory semantic analysis, which reveals the theory-dependent classificatory schemas used in categorizing compounds.

A way to avoid duplication of cognitive effort and analytical difficulties is to side with Farrell’s (2001) contention that nominal/verbal construal is a matter of alternative profiling of underspecified symbolic units which are related via functional shifts. The lexical semantic representations of such words include event schemas that are compatible with either noun or verb meanings. The verb vs. noun aspect of the meanings is supplied by the morphosyntactic contexts in which they appear (Farrell 2001: 109).

4.2 Compound-internal constituents

Many of the controversies surrounding CVs stem from the tacit but deeply rooted assumption that the constituents of compounds are categorically-specified words or roots. We believe that such an assumption can be discarded for the sake of a unified analytical approach to the semantics and classification of CVs in English. Just as “[c]onceptual structure encodes our knowledge of the categorical status of auditory, visual, olfactory, and haptic information in a neutral or a-modal format” (Van Der Zee and Nikanne 2000: 4), language as one of the cognitive systems in the I-mind provides parallel options for reconfiguring conceptual content in cases of unifying schemata in compound phenomena. Further support for the actegorial status of compound internal constituents can be found in the understanding of part-of-speech assignment as pragmatically driven and constrained.

Hopper and Thompson (2004) put forward the hypothesis that the lexical and semantic properties of verbhood and nounhood are secondary and are primed and ultimately determined by their discourse roles, i.e. the determinants of nounhood and verbhood are predominantly pragmatic. The proposal the authors make is that linguistic entities set out as acategorial elements:

the continua which in principle begin with acategoriality, and which end with fully implemented nounhood or fully implemented verbhood, are already partly traversed for most forms. In other words, most forms begin with a propensity or predisposition to become Ns or Vs; and often this momentum can be reversed by only special morphology. It nonetheless remains true that this predisposition is only a latent one, which will not be manifested unless there is pressure from the discourse for this to occur (Hopper and Thompson 2004: 287).
In terms of its part-of-speech system Modern English, according to Vogel (2000: 263), has undergone a “degrammaticalisation shift from a specialised noun-verb language (with a grammaticalised part-of-speech system) towards a flexible type-token language (without a grammaticalised part-of-speech system).” For the more conservative, Vogel suggests that English might be thought of as having two parallel part-of-speech systems. “Thus, there are now two overlapping systems: a specialized noun-verb-adjective-adverb-system and a flexible noun/verb/adjective-adverb-system” (ibid. 277), which she illustrates in the following table:

<table>
<thead>
<tr>
<th>Specialised</th>
<th>V</th>
<th>N</th>
<th>Adj</th>
<th>Adv</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible</td>
<td>V/N/Adj</td>
<td></td>
<td></td>
<td>Adv</td>
</tr>
</tbody>
</table>

Fig. 9. The Modern English part-of-speech system (Vogel 2000: 277).

We claim that it is the flexible system that is utilized in compounding.

And if the above arguments concern categorial assignment in general, Bauer’s (2001) idea of formal isolation as a basic criterion for compoundhood is open to interpretation and allows for acategorial treatment of compound-internal constituents.

Compound is a lexical unit made up of two or more elements, each of which can function as a lexeme independent of the other(s) in other contexts, and which shows some phonological and/or grammatical isolation from normal syntactic usage (Bauer 2001: 695, emphasis added).

Such an understanding of the constituents of a CV helps overcome the controversies involved in their classification, most of which arise from the dichotomization of the coordinate/subordinate distinction.

### 4.3 Standard classifications

Lieber\(^{11}\) (2009: 360-361) in characterizing compounds in English, defines *stir-fry*, *trickle-irrigate*, *slam-dunk* and *blow-dry* as simultaneous endocentric coordinate compounds; *headhunt*, *machine-wash* and *spoon-feed* as endocentric verb-containing subordinate CVs, constituting “a marginal class”. She goes on to mention as endocentric compounds V+V patterns, which are “not freely formed” (ibid.: 359), *blow-dry*, *trickle-irrigate* and *slam-dunk*. The author expressly distinguishes between coordinate and subordinate CV types – i.e. *stir-fry* as opposed to *spoon-feed*. This classification is based on an implicit firm belief that the input elements into CVs are fully-fledged lexical items with specified part-of-speech membership. Only such an assumption can explain the forceful opposition between *blow-dry* and *stir-fry* as simultaneous coordinate CVs and *spoon-feed* and *machine-wash* as subordinate endocentric ones. The implicit assumption

\(^{11}\) The classifying system of compounds that Lieber uses is the one presented by Bisetto and Scalise (2009) with a slight broadening of the subordinate class to include ones with subject-oriented interpretations.
that when we combine two linguistic entities with similar properties and level of granularity (verbal lexemes in our case), they are usually in a coordinate relationship, while combined linguistic entities with presumed differential properties are expected to contract syntactically motivated relations (in our case a subordinate relation between a verb and a noun interpreted as instrument within the frame of the verb).

Counter Lieber, Bauer believes that “[t]o trickle-irrigate is to irrigate in a particular way” (Bauer n.d: 8). In a same manner

[according to Carstairs-McCarthy (2002: 61) stir-fry and freeze-dry are both headed compounds. The hyponymy test works well here: stir-frying is a kind of frying (not a kind of stirring) and freeze-drying is a kind of drying (achieved by freezing). Again they seem to be excluded from the set of dvandvas (Bauer 2008: 4).

The subordinate vs. coordinate classification seems overdetermined, if we recognize the existence of well-elaborated word formation niches based on sanctioned construction schemas.

By adopting ‘construction’ as an operationalizing tool for the idea of the continuity among all expressible resources in the symbolic inventory of language, we can postulate a generalized schema for machine-wash, stir-fry and tumble-dry, which will collapse the subordinate vs. coordinate divide determined to a large extent by the lexeme-status of input elements.

[[P] Xi, j, k [R] Va, b, c ] Vl, m, n → [to process something to a certain effect by exploiting SEMi, j, k effect]

X – compound internal constituents
P and R – sound sequences
j, a, m – lexical indexes specifying possible homonymous correlations with simplex lexemes.

On the surface it seems that we have coordinate CVs where the lexical input structure suggests two verbs profiled in a relational concept. This interpretation sounds convincing for certain members of the word-formation niche – stir-fry might be interpreted as a synchronous coordinate V+V compound, but deep-fry does not yield such an analysis because there is no *to deep verb in English and second because the more plausible semantic interpretation of the whole - fry niche tends

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12 Hüning (2009: 183) contends that “word formation processes often show semantic fragmentation: in the course of time they develop ‘semantic niches’, i.e. groups of words (subsets of a morphological category) kept together by formal and semantic criteria and extendable via analogy.”

13 The construction schema (Booij 2005, 2007, 2009, 2010; Tuggy 2005 a,b; Langacker 1987; Lampert and Lampert 2010) is “a cognitive representation comprising a generalization over perceived similarities among instances of usage” resulting from “repeated activation of a set of co-occurring properties” (Barlow and Kemmer 2000: xxiii).

14 The nature of the construction and its representation follows Booij (2010), with the distinction that in the current argumentation the X and V constituents are not of determinate lexical status.
towards the manner subordinate extreme of the cline. The generalized meaning is [TO FRY IN A CERTAIN WAY, I.E. TO A CERTAIN EFFECT] and it is only a secondary or contingent fact that some of the effects involve naming by a verb-like construction-internal constituent. It turns out that even generalizations involving a local niche-internal classification require the postulation of a cline which can pay justice to all the facts.

![Diagram]

The cline captures the \{-fry\} niche with the generalized meaning [COOK TO A CERTAIN EFFECT]. Stir-fry will occupy the leftmost area of the cline, while deep-fry will indicate the rightmost extreme.

4.4 Conceptualization-based classification

In the context of drawing parallels and contrasts between noun and verb classifications, McGregor (2002) postulates a difference between classes and categories based on the types of relations among the members thereof and argues for a distinction between superclassification and subclassification.

Certain noun-verb compounds in English (e.g. hand-pick, pistol-whip, horse-whip, test-drive, etc.) also represent a type of verbal subclassification: they specify subtypes of the event denoted by the verb. Gooniyandi, by contrast, shows a system of verb superclassification (McGregor 2002: 5).

A further discontinuity is defined between

- grammatical classification: systems of overt or covert classification of lexemes; and
- epistemological classification: systems of linguistic units that categorise a domain of (conceptual) referents (McGregor 2002: 22)

As can be surmised from the author’s suggestions, certain CVs in English are instances of verbal subclassification, resembling the endocentric modifier nominal type (hyponymy-based). By implication it can be concluded that other CVs in English do not belong to the subclassifying type. Viewed from the perspective of epistemological classification, the other CVs belong to a superclassification class in which members create new individuated types of activities (conceptualizations), i.e. names of socio-culturally significant activities, usually pragmatically primed (e.g. deadpan, fast-talk, high tail).

CVs in English constitute a constructional idiom associated with two construal prototypes which enclose a gradient space of conceptualizations. The constructional
idiom can be represented as \([XY]\)\(V\), where a subdivision is established between CVs in which \(Y\) can be associated via sub-classification with a homonymous simplex verb (A) e.g. spray-paint, spoon-feed, headhunt; and epistemologically novel ones where the second constituent might be associated with a simplex \(V\) or not (B) e.g. hag-ride, to moonlight, to graymail, to sandbag, to blackball, to honeymoon.

The first prototype actualizes the subclassification class of CVs and is represented by \([XV]\)\(V\) where internal \(V\) is not categorically specified within the construction but is homonymous with a simplex verb.\(^{15}\) The radial network of this prototype contains two active zones in which the following can be distinguished:

\(a.\) \([\text{SPATIAL SPECIFIER } V]\)\(V\) – Marchand’s genuine CVs: e.g. outnumber, undergo, oversee;
\(b.\) \([X F,D,P]V\) where \(F, D, P\) stand for lexically but not categorically specified inputs (e.g. fry, dry, paint, etc.) which is associated with well-elaborated word formation niches, e.g. deep-fry; drip-dry; spray-paint.

The second prototype constitutes the class of superclassification CVs and can be represented by \([XY]\)\(V\), where the overall meaning of the CV involves the use of initial situational interpretation which provides the onomasiological motivation for the CV, e.g. sandbag, piggyback, badmouth.

\(5. \text{CV SEMANTICS}\)

Compositionality\(^{16}\) in the lexical semantics of CVs arises out of the contribution of:

i. the construction as a whole \([X Z]\)\(V\) contributes the categorical specification and the instruction that the whole conceptual complex is to be profiled as a relational concept
ii. the blending\(^{17}\) of two input frames.

The specific lexical semantics of CVs involves the activation of two input conceptual frames which interact in specifiable ways. There are three different ways in which the frames can interact, interrelated with the ramifications of the specified radial networks of the two CV prototypes (as defined in 3):

\(^{15}\) This restriction holds true throughout the inheritance hierarchy.

\(^{16}\) Compositionality is to be understood as a non-trivial and non-standard compositional theory likely to capture the general way in which semantic parts of a compound configure into a semantic whole (Bundgaard et al. 2006, 2007). Compositionality constrains the construal of the overall compound signification.

\(^{17}\) Blending (involving both conceptual disintegration (Bache 2005, Hougaard 2005) and conceptual integration) is a powerful cognitive processing routine which functions as guiding context for constraining and establishing a semantic bond (Fauconnier and Turner 2002, Coulson 2001, Bache 2005, Bundgaard et al. 2006).
A. \([X F,D,P]V\) – a single-scope blending of the two frames where the first frame fills an available slot in the second one and is foregrounded in a newly perspectivized profile of the second frame (e.g. bottle-feed, spray-paint, cartwheel)

B. \([\text{spatial specifier}]V\) – blending where the two frames merge and the spatial specifier frame augments the second frame by embedding it in a spatial scenario via the location branch of the event metaphor. In such CVs the meaning is established on the basis of an asymmetrical double-scope network of frame blending (e.g. overcome, under-rate, outnumber)

\([XY]V\) – symmetrical double-scope blending where the generic space is a newly emergent one in which the features to be projected from the two input frames are selected in keeping with the graded salience hypothesis (Giora 1997, 2002; Huang 2009) and in which pragmatically driven mapping principles of relevance motivate the relevant elaboration of the blend.

These three frame-blending mechanisms correlate with the three readily identifiable zones in the conceptualization-based classificatory space of CVs:

\[[XY]V\]: categorical specification or
[+dynamic; +relational] categorical relational meaning

Group B \([X V]V\)

[subclassifiaction]

Group A \([XY]V\)

[superclassification]

- highly schematic meaning

\[[XF,D,P]V\] \([SS V]V\) \([XY]V\)

[value foregrounding] [spatial scenario] [emergent content]

deep-fry outbid deadhead

- more specific meaning

\(B_1 \quad B_2 \quad T_A\)

- lexical meaning

Each CV realizes the merging of two input frames evoked by the compound-internal constituents and surfaces as a unified frame with

“a. A word sense’s semantic frame (what the word “means” or “evokes”)

= profile + background frame

b. A word sense’s profile: what the word designates, asserts

c. A word sense’s background frame: what the word takes for granted, presupposes” (Goldberg 2010: 39)

The only constraint for the sanctioning of a CV schema of any of the lower levels the only constraint is for the conceptual content evoked by it to be construable as a single frame, which is fully congruent with Goldberg’s (2010: 39) argument that “[t]o
count as “coherent” and “individuatable,” the situation or experience must be construable as a unit.”

The [X F,D,W]V, SINGLE SCOPE BLENDING PATTERN was illustrated in 4.3., so only the other two patterns are discussed below.

The [SPATIAL SPECIFIER V]V, ASYMMETRICAL DOUBLE-SCOPE BLENDING PATTERN leads to asymmetrical conceptual blending in which one of the outputs projected as a feature is blended as a default value in the meaning construction of the resultant CV. Being cognitively related to the homonymous preposition, these non-verbal constituents in CVs, just as the more abstract non-spatial meanings of prepositions, “tend to be derived from concrete, spatial senses by means of generalization or specialization of meaning or by metonymic or metaphorical transfer” (Cuyckens and Radden, 2002: xiii). In outnumber the input space of out projects the feature [BEYOND CERTAIN LIMITS], which is derived from [LEAVING A CONTAINER] into the composition in the generic space which combines with the meaning of [TO MAKE A TOTAL; REACH AN AMOUNT] as a default. Through completion, it also projects the constructional requirement that the blended space contain a counterpart to the agent that performs the verbal activity in the conceptual space in the verbal input so that the [LIMIT] meaning component can be set up by the emergent contrast between the counterparts in the running of the blend. The frame of out introduces a CONTAINER and imposes a spatial reading. VERTICALITY and PATH accompany this basic image-schema grounded metaphoric projection. VERTICALITY arises in the conflation of the two frames, the second of which involves QUANTITY IS VERTICAL MOVEMENT. Important for the configuring of the overall lexical meaning is also the FAR-NEAR schema. Besides introducing the CONTAINER schema, out implies MOVEMENT OUT OF THE CONTAINER, i.e. has a PATH/DIRECTIONAL component of meaning. Implicationally the FAR-NEAR schema will presuppose lack of control and will cancel the ‘exceed’, ‘be more powerful’ meaning of outnumber. However the VERTICALITY schema and the metaphor QUANTITY IS VERTICAL ELEVATION in the configured conceptualization override the far-near schema and associate power and control with vertical elevation. So the configuration involves QUANTITY IS VERTICAL ELEVATION conceived of as UPWARD MOVEMENT OF LEAVING A CONTAINER with the implication of control of the moving entity over the one remaining in the container.18

The verbs actualising the [X Y]V, SYMMETRICAL DOUBLE-SCOPE BLENDING PATTERN are invariably semantically exocentric as none of the constituents has any prevalence or leading role in profiling the blend. “Exocentricity19 is an «anomaly» in language

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19 Benczes’s (2004, 2006) detailed analysis of creative N+N compounds in English reveals that creativity is synonymous with degree of extension and that they correlate with transparency of meaning (Benczes 2006: 189). Respectively semantic exocentricity corresponds to higher degree of creativity.
design in the following sense: describing a construction as exocentric means acknowledging that we cannot account for all the information conveyed by it” (Scalise and Guevara 2006: 185). The criterion of semantic exocentricity adopted here is understood as defined by Scalise et al. (2009: 59-60). “the third sense of exocentricity, in which the semantic class denoted by the compound cannot be predicted from the semantic class of their constituents.”

In such CVs both the constituents and the underlying constructional schema are co-activated as salient components of the blend. Consequently elaborate processes of metaphoronymic (Goossens 2003) semantic creativity are involved in blending the two input frames so as to preserve the constructional requirement for a fleshed-out and richly emergent relational concept. *Hag-ride* is used as an illustrative example:

**hag** (input 1)

- witches ride on broomsticks
- witches torment people (including by riding them: sitting on their chest at night casting bad spells)
- witches can bring bad luck

**ride** (input 2)

- to move along in any way; be carried or supported
- to sit on and manage a horse or other animal in motion; be carried on the back of an animal

Generic space

- RIDING IS TORMENTING

In the initial component of the blend the metonymy CAUSE FOR EFFECT is activated, while in the second component MEMBER OF A CATEGORY FOR THE CATEGORY operates. Riding is associated with LIFE IS A JOURNEY via MEMBER OF A CATEGORY FOR THE CATEGORY; then CONTROLLED FOR CONTROLLER is activated to reverse the cause-effect directionality of the riding schema; then the blend runs BEING RIDDEN BY A HAG IS LIVING IN A TORMENTED STATE.

6. FINAL COMMENTS

The peculiarities involved in configuring the meaning of a CV derive from the fact that “the conceptual base that underlies their predication is complex: ... a complex scene”20 (Langacker 1987: 141; emphasis in the original). The cognitive-functional rationale of CVs in languaging21 lies in their ability to compress situational scripts

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20 Langacker defines the semantic pole of an idiom in this quotation, but taking the liberty to use it in relation to compound verbs is justified by its appropriateness and aptness for describing the conceptual constitution of a compound verb.

21 The term languaging is used as a shorter version of Slobin’s (2003) ‘thinking for speaking’, though the original more comprehensive term used by Maturana (1978) is also intended here.
(clause-like descriptions) into naming units whose constructional uniformity is guaranteed by overall verbal profiling, or actionalization construal (Langacker 2008). CVs rank high as convenient rich conceptual integration networks, as shorthand for events which enclose a cline between naming (thing/relation profiling) and description (situation profiling).

The tradeoff between explicitness and guided implicitness in the meaning constitution of CVs positions them as linguistic entities somewhere between explicit descriptions (situations) and implicitly construed names (relational profiling). This accounts for their cognitive power as construal mechanisms.

Just as the categorial, formal, semantic and origin properties of compounds represent a tightly interwoven totality, thus our analyses should try to keep as flexible and open an eye as possible without imposing dichotomous analytical categories which violate the natural fluidity of CVs as unique constructions in the hierarchical patterning of constructions in the fabrics of language.

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Abstract

BEYOND DICHOTOMIES: ON THE NATURE AND CLASSIFICATION OF COMPOUND VERBS IN ENGLISH

The study of compound verbs in English poses numerous problems, among which even their recognition as compounds on grounds of their derivation. Resulting from at least three different word-formation patterns, compound verbs constitute a heterogeneous class of complex lexemes. Their status as actual compound lexemes invites the differentiation between compounding as a word-formation process and compounds as a special class of lexemes. Even within the latter, compound verbs display marked properties at least in relation to the inability of standard classifications of compounds to capture and compromise their lexical uniformity and their heterogeneous origin. The adoption of a position in which it is argued that compound verbs in English constitute a constructional idiom and the application of scalar analytical notions which combine word-formationist and lexical-semantic accounts cast in the general framework of the cognitive linguistic enterprise yield informative generalizations concerning the linguistic and conceptual properties of compound verbs in English. In view of Radden and Dirven’s (2007: 41-46) claim that we do not need “more than two basic types of conceptual units things and relations” in order to establish linguistically relevant conceptual distinctions, compound verbs pose a problem for neat dichotomous treatment as they very often both conceptually and in terms of form include a “thing” (e.g. to flat-hunt, to house-sit, to fellow-feel, to case-harden, etc.) and thus come closer to a “situation” than to a “relation”. Exactly because of the fact that compound verbs profile/perspectivize “situations” as “relations”, they function as special construal mechanisms and as such do not fit the subordinate/coordinate distinction, because they name situations. In view of the above the paper treats compound verbs as a constructional idiom whose analysis necessitates the recognition of the role of conceptual conversion mechanisms, scalar classificatory and interpretative criteria and uniform lexico-semantic treatment.
Povzetek
ONSTRAN DIHOTOMIJ: O NARAVI IN TIPOLOGIJI GLAGOLSKIH ZLOŽENK V ANGLEŠČINI