Preverbs in Complex Denominal Verbs: Lexical Adjuncts or Core Predicates?*

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Abstract

In this paper I argue that certain complex denominal verbs in Germanic languages (cf. Germ. *vergärtnern* ('to away-garden')) do not involve a lexical adjunction of a preverb to a denominal base (Stiebels (1998)), but are better analyzed as instantiations of a lexical subordination process (Spencer and Zaretskaya (1998)). Accordingly, the preverb is to be regarded as part of the main thematic structure, the denominal verb being the subordinate predicate. Unlike Spencer and Zaretskaya (1998), I argue that the lexical subordination process involves a syntactic operation, rather than a semantic one. Basically, the empirical evidence in favor of the present lexical-syntactic approach (cf. Hale and Keyser (1993, ff.)) to the formation of complex denominal verbs is drawn from Talmy's (1985, 1991) typological work on conflation processes. Adopting such a typological perspective I put forward a syntactic explanation of why Romance languages lack those complex denominal verbs involving a lexical subordination process.

Key words: lexical syntax, argument structure, conflation processes, complex denominal verbs.

Resum. *Preverbs en verbs denominals complexos: Adjunts lèxics o predicats principals?*

En aquest article defenso que determinats verbs denominals complexos de les llengües germàniques (cf. al. *vergärtnern*) no impliquen una adjunció d'un preverb a una base denominal (Stiebels (1998)) sinó que més aviat es poden veure com el resultat d'un procés de subordinació lèxica (Spencer i Zaretskaya (1998)). D'acord amb aquesta darrera anàlisi, el preverb forma part de l'estructura argumental principal mentre que el verb denominal és el predicat subordinat. A diferència de Spencer i Zaretskaya (1998)), defenso que el procés de subordinació lèxica implica una operació sintàctica, més que no pas una operació semàntica. Bàsicament, l'evidència empírica a favor de l'enfocament lexicosintàctic (cf. Hale i Keyser (1993, ss.)) de la formació dels verbs denominals complexos prové de la classificació tipològica dels processos de conflació de Talmy (1985, 1991)). Des d'aquesta perspectiva tipològica, proposo que cal donar una explicació

sintàctica al fet que les llengües romàniques no tinguin verbs denominals complexos que impliquin un procés de subordinació lèxica.

Paraules clau: sintaxi lèxica, estructura argumental, processos de conflació, verbs denominals complexos.

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1. Introduction

The main goal of this paper is to provide a new analysis of those complex denominal verbs whose formation has been said to involve the lexical adjunction of a preverb to the base denominal verb: see the German examples in (1a,b) drawn from Stiebels (1998: 285-286).[1]

(1) a. Er *ver*-gärtner-te   sein gesamtes Vermögen.   (German)
          he *VER*(away)-gardener-ed his   whole   fortune
          'In gardening, he used up all his fortune.'

     b. Sie *er*-schreiner-te   sich   den   Ehrenpreis
          she *ER*-carpenter-ed herself$_{DAT}$ the   prize
          der Handwerkskammer.
          of the trade corporation
          'She got the prize of the trade corporation by doing carpentry.'

                                                                                   Stiebels (1998: 285-286)

The present paper is organized as follows: Section 1 reviews Stiebels's (1998) lexical-semantic analysis of complex denominal verbs in German. Section 2 presents an alternative lexical-syntactic analysis (cf. Hale and Keyser (1997, ff.) (hence-

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1. Following Stiebels (1998: 278), I will use the notion *preverb* to subsume both *prefixes* and *particles*, and the notion *complex verbs* to refer to all preverb-verb combinations. According to Stiebels (1998: 277), «both prefixes and particles belong to the category of prepositions, but they form different morphological objects (...) prefixes are morphologically minimal ([+min]) in that they form complex verb stems that can never be separated, while particles in the particle-verb combination are morphologically maximal ([+max]) in that they must be separated from the stem in all derivations (including inflection) as well as in sentences that display finite verb movement (verb-first structures, i.e.: main clauses).» Although both prefixes and particles have different morphological properties, they have been shown to behave very similar semantically: their argument structure properties are essentially the same (cf. Wunderlich (1997b)).

forth HK)), which is inspired by Spencer and Zaretskaya's (1998) lexical subordination analysis of verb prefixation in Russian. In Section 3 I give the main evidence in favor of a lexical-syntactic subordination analysis, which comes from the parameterization of Talmy's (1985, 1991) conflation processes (cf. Mateu (2000b, 2001), Mateu and Rigau (1999, 2000)). Section 4 summarizes the main conclusions and puts forward an agenda for further research.

Basing her analysis on Wunderlich's (1997a,b) framework of Lexical Decomposition Grammar (LDG), Stiebels (1998) argues for a semantically based morphological derivation of complex denominal verbs like those in (1): for example, in (2) are depicted the derivational steps that she proposes to account for examples like (1a).[2] The ARG-operation in (2c) is a semantic argument extension operation, which is posited in order to allow the semantic integration of the prefix into the verb (cf. Wunderlich (1997b)). In (2) the prefix *ver-* which functions as a lexical adjunct turns out to affect the argument structure of the base denominal verb by adding one argument, «the consumed object» (*sic*).

(2) a. $[\ ]_V$ $\lambda Q\ \lambda x\ \lambda s\ Q\ (x)\ (s)$

    b. $[gärtner]_V$ $\lambda x\ \lambda s$ GARDENER $(x)\ (s)$

    c. ARG (gärtnern): $\lambda R\ \lambda x\ \lambda s$ [GARDENER $(x)\ (s)$ & $R\ (s)$]

    d. *ver-* $\lambda u\ \lambda s$ CONSUME $(u)\ (s)$

    e. $[ver[gärtner]_V\ ]_V$ $\lambda u\ \lambda x\ \lambda s$ [GARDENER $(x)\ (s)$ & CONSUME $(u)\ (s)$]

<div align="right">Stiebels (1998: 286)</div>

Stiebels assumes that in the unmarked or default case, complex denominal verbs are formed from simple denominal verbs with subsequent preverb addition (see (3)).

(3) $P + N + [\ ]_V \rightarrow P + [N]_V \rightarrow [P+ [N]_V\ ]_V$ Stiebels (1998: 278)

As can be inferred from her LDG analysis in (2), Stiebels posits that in complex denominal verbs, the preverb and the denominal base have distinct lexical entries, this being in accordance with the «methodological requirement of semantic composition» (Stiebels (1998:285)).

Quite crucially, Stiebels (1998) argues that HK's syntactic approach appears to be problematic when confronted with complex denominal verbs like those in (1a,b). Her main criticism is based on the fact that complex verbs with an integrated adjunct (e.g., cf. the prefixes *ver-* and *er-* in (1a,b)) should not occur accord-

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2. In LDG-based work, the S(emantic) F(orm) level (formultated in Categorial Grammar terms) is to be taken as that representation encoding all grammatically relevant information of meaning. It comprises the lexico-semantic decomposition of lexical items that may combine general template-forming predicates with idiosyncratic atomic predicates. As shown in (2), the theta roles are represented by λ-operators that abstract over the argument variables in SF according to their depth of embedding in SF (cf. Wunderlich (1997a, b)).

ing to a syntactic approach like that of HK, since adjunct incorporation is argued to be impossible in l(exical)-syntax.[3] Stiebels (1998: 269-270) points out that «unless adjunct projections are integrated into lexical structure, adjunct incorporation cannot be handled within HK's approach (...) complex denominal verbs (<like those in (1a-b)> JM) constitute an important touchstone for HK's proposal.» Furthermore, she expresses her suspicion that «as with complex denominal verbs in German, HK might have problems to account for complex denominal verbs in English (e.g., *nail down, brick over the entrance, pencil out the entry, brush out the room*) for which the role of the preverb should be clarified» (p. 298).

2. A Lexical-Syntactic Subordination Approach to Complex Denominal Verbs

The present paper can be regarded as a reply to Stiebels's (1998: 285-287) lexical adjunction analysis of preverbs in complex denominal verbs. My reply to her criticisms of the syntactic approach starts with the following remark: Stiebels's (1998: 285) requirement that the verbal prefixes in (1a,b) be «lexical adjuncts» (*sic*) is not to be taken for granted. Following the 'lexical subordination approach' (cf. Levin and Rapoport (1988); Spencer and Zaretskaya (1998)), it can be claimed that it is precisely the preverb element (e.g., *ver-* in (1a)) that must be considered as part of the main thematic structure, the surface head element (e.g., *[gärtner]$_V$* in (1a)) being a subordinate predicate. Let us see why this is the correct analysis.[4]

   Our point of departure is to be found in Spencer and Zaretskaya's (1998) analysis of verb prefixation in Russian. They argue that some verb prefixation constructions in this language (e.g., cf. (4a)) can be given the same L(exical) C(onceptual) S(tructure) analysis as that assigned by Levin and Rapoport (1988) to English resultative constructions like *They drank the pub dry*. Both constructions are explained by making use of a 'lexical subordination operation' to be introduced by the semantic operator *BY*: cf. (4b). Spencer and Zaretskaya (1998: 17-18) interpret (4a) «to mean that the pen became 'exhausted' (in some sense that is defined in part semantically and in part pragmatically) by virtue of writing activity. This is then completely parallel to the analysis given for *They drank the pub dry*».[5]

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3. Cf. HK (1993) for the distinction between l(exical)-syntax and s(entential)-syntax. Cf. HK (1993, ff.) for an explanation of why the conflation operation fails to access the {specifier/adjunct} position in l(exical)-syntax.

4. For the moment notice that it is not coincidental that the subordination analysis goes hand-in-hand with the English analytic translations of the examples in (1).

5. The English resultative construction is assigned the following LCS by Spencer and Zaretskaya (1998: 7): [[CAUSE [ACT (they)], BECOME [DRY (pub)]], BY [DRINK (they)]], i.e., 'they caused the pub to become dry by drinking.'

    This parallelism accepted, I will not enter into discussing whether the LCS in (4b) should be replaced by the following, perhaps more appropriate one: [[CAUSE [ACT (she)], BECOME [*IZ* (pen)], BY [WRITE (she)]], i.e., 'she caused her pen to become «exhausted» by writing'. Suffice it to say that the latter analysis is indeed more in tune with Levin and Rapoport's (1988) analysis in the sense that the *BECOME* operator turns out to be unavoidable in those resultative constructions involving lexical subordination.

(4)   a.   Ona   *is*-pisala   svoju   ručku   (Russian)
           she   *IZ*(out)-write   her   pen.ACC
           'Her pen has run out of ink'.

      b.   [[CAUSE [ACT (she)], *IZ* (pen)], BY [WRITE (she)]]
                                        Spencer and Zaretskaya (1998: 17)

    According to them, the core predicate (i.e., the semantically primary predicate) corresponds to the preverb (e.g., *IZ*-), or to the resultative phrase (e.g., *dry*),[6] while the subordinate predicate (i.e., the semantically secondary predicate) corresponds to the verb (e.g., {*write*/*drink*}).

    To be sure, one of the most important advantages that can be attributed to the lexical subordination analysis is that it can provide an elegant explanation of so-called 'unselected object constructions'.[7] For example, the unselected kind of direct object in (4a) is due to the fact that it is only with the prefix *IZ*- ('out') that the basic verb *pisat'* ('to write') can take such an object. As Spencer and Zaretskaya (1998: 17) correctly point out, «the best way of regarding this case is to take the *iz*- prefix as the core predicator in a complex predicate, with the activity verb *pisat'* as a subordinate predicator». Given this, notice that a unified analysis of unselected object constructions such as those in (5) appears to be possible (the Russian examples in (5d,e) come from Spencer and Zaretskaya (1998: ex. (74, 83))): indeed, as shown by Levin and Rapoport (1988), it is precisely this unification what the lexical subordination analysis can account for in quite an elegant way.

(5)   a.   He drank the night *(*away*).[8]

      b.   She laughed her way *(*into* the room).[9]

      c.   He laughed himself *(*silly*).[10]

      d.   On   *pro*-pil   vsju   svoju   zarplatu   (Russian)
           he   *PRO*-drank   all   his   wages
           'He's drunk his way through all his wages.'

      e.   Rebënok   *do*-kričal-sja   do   xripoty
           baby   *DO*-cried-SJA(itself)   to   hoarseness
           'The baby cried itself hoarse.'

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6. Spencer and Zaretskaya (1998: 18) point out that «the main difference is that the adjective *dry* in the English resultative can be semantically more specific than the rather vague prefix in the Russian (though it is important not to overemphasize the degree to which secondary predicating adjectives actually express a meaning beyond that of an end point of some kind).»

7. See Goldberg (1995), Wunderlich (1997b), Spencer and Zaretskaya (1998), or Mateu (2001), among others.

8. See Jackendoff (1997) for an in-depth analysis of the so-called 'time-*away* construction'.

9. See Jackendoff (1990) or Goldberg (1995) for two analyses of the so-called '*way* construction'.

10. See Hoekstra (1988, 1992), Jackendoff (1990), Carrier and Randall (1992), Goldberg (1995), Levin and Rappaport Hovav (1995), or Wunderlich (1997b), among many others, for different analyses of «intransitive» resultative constructions.

Rebus sic stantibus, it is interesting to notice that Spencer and Zaretskaya's (1998) lexical subordination analysis of verb prefixation can be extended naturally to explain the German complex denominal verbs in (1), which are also examples of unselected object constructions: (1a) could then be argued to be assigned the LCS analysis in (6), whose structural semantics is essentially identical to that in (4b), the differences being reduced to those having to do with their idiosyncratic semantics.[11]

(6)   [[CAUSE [ACT (he)], {VER-/«AWAY»} (all his fortune)], BY
       [GARDEN (he)]] (i.e., 'he caused all his fortune to go away by gardening')

This said, although I am very sympathetic with Spencer and Zaretskaya's (1998) analysis of verb prefixation as lexical subordination, I disagree with their claim that «resultatives are complex predicates formed at a *semantic level* of representation and not constructions formed in the syntax» (p. 4; emphasis mine: JM) (...) «One indication that we need to form the complex predicate at a *lexical level* comes from the fact that many types of resultative are lexically restricted, in that only certain types of lexeme can serve as the syntactic secondary predicate» (p. 11; emphasis mine: JM).

This notwithstanding, with Marantz (1997), I believe that behind such statements is a false dichotomy which is usually found in current lexicalist theories (e.g., Bresnan (1996) or Spencer (1991)): i.e., 'lexical formation' vs. 'syntactic formation'.[12] Therefore, with Marantz (1997), I strongly disagree with Spencer and Zaretskaya when they point out that showing that a process has arbitrary lexical restrictions is an inevitable sign that syntactic formation is not involved. Moreover, with HK (1993, ff.), what we do not accept is Spencer and Zaretskaya's following equivalence: «lexical level» = «semantic (i.e., non-syntactic) level» (see their above statements). To be sure, we can speak of a *lexical semantics*, but we maintain that there is nothing incoherent in speaking of a *lexical syntax* as well. As shown by HK (1993, ff.), it appears to be the case that *syntax* is crucially involved in the *lexical* formation of denominal or deadjectival verbs. To put it in HK's (1999: 453) words: «Conflation is a lexical matter in the sense that denominal verbs and deadjectival verbs as well must be listed in the lexicon. Although their formation has a *syntactic* character, as we claim, they constitute part of the *lexical* inventory of the language. *The two characteristics, the syntactic and the lexical, are in no way incompatible*» (emphasis mine: JM).[13]

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11. See Rappaport Hovav and Levin (1998) for a principled distinction between the *structural* vs. *idiosyncratic* components of lexical meaning.

12. For reasons of space I cannot enter into discussing Marantz's (1997) crucial point that all derivational morphology is syntactic. According to him, nothing is gained by positing a difference between «lexical» and «syntactic» derivation. See Marantz (1997: 214-215) for a criticism of Spencer's (1991) interpretation of Chomsky's «Remarks on Nominalization» (1970) which is often identified as the birthplace of Lexicalism.

13. See HK's (1993: 94-99) discussion on why lexical processes are not to be seen as radically opposed to syntactic processes. Their following statement is clearly representative of this: «In reality, all verbs are to some extent phrasal idioms, that is, syntactic structures that must be learned as the conventional 'names' for various dynamic events» (p. 96).

According to the present argumentation, I want to claim that complex predicates like those in (1) (and by extension those in (4a) and (5)) are not to be formed at a lexical-semantic/conceptual level of representation (i.e., *LCS*), but at HK's lexical-syntactic level, the latter level being regarded as the locus of parameterization of morphosyntactic facts affecting argument structure. It should be clear that my assuming that syntax is involved in the formation of those complex denominal verbs in (1) is not simply grounded on purely theoretical reasons discussed by HK (1993, ff.) or Marantz (1997), which lead to the conclusion that derivational morphology is syntactic. In the following section it will also be shown that there appears to be empirical evidence pointing to the fact that the kind of lexical-syntactic variation examined by Mateu (2000b, 2001) and Mateu and Rigau (1999, 2000) plays a crucial role in accounting for the formation of the data in (1): to the extent that this kind of parametrized variation cannot be explained in *purely* lexical-semantic/conceptual terms, it will be argued to be regarded as natural to transfer the responsibility of the formation of these complex denominal verbs to the realm of syntax. In particular, in the following section I will show why these complex verbs can be properly explained from the perspective adopted by Mateu (2000b), where I provide a lexical-syntactic account of both complex path of motion constructions (e.g., cf. *John danced into the room*) and complex resultative constructions (e.g., cf. *They wiped the slate clean*), both of them involving one conflation process described by Talmy (1985, 1991).[14] Before doing so, let me present my lexical-syntactic analysis of the data in (1).

Following HK's (1997, 1998, 1999) configurational theory of argument structure,[15] I claim that the lexical-syntactic analysis of complex verbs like that in (1a) involves the syntactic composition of two different lexical-syntactic structures (called *Lexical Relational Structures* (LRSs)), the main one being transitive (cf. (7a)), and the subordinate one being unergative (cf. (7b)).
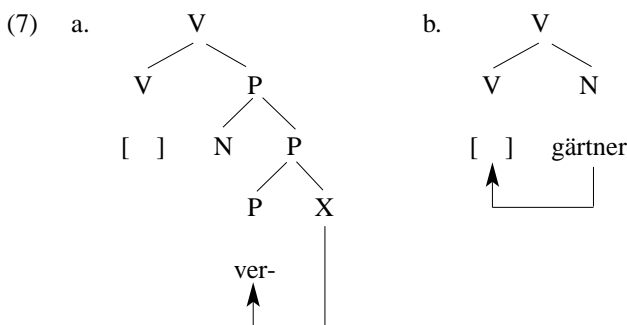
(7)   a.

The LRS in (7a) corresponds to the typical transitive structure expressing a caused change of location (i.e., 'to cause something to go away'),[16] while the LRS in (7b) corresponds to an unergative structure expressing an activity (i.e., 'to garden'). Following HK (1993, ff.), I assume that unergative verbs are properly regarded as denominal verbs, which involve conflation of a nominal root into a phonologically empty verbal matrix. Moreover, notice that the external argument (i.e., *er* 'he') is not present at l-syntax, but is to be introduced by the relevant functional projection (cf. HK (1993, ff.) or Kratzer (1996)).

On the other hand, I assume that preverbs (i.e., both prefixes and particles) belong to the category of prepositions (see footnote 1). In HK's framework prepositions are always to be regarded as birelational elements. Accordingly, directional/resultative preverbs like *ver-* (i.e., 'away') and PPs involving a 'terminal coincidence relation' like *to* (cf. HK (1993)) can be argued to be assigned the same argument structure (both contain a birelational Path element), the difference being that the former involve the conflation of a non-relational element *X* (i.e., an abstract Ground) into a directional relational element *P* (i.e., the Path). *N* in (7a) is to be interpreted as 'Figure/Theme'.[17]

Following HK's (1997: 228-229) analysis of examples like *Rizzuto slid into third base* (i.e., 'Rizzuto got into third base sliding'), we posit that complex verbs like that in (1a) can also be analyzed by means of a *generalized transformation* (Chomsky 1995)), the verb of (7a) being replaced by the denominal verb in (7b): see (8).

As in Hoekstra's (1988, 1992) or Mulder's (1992) Small Clause (SC) approach, the directional/resultative prefix (e.g., *ver-*) is assumed to be the head of the inner «SC» projection (i.e., *P*), which turns out to be adjoined to the superior verbal head because of its affixal status.

(8)

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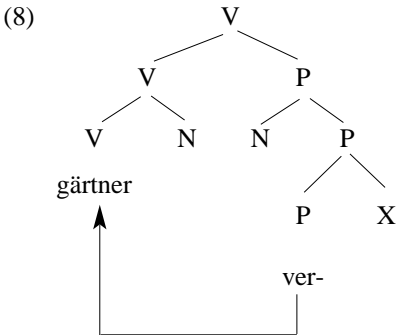
16. See HK's (1998) analysis of so-called 'location verbs' like *to shelve*. Unlike them, I have argued elsewhere that both (caused) change of location verbs and (caused) change of state verbs (e.g., *to break*) share the same syntactic argument structure (cf. Mateu (in press)).

17. 'Figure' and 'Ground' are notions borrowed from Talmy (1985). See Mateu (1999, 2000a) for a reinterpretation of these notions within a framework similar to that put forward by HK (1993).

I would like to emphasize here that the semantic intepretation involved in the so-called 'lexical subordination process' depicted in (6), is to be read off the complex lexical-syntactic structure in (8): roughly, '[(he) [[DO-garden]-CAUSE] [all his fortune away]]'. Indeed, the present analysis of lexical subordination as syntactic should be regarded as in full tune with HK's (1993) particular interpretation of the deeply honored tradition of interpretivist semantics, which is condensed in their following words: «these semantic roles, like the elementary semantic interpretations in general, are derivative of the lexical syntactic relations» (p. 72).[18]

Next I will show that the empirical justification of my lexical-syntactic account is to be mainly drawn from Talmy's (1985, 1991) typologically-oriented work on so-called 'conflation processes'.

3. Conflation Processes and Complex Denominal Verbs

In this section I want to argue that a semanticocentric approach to verb prefixation like that pursued by Spencer and Zaretskaya (1998) can be granted descriptive validity but it cannot provide a *principled* explanation of some important parameterizable morphosyntactic facts put forward by Snyder (1995) or Mateu and Rigau (1999, 2000), among others. Relevant to our present concerns is the fact that the semantic approach cannot explain why complex verbs like those in (1) exist in some languages (e.g., in German or Russian) but not in others (e.g., in Romance languages). More generally, semantic accounts of lexical subordination cannot explain why unselected object constructions like those in (5) exist in some languages, but not in others.

To be sure, to say that the relevant LCS operation holds for some languages but not for others is not an explanation but a mere stipulation. In particular, one could ask why some languages (e.g., those of the Romance family) lack the particular type of LCS operation described in (6). It is precisely this point that semanticocentric analyses cannot deal with: that is, the linguistic variation involved in lexical subordination processes like that depicted in (6).[19] Our claim is that (morpho)syntax has an important role to play here.

As pointed out by Mateu and Rigau (1999, 2000), among others, it should be clear that there is a *morphosyntactic* reason involved in Talmy's (1991) distinction between 'satellite-framed languages' like English, German, Dutch, or Russian, and 'verb-framed languages' like Catalan, Spanish, French, or Japanese.[20] The former languages are called 'satellite-framed' in virtue of the fact that the Path relation is not conflated into the verb, but remains as a 'satellite' around the verb (e.g., cf. *John went out of the prison*). As a result, a 'manner' component (e.g., that expressed

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18. For a substantially different view of the syntax-semantics interface, see Jackendoff (1990, 1997) or Bresnan (1996). See Mateu (1999) for an attempt to reconcile both positions.
19. See Mateu (2000b, 2001) for a review of some problems found in semanticocentric approaches to resultative constructions.
20. For reasons of space, the following discussion will be quite sketchy. The interested reader can take a look at Mateu and Rigau (2000) in order to get a better perspective.

by *walking* or *swimming*) is allowed to be conflated into the verb (e.g., cf. *John walked/swam out of the prison*). By contrast, the latter languages are 'verb-framed': the conflation of the Path relation into the verb has a fossilized status.[21] This prevents an independent manner component from being conflated into the verb. If this additional component is to be expressed, this can only occupy an adjunct position (e.g., *en Joan sortí de la presó a peu/nedant* 'John exited from the prison on foot/swimming').

According to Talmy (1991), 'satellite' status must be attributed to Russian prefixes (e.g., cf. (4a)). By parity of reasoning, those German examples in (1) should be analyzed in a similar way. In Talmy's (1985) terms, examples like those in (1) and (4a) obey the following lexicalization pattern: conflation of V with a manner component. Let us exemplify it with the analysis of (1a). To put it in our present terms, the satellite nature of the Path relation *ver-* allows an independent lexical-syntactic verbal object (e.g., cf. the unergative LRS in (7b)) to be conflated into the phonologically null main verb (i.e., the V in (7a)), the former providing the latter with phonological content (cf. (8)). By contrast, Romance languages, which lack complex denominal verbs like those in (1), are verb-framed: the Path relation is conflated into the verb, this incorporation being fossilized (see footnote 21). This prevents a manner component (in our terms, an unergative LRS) from being conflated into the verb.

Furthermore, as noted above, an additional step in the derivation of (1a) appears to be involved: the affixal nature of the Path relation *ver-* forces it to be adjoined to the superior verbal head. By contrast, it is interesting to note that such an additional step is typically missing in English, as shown in (9):

(9)   He gambled all his fortune *away*.

Notice however that the lexicalization pattern accounting for the German examples in (1) is the same one holding for English examples like that in (9) and, more interestingly for the purposes of the present paper, for those complex denominal verbs mentioned by Stiebels (1998: 298): *nail down, brick over the entrance, pencil out the entry* or *brush out the room.*

This seems then the appropriate place to refute Stiebels's (1998: 298) words: «HK might have problems to account for complex denominal verbs in English (and other languages)». As above, the refutation will be grounded on the descriptive basis of Talmy's insights on conflation processes. My lexical-syntactic account of complex denominal verbs in English runs as follows. A complex denominal verb like *to nail down* is the result of fusing two different LRSs, those in (10). (10a) is a transitive LRS containing a phonologically null causative verb which subcate-

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21. For example, consider the following Path verbs in Catalan: *sortir* 'to go out', *entrar* 'to go in', *pujar* 'to go up', or *baixar* 'to go down'. Clearly, from a synchronic perspective, the conflation involved in these verbs can be regarded as a clear example of 'fossilized incorporation': roughly speaking, what corresponds to the Catalan verb and what to the Path relation cannot be distinguished any longer (cf. Mateu and Rigau (2000) for more discussion).

gorizes for a PP as complement: its head, the particle *down*, is to be taken as the result of conflating a non-relational element *X* (i.e., an abstract Ground) into the prepositional head expressing a Path relation. Its specifier is to be interpreted as Figure/Theme. On the other hand, (10b) is a denominal verb: this is formed by conflating the nominal root *nail-* into another phonologically null verb. The lexical-syntactic structure of (10b) is that associated to unergative verbs expressing an activity. Semantically, (10b) is then to be associated to the activity of *nailing*.

(10) a.

b.
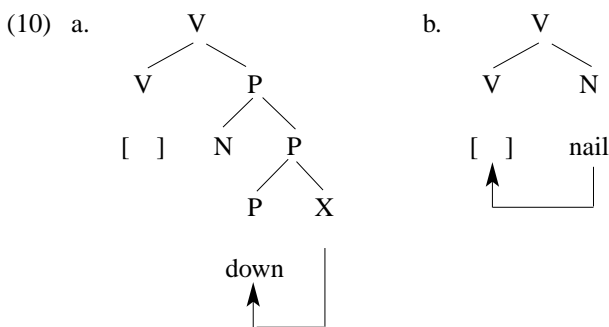
As stressed by HK (1998), phonologically empty matrices must be saturated at PF. As it stands, the LRS in (10a) would then crash at PF. Crucially, the Path relation (e.g., *down*) has satellite status in English, this being unable to saturate the empty matrix of the causative verb in (10a). An option becomes available: to resort to an independent LRS object (e.g., that in (10b)) in order to saturate the empty matrix of V in (10a). The phonologically null matrix of the causative verb in (10a) allows an independent lexical-syntactic object with full phonological content (that expressed by *nailing*) to be conflated into it. The same generalized transformation operation we made use of in the formation of (1a) can also be argued to be resorted to when accounting for complex denominal verbs in English. The resulting complex LRS is depicted in (11):

(11)
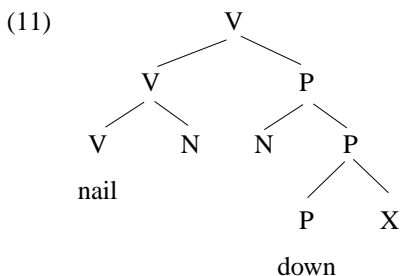
This said, let me conclude this section with the following remarks. Unlike Spencer and Zaretskaya's (1998) semanticocentric approach, a *syntactic* approach

to complex denominal verbs like that pursued here is to be regarded as a particular way of attempting to provide a principled explanation of how to deal with the linguistic variation in the lexical domain that cannot be expressed in purely semantic terms: crucially, I have shown that the explanation of why verb-framed languages like the Romance ones do not have complex denominal verbs like those in (1) must be related to morphosyntax, not to semantics.

On the other hand, we have seen that the expression of semantic content is to be constrained by the particular morphosyntax of the language at stake.[22] Consider for example how the semantic content contributed by complex denominal verbs like *nail down* or *nail up* is to be expressed in a verb-framed language like Spanish.[23] Two natural translations of these complex denominal verbs are given by the Collins Spanish Dictionary: *sujetar con clavos* ('to nail down') and *cerrar con clavos* ('to nail up'). Notice that these translations are in perfect tune with the verb-framed nature of Spanish: that is to say, in the Spanish translations the Path/State component is conflated into the verb, while the manner or instrument component is syntactically encoded as an adjunct.[24]

To sum up, I have tried to show that it is precisely the verb-framed nature of Romance languages what prevents them from having complex denominal verbs like *nail down*. I have emphasized that a semanticocentric approach to the formation of these verbs should not neglect the parametrized variation involved: the morphosyntactic distinction between satellite-framed languages vs. verb-framed languages should be incorporated into any adequate model dealing with lexical subordination processes.

4. Conclusions

In this paper I have argued that semanticocentric approaches to the formation of complex denominal verbs like those in (1) are descriptively adequate, but they cannot provide a principled explanation of why some languages lack them. This fact led us to pursue a syntactic explanation within HK's (1993, ff.) configurational theory of argument structure.

In particular, I have argued that the preverb in complex denominal verbs like those in (1) is not to be analyzed as a lexical adjunct (Stiebels (1998)). Following Spencer and Zaretskaya's (1998) analysis of verb prefixation in Russian, I have shown that those complex verbs in (1) are better analyzed as instantiations of a lexical subordination process. According to this analysis, the preverb must be

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22. Obviously, here I am referring to how the particular setting of those morphosyntactic parameters discussed by Mateu and Rigau (1999) can be argued to constrain our way of expressing ideas, not the ideas themselves! In other words, no Whorfian claim must be drawn from my present words (see Slobin (1996) for related discussion).

23. I omit their metaphorical meanings here.

24. It is interesting to note that the lexical subordination process involved in *nail down* and *nail up* is also apparent in the following paraphrases given by the COBUILD English Learner's Dictionary: 'If you nail something down, you fix it firmly to the floor with nails'; 'If you nail something up, you fix it to a vertical surface using nails'.

regarded as a core predicate, the surface head element being the subordinate one. In the present lexical-syntactic terms, the lexical subordination process has been argued to be carried out by means of a generalized transformation (cf. HK (1997)). As a result, the lexical subordination operation is not to be regarded as semantic, but as syntactic.

Finally, I would like to emphasize one specific goal of the present paper. I have concentrated on refuting Stiebels's (1998) following claim: i.e., complex denominal verbs like those in (1) are better analyzed by taking the preverb as a «lexical adjunct» (*sic*). After the present reply, I am however fully aware that, in order to confirm the lexical subordination hypothesis, one must next deal with those «challenging patterns of complex denominal verbs» (*sic*) commented on by Stiebels (1998: 287-295): e.g., cf. complex locatum verbs like *unterkellern* (lit. 'to under-cellar'; cf. *Sie unterkellerten das Haus* 'They put a cellar under the house') or complex location verbs like *einrahmen* (lit. 'to in-frame'; cf. *Sie rahmte das Foto in* 'She framed the photo'). Taking up such a challenge is left for future work.

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