# Spanish Light Verb Constructions: co-predication with syntactically formed complex predicates

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# **Table of contents**

1 Introduction	1
1.1 Previous studies	2
1.2 The proposal	5
2 Semantic and syntactic properties of LVCs	
2.1 Two main types of LVCs	6
2.2 Light Verb Constructions are not lexical phrases.	7
2.3 Number of arguments in LVCs	10
2.4 LVCs and their syntactic status	14
2.5 LVCs, auxiliaries and Clause Union	16
2.6 Light verbs and Collocations	20
2.7 Some regularity: families of LVCs	22
2.8 Summary	
3 Light verb constructions in Role and Reference Grammar	
3.1 Semantic Decomposition in RRG	25
3.2 Initial analysis of Light Verbs	28
3.3 The semantics of predicative nouns	31
3.4 Verbal schematism and qualia in the formation of LVCs	34
3.5 Semicompositionality and semiproductivity in LCVs	
3.6 Light verb interpretation vs. heavy interpretation	
4 Concluding remarks	
5 References	

#### **Presentation**

The present paper deals with combinations of verbs plus nouns known as Light Verb Constructions (LVC), such as *Bill took a shower*, in which the interpretation of the eventuality depends on both the noun and the verb. Following Butt & Geuder (2001), I will argue that LVCs are syntactically formed complex predicates. In LVCs, the event denoting noun combines its LS with the LS from the verb, creating an LS that describes a single eventuality. In this way, the argument structure for the LVC is not directly and solely licensed by the noun, but rather it is yielded by both syntactic components. I will argue that in these constructions are semi-productive and semi-compositional, which is better captured using a system of lexical decomposition, in this case Role and Reference Grammar (Van Valin and LaPolla 1997, Van Valin 2005).

# 1 Introduction

In this paper I will discuss the main characteristics of Light Verb Constructions (LVC), cases like *Pat made new comments on the case*, in which the noun is combined with a verb in order to produce a syntactically complex predicate. In other words, while the semantic content for the eventuality comes from both the noun and the verb, the noun is still the head of a noun phrase and it still preserves the characteristics of regular noun phrases in object position.

The term light verb construction is rather unfortunate for several reasons. First of all, it suggests that the verb has no meaning, which is not true, as argued in this paper. Second, it has been applied to many phenomena that, albeit related, are different form language to language. While the term has been used for verb+verb (V+V) constructions in some languages (Mohanan 1997, Butt & Geuder 2001, Pensalfini 2004, *inter alia*), it is

applied to only verb+noun constructions other languages. Sometimes linked with the previous problem, verbs appearing in an LVC, or light verbs (LV), have been conflated with auxiliary verbs.

Here, I will argue that in Spanish LVCs are restricted to V+N constructions. In addition, LVs are different from auxiliary verbs for several reasons, but they are not a special subclass of verbs. Rather, an LV is such insofar as it is part of an LVC.

#### 1.1 Previous studies

The notion of light verbs goes back to Jespersen (1964:117), who observed that some deverbal nouns are combined with verbs that are light in their semantic content, such as *have*, to form a complex predicate. Even tough more than forty years have passed, it is still believed that in LVCs the noun is the main predicate and that light verbs have no semantic content, two notions that are not accurate, as explained in the next section. There is no single definition of LVCs and in general there is no agreement as to what counts as an LVC.

Most of the previous analysis on LVCs has been centered on some syntactic properties of LVCs, especially on how the semantic arguments from the noun are syntactically licensed by the verb. For many scholars, such as Cattell (1984) and Grimshaw and Mester (1988), the verb in an LVC is only a functional element which allows the noun to be the main predicate and to license its arguments, something otherwise impossible. This comes with the idea that those verbs have no meaning. Not always differentiated from the previous position, from different frameworks other studies have proposed that in an LVC should be considered along auxiliary verbs (Alba-Salas 2001, Alonso Ramos 2004).

However, it was also observed that the matrix verb imposes some selectional restrictions. In this respect, Grimshaw and Mester (1988:229) pointed out that

the influence of the [light] Verb itself is detectable in subtle meaning changes. For example, although a spider can *walk*, a spider does not normally *take a walk*. This difference presumably reflects the influence of the argument structure of take on the interpretation of the complex.

It has been argued that there are other cases in which some of the arguments of the LVC are not licensed by the noun alone, but rather by the verb. Then, in addition to imposing selectional restrictions, some verbs also have a partially specified argument structure. Constructions of this type were called semi-light verb constructions (Di Sciullo and Rosen 1990, Pelletier 1990).

Two mechanisms have been proposed for combining the arguments for the noun into the verbal argument structure. For Grimshaw and Mester (1988) this is done via *argument transference*, according to which the noun transfers its  $\theta$ -roles to the verb. This operation follows from the fact that the light verb is thematically incomplete, and the noun alone cannot project its arguments beyond its phrasal level; so the  $\theta$ -roles from the noun have to be transferred to the verb. The second mechanism is *argument substitution*. According to Di Sciullo & Rosen (1990:110) "A light verb is one that has only unspecified variables at Argument Structure". Consequently, a light verb construction is the result of the substitution of one of the unspecified variables of the light verb with the argument structure of the second predicate. A solution along these lines is offered in (1), where u represents the unspecified arguments and the sub-index represents a control relation. There have been other proposals along the same lines (Rosen 1990, Mohanan 1997, Samek-Lodovici 2003).

1. V1 
$$(u_i, u)$$
  
V2  $(x_i, y) \rightarrow [V1 V2](x, y)$ 

Butt & Geuder (2001) consider LVCs as complex predicates, where LVs are semi-lexical heads. Contrary to most proposals, they define LVs as a class of verbs in Urdu, different from auxiliaries. LVs are a type of co-head, where both elements jointly determine the "predicative power of the lexical predicate" (Butt & Geuder 2001:333). The notion of co-head is similar to co-subordination in RRG (Van Valin and LaPolla 1997) or to co-lexicalized compounds for Givón (2001).

Specifically for Spanish, LVCs are regarded as unanalyzable idioms for most scholars (see for example Piera & Varela, 1999; Gómez Tórrego 1999). There are, however, two important studies: a comparative study of LVCs in Romance languages by Alba Salas (2001), and another devoted only to Spanish by Alonso Ramos (2004). Alaba-Salas (2001) proposes within Relational Grammar that in all LVCs the noun should have a deep subject, and the "argument transference" is achieved by demotion. There are two fundamental problems: first, not all nouns in LVCs have a deep subject; second, he has to postulate that action nouns in LVCs are in fact verbs, for which there is no independent motivation. Alonso-Ramos (2004) proposes rather that LVCs are semiphrases in which the meaning of the verb is already contained in the meaning of the noun. The downside is that ultimately LVCs are treated as lexical phrases.

Finally, it is worth pointing out that the notion of light verb has been extensively used in recent years in the Minimalist Program (Chomsky 1995, Bosque 2001, Adger

<sup>1</sup> In essence, Alonso Ramos' (2004) book is a modified version of her Ph.D. dissertation (Alonso Ramos 1998).

<sup>&</sup>lt;sup>2</sup> Alba-Salas (2002) does not use the term "deep subject" but rather he refers to them as a 1-relation within the P-sector of the noun. He does not use the term "argument transference" either, although rearrangements in the argument structure do the same job.

2003). However, such a notion corresponds to an empty node in the tree (the "little v") and has in fact nothing to do with light verbs in the present discussion.<sup>3</sup>

#### 1.2 The proposal

I will consider light verb constructions as syntactically formed complex predicates in terms of a merged logical structure representation. This idea has been suggested already by Butt & Geuder (2001), though LVCs should be restricted to V+N constructions in Spanish. I will argue that both the noun and the verb are co-predicators since both of them contribute to the LS (cf. Van Valin 2004). However, in syntactic terms, only the verb is the head of the VP while the noun is a verbal argument (in most cases the direct object). In other words, in syntactic terms LVCs have a simple nucleus, with only one lexical item as the head, being the verb, in opposition to cases of co-subordination that might have a complex nucleus or a complex core (i.e. formed by two verbs). Related to this point, I will argue that syntactically LVCs are different from auxiliary verbs constructions in Spanish.

In terms of the LVC formation, the verb takes as its argument an event or state denoting noun, which will be called the predicative noun (or P-noun). This P-noun combines its meaning with part of the meaning provided by the verb. In other words, the Logical Structure (LS) is the result of the co-composition (Van Valin 2004) of the LS for the verb with the LS for the noun. In addition, the argument structure from the resulting LVC is not directly licensed by either the noun or the verb alone; rather it follows from the LS.

It is necessary to say, though, that the motivation for saying that there is a  $\nu$ P level comes from the

analysis of VP-Shells and causatives. For some authors causative verbs also count as light verbs.

As will be explained, there are more patterns in LVCs than what has been previously assumed. So, it is possible to identify some "families" of LVCs. Even though there are regularities inside those families, and even productivity, there is a great deal of idiosyncrasy across groups. Thus, the combination between the verbal and the nominal LS is not completely unsystematic but it is not completely compositional either. Rather, they are semi-productive and semi-compositional. Finally, in order to argue for complex predicate formation and capture the characteristics of Spanish LVC, it is necessary to have a theory that allows semantic decomposition.

Finally, two terminological notes are in order. In many studies the term *heavy verb* is used in opposition to light verbs. In this study I will also use it for the sake of contrast, and it does not have any theoretical status. Second, even though the categories of "subject", "direct object" and "indirect object" are not technically defined in RRG, I will use them in order to keep things simple.

# 2 Semantic and syntactic properties of LVCs

## 2.1 Two main types of LVCs

The first thing to be noted is that there are two main classes of LVCs, depending on the type of predicative noun (P-noun) that the verb takes as its argument: in some cases it is a state denoting noun (such as *miedo* 'fear') while in other cases it is an event denoting noun (such as *patada* 'kick'). This first semantic classification has, as one might expect, some syntactic correlations. Even though in both cases it is possible to modify the noun, they present different syntactic characteristics, not highlighted in previous studies (Alba-Salas 2002, Alonso Ramos 2004). Not surprisingly, an LVC having an event denoting noun might alternate between a cumulative interpretation with a plural noun (2a) and a

quantized interpretation a numeral (2b) or a quantifier (cf. Krifka 1992). In addition, event denoting nouns might also refer to specific events and thus they also accept the definite article (2c).

- 2. a. Sergio les da besos a las muchachas.
  - 'Sergio gave kisses to the girls'
  - b. Sergio les dio **tres** besos a la muchacha. 'Sergio gave **three** kisses to the girl'
  - c. Sergio les da **el** beso de despedida a las muchachas. 'Sergio gave **the** goodbye kiss to the girls'

In contrast, LVCs referring to a state or change of state do not usually accept an article, as in the contrast between (3a) and (3b), except when the event is qualified, as in (3c), and they cannot be quantized (3d) although can accept intensifiers (3e).

- 3. a Me dio miedo.
  - 'I got scared'
  - b. \*Me dio el medio.

Intended: 'I got scated'

- c. Me dio un miedo terrible.
  - 'I got terribly scared'
- d. \*Me dio tres miedos.

Literally: (it) gave me three fears.

- e. Me dio mucho miedo.
  - 'I got really scared'

Even though there exist more particular restrictions for some LVCs, this first difference between types of nouns accounts for many cases in which there seems to be syntactic restrictions on the noun (cf. Alonso-Ramos 2004). Those restrictions are not arbitrary, nor are they due to a fossilized syntax, but rather have a semantic orientation.

#### 2.2 Light Verb Constructions are not lexical phrases.

There are other expressions in language that also contain a VP in which the verb does not seem to contribute to the overall meaning of the sentence, as in:

4. My sea-horse kicked the bucket last week.

From a semantic perspective, one cannot make sense of this sentence as a sea-horse kicking anything, for more than obvious reasons; rather one knows it means that the animal died. The interpretation of (4) is not related to its parts at all: neither the verb nor the direct object NP contributes to the meaning of the sentence. For a competent speaker to interpret (4) is necessary to learn the whole phrase as a lexical item. In contrast, in LVCs, the meaning of the whole construction is related to the meaning of its parts: traditionally the meaning has been attributed to the noun, although here I will argue that the verb also contributes.

Related to this, there is another semantic difference. In order to understand idioms, one needs to know the cultural context in which they were created, which may result more or less transparent, as in (5a) if one knows the effect of giving free rein to horses, or rather obscure as in (5b), which has nothing to do with falling or twenties.

- 5. a El señor Arbusto le da rienda suelta a su imaginación. 'Mr Arbusto gives free rein to his imagination.'
  - b Nunca le cayó el veinte. never to.him fall.3SG.PAST the twenty 'He never got/understood it.' (Literally: the twenty never fell to him.)

The second semantic difference is that each idiomatic expression has a unique cultural context that originated it. As will become evident in the following sections, even if the origin of LVCs relies on metaphors, there is a semantic process that explains their interpretation of existing LVCs and permits the creation and interpretation of new ones.

Idioms of the kind shown in (5) are lexical phrases, i.e. non-analyzable phrases that behave as a single lexical unit. This means that one cannot create more idioms with *caer* 'to fall' or *veinte* 'twenty' from the ones in (5). In contrast, one of the main characteristics of LVCs that I want to emphasize is that they are semi-productive: from

(6a) one can create other LVCs in (6b) and (6c). Crucially, the examples in (6b) and (6c) are systematically related to the example (6a).

- 6. a. Me dio frío. to.me gives cold 'I got cold'
  - b. Me dio calor/hambre/sueño.to.me gives heat/hunger/sleep.'I got hot/hungry/sleepy'
  - c. Me dio/tengo/me agarró frío.
     to.me gives/(I) have/ to.me grabbed cold
     'I got cold / I am cold / I got cold'

But perhaps the main syntactic difference between LVCs and lexical phrases is that the former can be modified while the latter are syntactically frozen. Consequently, it is not possible to pluralize (7a) into (7b), change the article (7c) or quantify the noun (7d). As one can expect, it is not possible to substitute the direct object (7e) or to cleft it (7f).

7. a. Sergio nomás les da el avión a las muchachas.

Sergio just to them gives the plain to the girls

'Sergio just patronizes the girls

- b. \*Sergio nomás les da *los* avion*es* a las muchachas. Sergio just to.them gives *the.pl* plaines to the girls
- c. \*Sergio les da *un* avión a las muchachas. Sergio just to.them gives *a* plain to the girls
- d. \*Sergio nomás les da *muchos* aviones a las muchachas. Sergio just to them gives *many* plain to the girls
- e. \*Sergio se lo da a las muchachas. Sergio just to.them *it* gives to the girls
- f. \*El avión es lo que Sergio les da a las muchachas. the plain is what Sergio to.them gives to the girls

In contrast, in LVCs the P-noun could accept all the previous modifications. In section 2.1 I provided examples that show under which conditions it is possible to modify the noun. In the following section, I will present the characteristics of the noun as the direct object.

Of course even lexical phrases might have open slots as well, and as a result one can say that *anyone* could kick the bucket. To what extent idioms in general have more open slots and a less restricted syntax is a matter of another discussion.<sup>4</sup>

As important as the difference between lexical phrases and LVCs may seem, it is not commonly drawn for Spanish. Even in the most comprehensive Spanish grammar LVCs are rendered as lexical phrases by scholars (Piera & Varela, 1999; Gómez Tórrego 1999)<sup>5</sup>, let alone in more traditional grammars such as the one by the Spanish Royal Academy.

#### 2.3 Number of arguments in LVCs

As mention above, one of the earlier observations made about LVCs was that the number of arguments seems to depend on the noun, not on the verb. This might be the case for cases like the following example, where in the (8a) there is one argument, the bus, in addition to the P-noun, while (8b) there are two arguments, the bus and the Heribeto's article.

- 8. a El autobús hizo cinco paradas (antes de llegar a su destino final) the bus made five stops 'The bus stopped five times (before reaching its final destination)'
  - b Francisco le hizo críticas al artículo de Heriberto. Francisco dat made criticisms to;the article of Heriberto 'Francisco criticized Heriberto's article'

As pointed out, it became evident that the verb was not devoid of meaning because it might impose some selectional restrictions (Grimshaw and Mester, 1988). In addition, scholars soon realized that there are some other cases in which the LVC has arguments that are not licensed by the noun, and then the idea of semi-light verb constructions came

<sup>5</sup> This is stinking if one thinks that this grammar is quite comprehensive: three volumes with more than a thousand pages each.

<sup>&</sup>lt;sup>4</sup> But see Riehemann (2001) and the references therein. She would also argue that in some idioms are related to their parts.

around (Di Sciullo and Rosen 1990, Pelletier 1990). In this case, the argument structure for the LVC would not be entirely empty but rather it would have an argument specified, while the other is transferred from the noun. For example, in (9a) the LVC has two arguments, in addition to the P-noun. However, the P-noun can only license one argument by itself, not the two arguments of the LVC, as shown in the contrasts between (9b) and (9c).

- 9. a El olor a pan recien horneado me dio hambre the pain of bread freshly baked to me gave hunger 'The smell of freshly baked bread made me get hungry'
  - b) Mi hambre 'My hunger'
  - c) \*Mi hambre de/por/hacia/con respecto al olor a pan' 'My hunger of/for/to/with respect to the smell of bread'

For Italian, Samek-Lodovici (2003) suggested that the number of direct verbal arguments of an LVC depends entirely on the verb. Thus, LVCs with one argument (in addition to the P-noun) are formed with *fare* 'to do' because it is monotransitive, while LVCs with two arguments are formed with *dare* 'to give' in virtue of being ditransitive. Spanish LVCs contrast with this situation since it is possible to have LVCs with two arguments using *hacer* 'to do' (10a); conversely, there are LVCs with one argument with *dar* 'to give' (10b). Therefore, the number of arguments does not depend on the argument structure of the verb, since (10b) would be impossible, with an otherwise ditransitive verb.<sup>6</sup>

10. a) No me hizo gracia su chiste.

not to.me made fun his joke
'I didn't find his joke funny'

Arguments of the LVC (in addition to P-noun): me 'to me' and su chiste 'his joke'.

<sup>&</sup>lt;sup>6</sup> Of course, it is possible to say that in (10b) *dar* is not the same verb as in *Ricardo me dio su libro* 'Ricardo gave me his book'. However, I will argue that is not necessary to postulate homophonous forms for the verb.

b) Ricardo dio de saltos.
Ricardo gave of jumps
'Ricardo jumped'

Arguments of the LVC (in addition to P-noun): *Ricardo*.

Even in recent papers (Alba Salas 2002, Alonso Ramos 2004) it has been argued that at least one argument for the LVC has to come from the noun. The underlying idea is that there must be argument transference (or a similar mechanism) as a condition for having an LVC. However, this analysis would not predict cases in which no argument depends on the noun, as will be exemplified below.

There are other LVC in which the nominal alone does not allow any kind of argument. As shown in (11), the possession of the nominal *calor* 'heat' results odd (11b-c), and it does not accept the cause of the heat either (11c). However, in (11a) there are two arguments related to the state of getting hot, the cause *esa caminata* 'that walk' and the experiencer *me* 'to me'.

- 11. a) Esa caminata me dio calor. 'That walk made me get hot'
  - b) ?Mi calor 'My heat'
  - c) ?El calor por parte de Juan 'John's heat'
  - d) ?El calor de la caminata 'The heat of the walk'

Finally, let us consider the following case, (12), in which the same verb and noun combination produces different interpretations as well as a different number of arguments. In the first case (12a), there is a direct cause, the draft, triggering the change of state. In the second case (12b), in contrast, there is no cause. One cannot argue that the cause has been elided because (12b) can be perfectly uttered without any anaphoric or exophoric referent.

- 12. a. Cierra la ventana porque el chiflón me dio frío. 'Close the window, because the draft made me get cold.'
  - b. No sé por qué, pero me dio frío.'I don't know why, but I got cold'

This contrast has not been previously discussed in the literature, and certainly presents a challenge for all of the other theories, since both constructions seem related: (12b) is the anti-causative version of (12a). It is pertinent to remark that the meaning of (12b) is not "it makes me cold" or "It makes me fell cold"; in other words, they are not missing the cause, nor is it pragmatically inferred; it is simply not part of the meaning.

Both in (11) and (12) it would be problematic to argue that the arguments of the noun have been projected to the whole construction (either via argument transference or other similar mechanism). As I will argue in this paper, argument transference is a byproduct of having a syntactically complex predicate, in which part of the semantic content of both the noun and the verb is combined. Therefore, there can be LVCs in which the arguments are not attributed to either the noun or the verb, or where a seemingly identical construction displays different argument structures. In order to argue for complex predicate formation, it will be necessary a theory that allows for semantic decomposition. Summarizing, even though in many cases it seems that the noun transfers its arguments to the verb, it is rather the syntactically complex predicate that licenses the arguments.

#### 2.4 LVCs and their syntactic status

One of the main characteristics of LVCs is that the P-nominal is a verbal argument. In most cases, it is the direct object (13a), but it can also be a prepositional object (13b)<sup>7</sup> or the subject in a handful of them (13c).

- 13. a) Los policías le dieron golpes a la viejita. the policemen to.her gave beats to the old.lady 'The policemen beat the old lady'
  - b) Los policías agarraron a golpes a la viejita. the policemen grabbed to beats to the old.lady 'The policemen beat the old lady up'
  - c) A la viejita le entró un susto tremendo to the old.lady to.her entered a scare tremendous 'The old lady got tremendously scared'

In this section, I will focus on cases like (13a), where the P-noun is part of the direct object. The question here is whether the P-nominal really behaves as the direct object or rather it has a more restricted distribution that might suggest that it has a different syntactic status. The question is relevant for two reasons. First of all, from a broad theoretical perspective, there is a dispute in some languages about whether in LVCs the object is incorporated into the verb (cf. Ahn 1990, Dubinsky 1990, Dubinsky 1994, Grimshaw & Mester 1988). For example, for Japanese, Ahn (1990) states that the verb *suru* 'to do/make' is a heavy verb when assigns accusative case. Only the cases when *suru* 'to do/make' does not assign accusative case are true LVCs. Therefore, it is necessary to explore whether the P-noun in LVCs in Spanish is argument-like or rather it seems demoted to another syntactic role.

Second, Alonso Ramos (2004) assumes a rather undefined position with respect to the syntactic status of the P-nominal in Spanish LVCs: they are in the object position but

<sup>&</sup>lt;sup>7</sup> Notice that whether prepositional objects or this kind are arguments or not is a different issue.

are not exactly like other objects because the whole LVC does not have a phrasal structure.

Here I argue that the NP containing the P-noun has the same syntactic status as any other NP in object position. The noun in an LVC can be substituted by the accusative pronoun in (14a-b), just like with other direct object. As shown in the previous section, this would not be possible for a lexical phrase. On the other hand, DOs in a left-dislocated position also trigger the use of the DO pronoun, and as one might expect a P-noun in an LVC behaves just as other DOs, as shown in (14c).

- 14. a. Le dije que si me seguía molestando le iba a dar <u>una patada</u> y se la di.
  - 'I told him that if he kept teasing me I was going to kick him and I kicked him.' DO pronoun *la* co-referent with *una patada* 'one kick'.
  - b. A: ¿Le diste un beso a la Julia?

'Did you kiss Julia?.'

B: No, no se *lo* di.

DO pronoun lo co-referent with un beso 'one kiss'.

'No, I didn't.'

c. La patada yo se *la* di.

DO pronoun la co-referent with la patada 'the kick.'

'I KICKED him.'

The three previous tests are among the most common diagnostics to determine whether a NP is a direct object or not, and in LVCs the NP containing the P-noun passes those texts. The other well known test for DOs is passivization. Contrary to Alonso Ramos (2004), LVCs can be passivized, as in (15).

15. Todos los golpes fueron dados por la espalda y los costados

'(Someone) was hit on the back and sides' (lit. 'All the hits were given on the back and sides') Example from Google:

http://www.infanciayjuventud.com/argenhoy/bsas/baires5.html

Alonso Ramos (2004) points out that P-nouns in LVCs have many syntactic restrictions, which, as shown, is not the case. Certainly not in all cases the P-noun can be substituted

by the DO pronoun, as in the LVC in (16a). However, this is also the case for other bare nouns, as in (16b) which is clearly not an LVC.

- 16. a) Pensé que me iba a dar sueño y me (\*lo) dió. 'I thought I was going to get sleepy, and I got (sleepy)'
  - b) Pánfilo quería comer fruta y (\*la) comió. 'Pánfilo wanted to eat fruit and he ate'

It is important to say that in Spanish, not all types of DOs seem to share the same properties, and thus some fail to pass the tests for DOs. But this is independent of being or not an LVC.<sup>8</sup>

When the P-noun appears in subject position or as part of a prepositional object (13b-c) above, one could argue more or less along the same lines as I did for direct objects: they are just as other subject or prepositional object NPs.

#### 2.5 LVCs, auxiliaries and Clause Union

There are two different issues to be discussed in this section. First, for Spanish I will restrict the use of LVC for V+N constructions, in opposition to V+V complex predicates. Linked with that, I will argue than in Spanish LVCs are different from auxiliary constructions and restructuring constructions, restricted to V+V constructions.

In the literature, verbs in LVCs are considered akin to auxiliary verbs or a subclass of them (Alonso Ramos 2004; Di Sciullo & Rosen 1990; Rosen 1990; Catell 1984). Very frequently, this goes hand with hand with the fact that in many cases the terms "light verb construction" and "light verb" have been used for V+N and V+V constructions.

So, different authors have proposed that V+V also count as LVCs (Mohanan 1997 for Hindi; Butt & Geuder 2001 for Urdu and Wagiman, Australian; Pensalfani 2004 for

<sup>&</sup>lt;sup>8</sup> In terms of RRG, only in M-transitive predicates, but not M-intransitive, the direct object satisfies all the tests for DOs.

Kalam, Trans-New Guinea, and Jungulu, Australian). A similar phenomenon has been described for Australian English, in cases like *have a read*, where the verb *to have* is combined with the *a V-infinitive* construction (Wierzbicka 1982).

- 17. a Nyinda-bili-rni bundurru ukukbili-wunyu-nu. Jingulu (Australian)
  DEM(m)-dual-ERG food wrap-3dual-did
  'Those two wrapped the food' (Pensalfini 2004: 370)
  - b Raam has padaa Hindi Ram-Erg laugh fall.down-perf-Masc 'Ram burst out laughing' (Mohanan 1997:432)

The distinction between "light verbs" and auxiliary verbs, or the distinction between verb-noun constructions and verb-verb constructions (which is in principle a different matter), could be only a terminological issue. However, according Butt & Geuder (2001) in Urdu auxiliary verbs are different from LVs, even in V+V constructions. In addition, they acknowledge that for English LVCs are restricted to N+N constructions.

For the particular case of Spanish, there is an obvious difference: V+V and V+N constructions have different syntactic (and even semantic) properties, and so one should regard them as auxiliary verb constructions and LVCs, respectively. It is not obvious to me why one should conflate those categories, except for the fact that it has been traditionally considered that in both the auxiliary verb and the "light verb" are devoid of meaning (position that is not supported here). One could concede that auxiliary verbs and "light verb" frequently express aspectual meanings, but that is not enough for equating them (as Alonso Ramos 2004 suggests), as it would amount to saying that any word with aspectual meaning should be regarded as auxiliary on similar notional grounds. In other words, auxiliary verbs should be defined as a subclass of verbs in terms of their

<sup>&</sup>lt;sup>9</sup> Of course, in Spanish it would be also necessary to distinguish the stage and individual level copulas *estar* and *ser*.

morphosyntactic properties and not based on the meaning of the word regardless of the syntactic properties.

For Alba-Salas (2002), it would be possible to conflate auxiliary constructions and LVCs because he considers that the event denoting noun in an LVC is syntactically a verb and because in both cases the predicative element displays a "deep subject" (or a 1-relation in RG). The problem is that there is no independent motivation for these suppositions move outside Relational Grammar.

For Alonso Ramos (2004) the analogy between auxiliaries and light verbs comes with the fact that the noun alone cannot act as syntactic predicate, even though it is the main predicate at the semantic level. As she says, in constructions like *dar una paliza* 'to beat someone up', "the support verb is nothing but a lexical tool, used with morphological and syntactic purposes to allow the construction of the sentence". The main problem at this point is to make LVCs and auxiliary constructions similar at the syntactic level so that one can treat auxiliary verbs and "light verbs" as members of the same category. And it is a problem not just because one class takes NP as complements and the other combines with verbs, but also because they exhibit different syntactic properties.

There are two important differences between auxiliary verbs and "light verbs". It was shown in the previous section that P-nouns are in many respects just like regular DOs. However, auxiliary verbs, specially restructuring verbs, do not behave like DO taking verbs. In other words, *volar* in (18) cannot be substituted by the DO pronoun; rather, in addition to *lo*, it is necessary to use the verb *hacer* 'to do' a proform.

<sup>&</sup>lt;sup>10</sup> The translation is mine, the original quote goes as follows: "El verbo de apoyo dar no es más que una herramienta léxica, empleada con fines morfológicos y sintácticos para permitir la construcción de la oración"

18. a Yo puedo volar.

'I can fly'

b. \*Yo lo puedo

I it can

c. Yo *lo* puedo *hacer*.

'I can do it'

For Di Sciullo & Rosen (1990) and Rosen (1990) auxiliaries and "Light Verbs" are similar in that in both cases there is a substitution of the unspecified variables of the first verb for the argument structure of the second predicate. Let us assume that argument substitution captures what happens in LVCs in Spanish and let us think only in terms of what happens at the level of the argument structure. Then, the analysis might seem correct. In fact, similar analyses have been proposed for Hindi (Mohanan 1997), and Italian (Samek-Lodovici 2003).

According to this view, when a verb like *suele* 'used to VERB' in (19a) combines with another predicate, it would have an empty conceptual structure, and therefore it needs the arguments of the other predicate in order to have any projected arguments. Then, the argument structure of both verbs merges in a single predicate, like in the case of LVCs. On of the main evidences for this merge is clitic climbing, as depicted in the contrast between (19b) and (19c): in (19b) the DO pronoun is an enclitic, but in (19c) it appears now as a proclitic of the auxiliary verb.

- 19. a. Ponciano solía leer la carta.
  - 'Ponciano used to read the letter'
  - b. Ponciano solía leerla.
    - 'Ponciano used to read it'
  - c. Ponciano la solía leer.
    - 'Ponciano used to read it'

The problem then is that in clear cases of restructuring verbs, the auxiliary and cannot be separated from the other verb, therefore, it is not possible to have cleft constructions, as

illustrated in (20). In contrast, I have shown that in LVCs it is possible to dislocate the NP containing the P-noun from the verb (14c above).

- 20. a) Pancho se quiere comer la guajolota.
  - 'Pancho wants to eat the subway'
  - a') \*Comer la guajolota es lo que Pancho se quiere. Intended: 'To eat the subway is what Pancho wants'
  - b) Carlitos suele ir al Chopo.
  - 'Carlitos used to go to Chopo'
  - b') \*Ir al Chopo es lo que Carlitos suele.

Intended: 'Carlitos used to go to Chopo'

So, the moral for this section is that LVCs are different from auxiliary verbs mainly because LVCs take NPs as arguments. The resulting construction, the LVC, behaves syntactically different from auxiliary constructions. Even if one believes that there is argument substitution, which I do not, there is no clause union because there are not two clauses, just one: in the case of LVCs one is not dealing with a complex clause.

Even though I argue that there is co-predication (both the noun and the verb contribute to the LS), in Spanish LVCs the noun is still an argument of the LV, not a co-head with it (or more precisely, there is no nuclear co-subordination, see Van Valin & LaPolla 1997, Van Valin 2005).

#### 2.6 Light verbs and Collocations

Alonso Ramos (2004) defines LVCs in terms of collocations. A collocation is defined technically as "a semi-phrasal expression formed by two lexical items  $L_1$  and  $L_2$  in which  $L_2$  is taken in a somehow arbitrary mode to express a given sense and/or syntactic role in function of  $L_1$ 's choice" (Alonso Ramos 2004:20). <sup>11</sup> In terms of argument structure,

 $<sup>^{11}</sup>$  Original text in Spanish: "Una colocación es una expresión semifraseológica formada por dos unidades léxicas  $L_1$  y  $L_2$  n donde  $L_2$  es acogida de un modo (parcialmente) arbitrario para expresar un sentido dado y/o un papel sintáctico en función de la elección de  $L_1$ "

Alonso Ramos assumes that the verb "borrows" some of the arguments form the verb, a solution rather similar to argument substitution or argument transference.

She observes that in an LVC the verb does not seem to be freely chosen, but rather it depends upon the P-noun. According to her analysis, if one wants to express a predicate relative to the concept 'desire', in Spanish one might use a verb (desear 'to desire'), an adjective (deseoso 'eager') or a noun (deseo 'desire'). In case one chooses to use the noun, then all one needs to know is that it has to be combined with the verb tener 'to have'. If one wants to talk about some hitting someone else, and if one decides to use a noun, then one can combine the noun golpe 'hit' with different verb, namely dar 'to give', asestar 'to deal' or recibir 'to receive'. I do not think that using a verb, an adjective or a noun (in a LVC) are interchangeable instantiations of the same abstract predicate, and the same goes for two different LVCs with different verbs and the same Pnoun. In addition, I also reject the idea that the verbs involved in LVCs as mere syntactic support for the main meaning, as she claims. However, there is something true in thinking that not any noun can combine to any verb to form an LVC, or, in other words, it there is some degree of idiosyncrasy involved in LVCs. Then, there should be some information regarding which noun combines with which verb in the lexical information for both of them, something that she emphasizes. I will address this issue in section 3 (particularly §§ 3.4 and 3.5)

Finally, LVCs cannot be viewed as undergoing a process of grammaticalization, something that one could expect from semi-phrases. So, for example, the combination of *patada* 'kick' with *dar* 'to give' as in *Mario me dio una patada* 'Mario kicked me' has

been documented since the 15<sup>th</sup> century. <sup>12</sup> Butt and Geuder (2001) have argued something similar for Urdu.

Summarizing, even thought at some level LVCs seem to be a multiword lexical unit, as what seems to be the main predicate is extracted from both the verb and the noun (or just the noun, in Alonso Ramos' view), treating them as multiword lexical units contradicts the syntactic properties examined in the previous sections.

#### 2.7 Some regularity: families of LVCs

In the previous section I mentioned that LVCs take a state or event denoting noun as argument. That is the first classification one can make. In addition, if there is an LVC with a noun from a semantic field, it is often possible to create more LVCs with nouns from the same semantic field. Knowing that, it is possible to identify different "families" of LVCs according to the type of noun, as exemplified in (21).

#### 21. Some families of LVCs with dar.

Internal experiences: Dar calor 'to get hot', dar frío 'to get cold', dar sed 'to get thirsty', dar hambre 'to get hungry'...

Diseases: Dar gripe 'to get the flu', dar migraña 'to get migraine', dar hepatitis 'to get hepatitis'...

Emotions: dar miedio 'to get scared', dar pavor 'to dread' dar coraje 'to get angry', dar envidia 'to get envy'...

Hitting: Dar patadas 'to kick', dar golpes 'hit', dar puñetazos 'to punch'...

Communication: Dar orden 'to emit an order', dar opinión 'to emit an opinion', dar un informe 'to inform'...

An important fact that has not been highlighted in previous studies is that it is possible to create new LVCs based on other nouns of the same semantic type. For example, one could make up the noun *piernazo*, which does not exist but is a perfect derivation from

<sup>&</sup>lt;sup>12</sup> Documented in J. Pérez de Moya, *Philosofía Secreta*, as displayed in the web searchable corpus *Corpus del español* (http://www.corpusdelespanol.org/).

pierna 'leg', <sup>13</sup> and would have the meaning of 'violent contact with/at the leg', just as other nouns derived with -azo from a body part mean 'violent contact with/at noun': manazo from mano 'hand' means 'hitting with hand', rodillazo from rodilla 'knee' means 'hitting with knees', etc. If someone says (22), it would mean either that someone hit Roberto on the leg or that someone hit him with their leg. This is a productive part for LVC formation that includes body parts, but also nouns such as palos 'stick', leños 'firewood', pedrada 'hitting with stone', and many other objects that one can hit with or throw.

## 22. Le dieron un piernazo a Roberto.

'Roberto was hit at/with the leg'

Conversely, a noun can be combined with more than one verb, creating a different type of "family". For example the noun *patada* could be combined with *dar* 'to give', *agarrar* 'to grab', *propinar* 'to give', *recibir* 'to receive', *asestar* 'to deal', *pegar* 'to stick', *tirar* 'to throw', *largar* 'to give', *disparar* 'to shoot', *chutar* 'to throw', *descargar* 'to unload/deal', *aplicar* 'to apply', and *plantar* 'to plant'. Roughly all the nouns that can be combined with *dar* 'give' to form LVCs for hitting can be combined with these other verbs to express related meanings; sometimes they have a very similar meaning but belong to another dialect or register (such as *propinar* literally 'to give medicine' instead of *dar* 'to give': *le propinó un coscorrón* 'he knocked him on the head'), sometimes they express the reverse meaning (such as *recibir* 'to receive': *recibí una puñetazo* 'I received a punch'), or even sometimes they express an intensified meaning (such as *agarrar* 'to grab': *la policía lo agarró a golpes* 'the police beat him up').

<sup>13</sup> I could not find a single example of *piernazo* in the CREA (Corpus of the Royal Spanish Academy).

Perhaps the "hitting family" is one of the more abundant realms for LVCs, but it is not the exception. Other nouns can be combined with more than one light verb to highlight different aspects related to the noun. Some of these cases appear below.

#### 23. Family or LVCs with the same noun.

- Dar calor 'to get hot', tener calor 'to be hot (=feel hot)', hacer calor 'to be hot (=there to be hot)'...
- Dar hambre 'to get hungry', tener hambre 'to be hungry', hacer hambre 'there exists hunger', by analogy with hacer calor...
- Dar golpes 'to hit', agarrar a golpes 'to hit (over and over and with intention)', propinar golpes 'to hit', recibir un golpe 'to receive a hit', asestar un golpe 'to hit'...

Darse un baño 'to have a bath', tomar un baño 'to take a bath'...

It is not my intention to provide a taxonomic or a comprehensive list of LVCs. The point here is that there are more regularities than people usually assume. One important characteristic of LVCs is that often times the same P-noun can select different verbs. This fact has not always been highlighted and languages may differ as to how many verbs a given noun can combine with. Alonso Ramos (2004) had noticed this, but at the same time, she claims that the lexical content of the verb is already included in the lexical content of the noun. Following her line of thought, in (24) the idea of kicking is already contained in the noun patada 'kick' and so the verb to give does not provide any meaning.

#### 24. Mario le dio una patada a Miguel.

'Mario kicked Miguel once'

Then, the fact that the same noun can be combined with different nouns becomes a mere lexical curiosity. In other words, if one claims that the verb does not contribute to the LVC, there is no reason as to why the same noun can be combined with many verbs to form semi-phrasal (i.e. semi-lexical) constructions, in Alonso Ramos' account. Related to this, in her view the selection of the verb is arbitrary, not related to its meaning.

#### 2.8 Summary

In this section I have argued that there are two main groups of LVCs depending on the type of P-noun, and that these groups have different syntactic characteristics. I also indicated that in some cases the arguments are not licensed by the P-noun, and in fact it is possible to think that in general the arguments structure of the LVC is the result of the "merge" of the meaning of both the noun and the verb. In other words, it is the construction itself, not its components, that licenses the arguments. Finally, I have also provided evidence for claiming that in syntactic terms the verb and the P-noun are not coheads (there is no nuclear co-subordination). Rather, the P-noun's NPs share the syntactic properties of other NPs in object position. In other words, the LVC has phrasal properties, although in some cases there are some idiosyncratic restrictions, which is why one could think of them as collocations. Finally, I argued that LVCs can be grouped into "families": there is regularity within those families but there is a great deal of idiosyncrasy across families.

# 3 Light verb constructions in Role and Reference Grammar

#### 3.1 Semantic Decomposition in RRG

In this section, I will explain some basic principles for semantic decomposition in Role and Reference Grammar. In RRG, the semantic representation is based on a Vendler's (1967) classification of verbs. The original verb classification in RRG (Foley & Van Valin 1984; Van Valin 1993; Van Valin & LaPolla 1997) distinguished states,

achievements, accomplishments and activities. This classification is well known and I will not elaborate here, but we can see the list in (25).<sup>14</sup>

- 25. a. States: John is sick.
  - b. Achievements: The balloon popped.
  - c. Accomplishments: The snow melted.
  - d. Activities: John runs.

Over the past years, two other categories have been added: semelfactives (Smith 1997) and active accomplishment. In the first case, it has been observed that even though achievements and semelfactives are very similar in that both are punctual, the former lacks a resulting state: *The light flashed* (semelfactive) does not entail *The light is flashed*; but *The window shattered* does entail *The window is shattered*. On the other hand, the incentive for having active accomplishments in the repertoire is the observation that activities behave in a different way when they have an end point, like in (26b). So, if one says *Pete is walking*, then one can truthfully say *Pete has walked*; but if one says *Pete is walking to the store*, one cannot truthfully say *Pete has walked to the store* (in that particular occasion) since he has not reached the store yet.

- 26. a. Semelfactive: Richard glimpsed Roselyn's smile.
  - b. Active accomplishment: Pete walked to the store.

All the previous six verbal classes have, in addition, a causative counterpart. So for example, *the beer is cold* expresses a state predicate but *the fridge cooled the beer* expresses a causative state: the fridge causes the beer to be cold.

There are two classes of "words" in the metalanguage used for semantic representations in RRG: predicates and operators. The formal representation using predicates and operators is called Logical Structure. Both states and activities are taken as

<sup>&</sup>lt;sup>14</sup> I will present the basic notions here, but for a deeper and more detailed description see Van Valin & LaPolla 1997 and Van Valin 2005. Furthermore, the labeling changed from Foley & Van Valin (1984) and Van Valin (1993) to Van Valin & LaPolla (1997), and then it was adjusted in Van Valin (2005).

basic in RRG, and they are represented using just predicates. States receive the simplest representation, they are not marked by any special operator and are represented just with a bare predicate, as shown in (27a); in activities, it is necessary to add the predicate **do'**, in addition to the predicate indicating the "kind" of activity (i.e. walking vs. running), as illustrated in (27b).

- 27. a. States: **predicate** (x), where x is an argument.
  - a'. The beer is cold: cold' (beer).
  - b. Activities: do'(x, [predicate'(x, y)]), where x and y are arguments.
  - b'. My buddy is drinking beer: **do** (buddy, [**drink** (buddy, beer)])

In order to obtain the correct decomposition for activities, one has to do two things: first, make sure to have the predicate with its arguments, [**drink**' (buddy, beer)] in (27b'). Since *drink* does not refer to an state, **drink**' (x, y) cannot be a complete LS *per se*; rather, it is just a *part* of the complete representation that always occurs as one of the arguments of  $\mathbf{do}'(x, [\mathbf{pred}'(x)])$ , where  $\mathbf{pred}'(x)$  represents the other part of the lexical meaning that lets us distinguishing *walk* from *run*, or from any other activity, for that matter.

All other types of predicates are represented using the second class of "words" used in the metalanguage: operators. In this respect, achievements have the operator INGR, accomplishments BECOME, and semelfactives SEML, all of them combined with the respective predicate. Consequently, in order to represent *the snow melted*, one has to add BECOME to the predicate to form: BECOME **melted**′ (snow). <sup>15</sup>

In contrast, causatives have a slightly more complex form, depicted in (28a). So, turning back to our previous example, in (28b), the fridge does something that causes the

Notice that **do**', the marker for activities in **do**'(x, [**pred**'(x)]), does not have the same status as other predicates, and rather behaves as a semantic operator. We do not mark it in capital letters, as any other operator, since DO is reserved for marking agents, in opposition to effectors (see VV&LP 1997:118 ff.). On the other hand,  $\mathbf{do}'(x, \emptyset)$  represents an unspecified activity, and so in the LS it does resemble a predicate.

beer to become cold. Since one does not know or one does not specify what the fridge does, one just represents an unspecified activity:  $do'(fridge, \emptyset)$ .

- 28. a. Causatives:  $\alpha$  CAUSE  $\beta$ , where  $\alpha$ ,  $\beta$  are LSs of any type
  - b. The fridge cooled the beer: [do'(fridge, Ø)] CAUSE [BECOME cold' (beer)]]

Finally, there are lexical rules signaling the relation between activities (*Pit drank beer*) and active accomplishments (*Pit drank the beer*). This is particularly relevant for verbs of consumption and creation. The lexical rule is stated as follows (From Van Valin 2005):

29. Creation/consumption verbs:

 $do'(x, [pred1'(x, y)]) \iff do'(x, [pred1'(x, y)]) & INGR pred2'(y)$  where pred2' is of the type of creation (exist') or consumption (consumed').

Even though RRG does not have a defined set of semantic primitives, there have been several attempts for a more refined semantic decomposition (Van Valin & Wilkins 1993, Mairal & Faber 2002, Mairal & Faber 2005). For example, Van Valin & Wilkins (1993) provide the decomposition in (0) for *remember*. When needed, I will use a semantic decomposition along those lines.

30. BECOME **think.again** (**x**) **about something.be.in.mind.from.before** (y) In the next sections, I will explain how the formation of LVC at the LS occurs from two different lexical items. In particular, how the event denoting noun is combined with the so-called light verb in order to create the LVC.

#### 3.2 Initial analysis of Light Verbs

One of the motivations for having **do**' for actions comes from Basque. As Van Valin and LaPolla (1997) and Levin (1989) point out, in this language verbal expressions that are usually lexicalized as intransitive activity verbs in languages like English are created by combining a noun with the verb *egin* 'do, make' as one can see in (31). Furthermore,

Levin (1989) indicates that in these cases the noun is non-referential, but it picks out the action denoted by it.

31. ni-k lan-Ø egin d-u-t 1sg-ERG work-ABS do 3sgABS-AUX-1sgERG 'I worked' (from Levin 1989:54)

The combination of a non-referential noun meaning 'work' plus a verb meaning 'do, make' should be familiar by now. Even though not pointed out by Van Valin and LaPolla, this is exactly the type of combination that we have seen in previous examples (as in *El autobús hizo cinco paradas* 'The but stopped five times', in (8a) above). In other words, RRG already has an initial mechanism for dealing with LVCs: the representation for the noun fills the second position in the representation **do'**(x, y).

This solution works for all LVCs that use *hacer* 'do, make'. Let us take the LVC in (32a). One could assume that the meaning of *hacer* in this case is do'(x, y), where y can be a predicate; the meaning of *llamada* 'call' would be call'(x). This gives rise to the representation in (32a').

- 32. a. Jacinto hizo una llamada. 'Jacinto made a call.'

  - a'. do'(Jacinto, [call'(Jacinto)])

Then, LVCs are the result of combining the meaning of the noun with the meaning of the verb. This is different from saying that the verb acts only as a syntactic support for the noun. Notice that the LS for *hacer* 'to do' alone only indicates that there was an activity, without indicating the type of activity. In the LS for *hacer una llamada* 'to make a call', the LS for the noun specifies what the activity is. So, LVCs are a special case of cocomposition (Van Valin 2004, Pustejovsky 1995, 1998), where the noun provides the **call**' for the LS. In other words, what is important in the formation of LVCs is that the noun provides the **pred**' in the LS, replacing the one from the verb.

This solution carries several advantages. First, it has been pointed out in previous accounts that the main purpose of LVCs is to combine the argument structure of the noun with the unspecified variables of the verb. In the presented analysis, the resulting argument structure is the effect of creating the LS based on the LSs from two lexical items. Then, in LVCs, as in RRG in general, the argument structure follows from the LS (*see* Van Valin and LaPolla 1997; Van Valin 2004, 2005). Second, there is no need for postulating any control mechanism in LVF: it is a natural result of the resulting LS (cf. Alba-Salas).

In the previous examples the LS for the noun seems highly similar to the LS of a verb, but this is in part an illusion due to the fact that there is no need for a further decomposition in the meaning of the noun. There are other cases in which it is necessary to decompose the meaning of the P-noun when providing its semantic representation. One may ask, for example, what *tener hambre* 'to be hungry' really means. As the translation suggests, it refers to a physical sensation (or proprioception) and not to a possessive relation. Therefore it would not be appropriate to represent *Toño tiene un acordeón* 'Toño has an accordion' and *Toño tiene hambre* 'Toño is hungry' with the same LS because in one case Toño **possesses** something while in the second case he **feels** an internal sensation. Therefore, it is necessary to provide a LS as in (33a'). On a similar note, the meaning of *dar hambre* 'to get hungry' (lit: 'to give hunger') in (33b) has noting to do with transference of possessor, but rather with becoming hungry, represented as in (33b').

- 33. a. Toño tiene hambre. 'Toño is hungry.'
  - a'. feel' (1sg, [hungry'])
  - b. Ya me dio hambre

'I got hungry already.' b'. BECOME **feel'** (1sg, [**hungry'**])<sup>16</sup>

At the intuitive level, it seems appropriate to say that a part of the LS for dar hambre 'to get hungry' should have the predicate **feel'**, but where does it come from? In order to answer this, it is necessary to provide a richer semantic representation for nouns.

## 3.3 The semantics of predicative nouns

It is well known that not all nouns refer to physical entities, like dog, chair or people; other nouns refer to activities, like *destruction* (Chomsky 1970; Langacker 1987, Nunes 1993, Pustejovsky 1995, Picallo 1999, inter alia). Furthermore, it is also known that this last type of nouns has two interpretations: one refers to concrete entities and the other one to activities. For example, in (34a) the noun refers to the event of reporting, an interpretation that is selected by the verb, since only eventualities can be extended in time, as signaled by the verb durar 'to last'; on the other hand (34b) refers rather to the physical object containing the information, since only physical objects can be located on a table.

- 34. a. El informe duró cinco horas 'The report lasted five hours.'
  - b. Casimiro dejó el informe sobre la mesa 'Casimiro left the report on the table.'

In order to make the distinction between nouns referring to activities and nouns referring to the result of an activity, the terms process nominal and result nominal are used. This terminology can be somehow misleading, since it is also applicable to nouns referring to states. In the following examples (35a) refers to the disease itself whereas (35b) refers to

<sup>&</sup>lt;sup>16</sup> As discussed below, the meaning of dar 'to give' as a heavy verb can be decomposed as the causative counterpart of tener 'to have', also as a heavy verb. This does not apply, however, for LVCs. As tempting as it may seem to say that dar frío 'to get cold' is the causative of tener frío 'to be cold', it would be incorrect to use the LVC tener frío in the LS of dar frío. Certainly at an informal level one could use a LVC in order to understand another one, but this cannot be extrapolated to their LSs.

the state of being sick. As Nunes (1993) points out, what is important to note is that nouns referring to states also have a more concrete interpretation.<sup>17</sup>

- 35. a. Descubrieron una nueva cepa de gripe 'A new flu strain was discovered.'
  - b. La gripe le duró dos semanas 'He had the flu for two weeks.' (lit.: the flu lasted to him two weeks)

This discussion is relevant because LVCs take the process or state sense of the noun, and not the concrete one. In addition, it is clear that these two interpretations should have a different representation in virtue of one being a concrete entity and the other one being a state or a process. This begs the question, how are these two interpretations related? For Alonso Ramos (2004), this is just reduced to listing the different interpretations, which is far from being satisfactory, while Alba-Salas (2001) argues that process or state denoting nouns are in fact verbs, but there is no evidence that supports his claim.

Pustejovsky has suggested that the meaning of nouns includes information regarding the type of entity (i.e., whether it is a physical object, information, etc.), its components, and the eventualities that are associated with those entities. This information, organized in a systematic way, is called the *qualia structure* (Pustejovsky 1991, 1995, 1998, 2000, 2001).

The qualia structure of nominals has been of incorporated in RRG in recent years (Van Valin 2004, 2004, Van Valin & LaPolla 1997), although here I will use it without the formalisms the Pustejovsky uses. In order to explain the qualia structure, take for example the noun *novel*. Novels contain narrative (36a) and they come very frequently contained in books (36b). On the other hand, there are two activities associated with

<sup>&</sup>lt;sup>17</sup> When dealing with nominalizations, we could apply further distinctions, such as agent nominalization, where the noun incorporates the agent of the verb, like in *buyer*, Spanish *comprador*; or patient nominalizations, where the noun incorporates the patient of the verb, like *invention*, Spanish *invención* (see Nunes 1993, Picallo 1999, Portero 2003), but this further classifications are not relevant here.

novels, people write them (36d), and people read them (36c). Depending on which of these activities is picked, one can interpret *Julio just finished the novel* as meaning that Julio finished reading the novel based on (36c), or that Julio finished writing the novel based on (36d). So, the noun *novela* 'novel' should have a qualia representation as follows:

- 36. Qualia: novela 'novel'
  - a) **narrative** '(y)
  - b) **book (**y)
  - c) do'(x, [read'(x, y)])
  - d) do'(x, [write'(y, y)]) & INGR exist'(y) (based on Van Valin 2004)

Following Van Valin and Wilkins (1993), one could decompose activity nouns used in LVCs as in (37). One could say that an explanation contains information (37a) expressed in detail and in a clear way (37c) that usually has a physical manifestation (37b). Then, if someone says *La explicación duró media hora* 'The explanation lasted half an hour', the even represented in (37c) is picked out, but if she says *Te dejé la explicación sobre el escritorio* 'I left the explanation on the desk', one interprets that it refers to the physical object (37b). Therefore, there is no need for saying that the event interpretation of the noun is a different lexical entry (as Alba-Salas 2002), rather a different par of the qualia is picked out in the concrete and in the event interpretation, but both are systematically related insofar they are part of the complex meaning of the noun *explicación* 'explanation'.

- 37. Qualia: explicación 'explanation'.
  - a) **information** (y)
  - b) physical object (y)
  - d) **do'**(x, [express.( $\alpha$ ).to.( $\beta$ ).in.detail'(x, y)]) CAUSE [BECOME aware.of'(y, z)], where y= $\beta$  and z= $\alpha$

<sup>&</sup>lt;sup>18</sup> It should be noted that Pustejovsky (1995, 1998) assumes that the qualia structure is part of the lexical meaning. I will assume a weaker position here, more along the lines of conceptual frames (Fillmore 1968). In other words, the qualia structure contains characteristics associated to the lexical meaning; we could assume that they are part of it or that they are implied.

Similarly, for nouns referring to states, also found in LVCs, the noun can refer to the state itself as in (38a), but the qualia structure has to also include that a necessary part of the definition of *frío* 'cold' is that it is something that people feel, as in (38b).

- 38. a. El frío dañó a las uvas. 'The cold damaged the grapes'
  - b. El frío me hizo temblar.'The cold made me shiver'
  - c. Qualia: frío cold' (y) feel' (x, [cold'])

Thus, it is possible to use the information from the qualia structure of nouns to fill in parts of the LS of LVCs.

#### 3.4 Verbal schematism and qualia in the formation of LVCs

In section 3.2 I provided the basics for creating LVCs using RRG, but it was necessary to provide a richer semantic representation for nouns in order to explain where the LS for cases like *dar frío* 'to get cold' comes from. In the previous section, I explained how that richer representation might look like and how the meaning of some nouns is systematically related to their concrete meaning. Crucially, both senses are part of the complex meaning of those nouns. Now, it is time to revise and expand the proposal for LVCs for more types of LCVs. In addition, I will show how this analysis easily accounts for the LVC families presented above.

First, it is necessary to have a look at the LS for *dar* 'to give' as a heavy verb to later compare it with the LS of LVCs. The LS of the example in (39a) is represented in (39b). The LS must be interpreted as Isra doing an unspecified activity that caused that I had the

bottle.<sup>19</sup> The argument of  $\mathbf{do}'(x, \varnothing)$ ... is the initiator of the action whereas the first argument of ...BECOME  $\mathbf{have}'(y, z)$  is the receiver and the second argument the transferred object.

- 39. a Isra me dio la botella. 'Isra gave me the bottle'
- In the case of the LVC *dar frío* 'to get cold' in (40a), whose corresponding LS in (40b), one can paraphrase the LS as the ice cream causing something such that I get cold. The

[do'(Isra, Ø)] CAUSE [BECOME have'(1sg, botella)]

one can paraphrase the LS as the ice cream causing something such that I get cold. The ice cream is represented in a generic activity  $\mathbf{do'}$  (helado,  $\varnothing$ )..., which does not mean that the ice cream is doing, willingly, something, but rather that it is involved in an unspecified activity, presumably being eaten. The predicate **feel'** (1sg, [**cold'**]) comes from the qualia structure of the noun *frío* 'cold' (38c).

- 40. a El helado me dio frío. 'The ice cream got me cold' LVC: dar 'to give' + frío 'cold'
  - b [do'(helado, ∅)] CAUSE [BECOME feel' (1sg, [cold'])]<sup>20</sup>

It is necessary to say that the meaning of those constructions as causative is independent of the analysis in RRG. In other words, if one was to decide to use a different metalanguage one still would have to account for that part of the meaning. Notice that dar 'to give' also has a causative meaning in other constructions.

- 41. a. Maricela le dio de comer a su hijo. 'Maricela fed her child' where feed=make.eat
  - b. [do'(Maricela, Ø)] CAUSE [do'(hijo, [eat'(hijo)])]

<sup>19</sup> It is an open question to what extent causatives are implicative, i.e. to what extent *to give* implies *to have*. Park (1995) indicates that in Korean causatives are not implicative (in Van Valin 2005). For Spanish, we can assume that causatives are implicative.

<sup>&</sup>lt;sup>20</sup> Some of these constructions can be achievements or accomplishments. For example, *me di un susto* 'I got scared' is most probably an achievement, since the change of state happens without transition. However, since in RRG accomplishments can be decomposed into PROC & INGR, I will represent all these changes of state as BECOME (Van Valin 2005).

All this can be summarized in (42): in the LVC *dar frío*, the light verb provides the lexical template and the predicative noun provides the predicate that is missing in the lexical template. The noun's predicate comes from its qualia.

42. LVC: Dar frío

Dar 'give': lexical template [ $do'(x, \emptyset)$ ] CAUSE [BECOME **pred'**]

Frío 'cold': Qualia Structure: **feel'** (x, [**cold'**]), which replaces **pred'** in the LS for dar

Then, the LS for LVCs is the result of the co-composition of the LS for the verb and the LS for the noun. This is done syntactically, not lexically (morphologically). One could think of this as a special type of coercion (Pustejovsky 1995, 1998, *inter alia*), as in *Mary finished the book*, where its interpretation depends on filling in the information relative to the activities that one usually performs with books, i.e. writing or reading them. The main contrasts with LVCs is that in the final LS, the qualia from the noun does not only provides the missing predicate (i.e. that one *feels* the cold in (42), but it also replaces the **pred'** from the LS for the verb.<sup>21</sup>

All the previous discussion can be stated as the generalization in (43).

- 43. Complex predicate formation in LVCs:
  - i) the verb should provide the lexical template or part of it, and
  - *ii*) the qualia structure of the nominal replaces part of the lexical template provided by the verb; in particular, the nominal should provide the predicate in the logical structure (**pred**'(x)) or **pred**'(x, y)).

One of the main contributions of the light verb is to provide the operators in the lexical representation, i.e. **do**′, CAUSE, BECOME, INGR, etc. (cf. Van Valin & LaPolla 1997, Van Valin & Wilkins 1993, Mairal & Faber 2005).

<sup>21</sup> A full comparison between type coercion and LVCs would be necessary, but it goes beyond the limits of this paper.

In previous sections I reported that there was a problematic case in which the noun does not accept arguments but the LVC might have two arguments, as in (11) with the noun *calor* 'heat' or in (40) with the noun *frío* 'cold', repeated here as (44).

#### 44. El helado me dio frío.

'The ice cream got me cold'

As mentioned above, this case would be problematic for an account based on transference of arguments from the noun, since the noun alone licenses no arguments. However, it is not problematic for a proposal where the arguments do not depend directly on either the verb or the noun but rather on the LS resulting from both elements. In any case, the lack of explanation for how the complex predication is formed is the main failure of the other two main descriptions of light verbs in Spanish (Alba-Salas 2002, Alonso Ramos 2004).

# 3.5 Semicompositionality and semiproductivity in LCVs

From the discussion in the preceding section one could get the impression that LVC formation in Spanish is a regular process, in fact a compositional one. On the other hand, it has been reported that LVCs in Spanish are idiosyncratic constructions, in which the meaning does not necessarily correspond to its parts. As Alonso Ramos (2004) has emphasized, in some cases the selection of the verb seems arbitrary. How, then, can one reconcile these two seemingly contradictory positions? In section 2.7 I argued that one observes regularities within the "LVC families" described in that section, but a great deal of idiosyncrasy across families. In this section I will argue that LVCs have a degree of compositionality and therefore they are semi-productive, but they are as well idiosyncratic constructions.

It was explained that it is possible to identify some groups of LVC because one the same verb can be combined with several nouns that share part of the same meaning, and

the same noun can be combined with more than one verb variants of the meaning denoted by the noun. I will explain how this happens with a few semantic fields.

It was mentioned before that some LVCs denoting change of state have a causative/anti-causative alternation, as in (12), repeated here as (45).

- 45. a. Cierra la ventana porque el chiflón me dio frío. 'Close the window, because the draft made me get cold.'
  - b. No sé por qué, pero me dio frío.'I don't know why, but I got cold'

Not all LVCs denoting change of state allow this alternation, though. Specifically, there is a whole set of LVCs referring to diseases that do not allow the causative component to be part of the LS of the LVC: they encode just a change of state. The example in (46a) indicates that Pancracio got sick, and it does not imply that there is an unsaid cause. It is not possible to have a noun in the subject position as the cause of the change of state (46b); the only way to express it is using the periphrastic causative (46c).

- 46. a. A Pancracio le dio gripe 'Pancracio got the flu'
  - b. \*La lluvia de la semana pasada me dio gripe. Intended: 'Last week's rain made me get a cold'
  - c. La lluvia de la semana pasada *hizo que* me diera gripe. 'Last week's rain made me get a cold'

Since all the LVCs with *dar* referring to diseases behave in a similar way, one should have a particular representation for them (47). So, this schematic representation represents the semantics of LVCs related to diseases, and then the formation of LVCs is regarded with a particular type of constructionist approach.

47. LVC *dar* + noun qualia: {**disease**'(x)} Schematic LS: BECOME **be.affected.by.disease**(α)'(y)

So far, I have only addressed the LVCs with *dar* that have a change of state as part of their meaning. In the case of LCV that denote activities, this group differs radically in

that LVCs do not take the whole  $[\mathbf{do'}(\mathbf{x}, \varnothing)]$  CAUSE [BECOME...] part of the LS of dar, but only the part relative to the activity  $\mathbf{do'}(...)$ , as in (48a-b).

- 48. a. Jeon no se dio una ducha durante todo el semestre. 'Jeon did not take a shower during the whole semester'
  - b. do'(x, [shower'(x, y)])
  - c. Jeon se hizo una ducha. 'Jeon made (i.e. built) a shower for himself'

The idiosyncratic part here corresponds to the noun *ducha* 'shower', which denotes an activity, forming an LVC with *dar* 'to give' and not with *hacer* 'to do, make'. A predicate formed by *hacer* + *ducha* can only take the non-process meaning of the noun and therefore it can only mean to build a shower (48c). But this is true for all *dar*-LVCs that have an event denoting noun, which is a big class.

Of course, within the activity denoting LVCs, there are many subgroups, and then it is necessary to provide a particular schematic representation for each of them. For the case of LVCs referring to hitting, which are a very productive subgroup, one can represent (49a) as in (49a'). In this case, is necessary to provide a semantic representation where part of the meaning is decompose in order to capture the generality. Then, the schematic LS for this group would be as indicated in (49b).

- 49. a. Mario le dio una patada al jugador del otro equipo. 'Mario kicked once the other team's player'
  - a'.  $\langle (1)$ time  $\langle$ **do'**(Mario, [**contact.with.force.between.(foot).and.**( $\beta$ )'(Mario, jugador)]) $\rangle$  $\rangle$  where  $\beta$ =jugador
  - b. LVC dar + noun qualia: {contact.with.force.between.( $\alpha$ ).and.( $\beta$ )'(x, y)} Schematic LS: do'(x, [contact.with.force.between.( $\alpha$ ).and.( $\beta$ )'(x, y)])

As explained, it is possible to create new LVCs based on the particularities of the LVC family. For example, if we create a new noun that we intend to refer to a new disease, it could be also possible to include it in an LVC. Let us make up a nonsense disease called

frontitis (the pseudo Latin would work both in Spanish and English), and let us provide the definition below, taken from my personal "makeupedia". Then we could readily use this new disease in an LVC indicating change of state, just as in any other LVC of this subtype.

- 50. *Frontitis*: Inflammation of the frontal lobe from excess in thinking. If the inflammation persists it can lead to the complete hypertrophy of the frontal lobe, causing the patient to become an incurable nerd.
- 51. a. A Francisco ya le dio frontitis. 'Francisco got the frontitis already'
  - b. BECOME **be.affected.by.disease(frontitis)** (Francisco)

Summarizing, LVCs are indeed idiosyncratic constructions with respect to two things: *i*) the verb that a noun takes (i.e. *ducha* combines with *dar* to express the activity of showering but it is incompatible with *hacer* to express the same meaning); and, *ii*) with respect to what part of the light verb's lexical template remains for the LVC across different types of nouns. On the other hand, LVCs are semi-compositional and semi-productive to the extent that once one understands the idiosyncrasy, it is possible to almost compositionally form the meaning of predicates, and furthermore to create new predicates.<sup>22</sup>

# 3.6 Light verb interpretation vs. heavy interpretation

As the final subsection, let me briefly address the relation between light and heavy use of verbs. There are some cases in which the construction is potentially ambiguous between an interpretation as an LVC and another as non-LVC. In the second case, the verb would be interpreted as heavy verb and the noun would have a concrete interpretation. For

<sup>&</sup>lt;sup>22</sup> Even though it is not possible to treat this issue here, idiosyncrasy is one of the main differences between LVC formation and coercion as presented in Pustejovsky (1995, 1998). To me, coercion is an operation that takes place regularly and as an ongoing process at the moment of speech, whereas LVC formation is idiosyncratic and constructional, in the sense that the construction for specific families and the particular way in which they resolve the semi-composition is stored in the lexicon.

example, in the sequence *dar un baño*, the noun *baño* 'bath' could be taken as meaning the action of taking a bath or something like 'where the bath takes place', i.e. the room or a container.<sup>23</sup> Under the first interpretation, we get the LVC meaning 'to take a bath or a shower' (52b). Under the second interpretation in (52c), the LS for the noun does not replace part of the LS for the verb, and therefore it has to be interpreted in its literal sense, as a transference.

- 52. a. Dale un baño a tu hijo.
  - b. 'Bathe your son' **do**'(2gs, [**shower**'(2sg, hijo)])
  - c. 'Give a bucket to your son'
     [do'(2sg, Ø)] CAUSE [BECOME have'(hijo, baño)]<sup>24</sup>

Against having two lexical entries for *baño* 'bath', à *la* Alonso Ramos (2004), it can be argued that there is just one lexical item that happens to be polysemous. As we already know, the two parts of the meaning of the noun come from different parts of its qualia structure. There is no need, either, for postulating any syntactic derivation for the activity interpretation of the noun, as Alba-Salas (2002) assumes.

For some V+N constructions, the distinction between LVC and heavy construction is even more subtle. For example, the noun *informe* 'report' would have in its qualia that it is information, which can be communicated, and that it can be created (presumably writing it). Then, the sentence in (53a) can mean that I received the physical object containing the information or that I received the information via communication, and therefore that I was informed.

- 53. a. Me dieron el informe sobre la situación en Atenco.
  - b. 'They informed me about the situation in Atenco'

<sup>&</sup>lt;sup>23</sup> At least in some dialects *baño* means the bathroom or a kind of bucket where parents can bath a baby.

<sup>&</sup>lt;sup>24</sup> For clarity's sake, the LS for the interpretation referring to the physical object provided in this section are a simplified version of more accurate LS.

[do'(3pl, [express.as.report'(3pl, situación)]] CAUSE [BECOME aware.of'(1sg, situación)]

c. 'They gave me the report about the situation Atenco' [do'(3pl, Ø)] CAUSE [BECOME have'(1sg, informe.de.situación)]
In some other cases, with the verb hacer 'to do, make' the ambiguity can be
straightforward, since under the heavy verb interpretation the hacer + noun construction
has the meaning of creating something, but under the LVC interpretation it means to do
something relative to the noun's qualia. In order to make more explicit the relation
between heavy and light uses of verbs, take the following example:

- 54. a. Juan hizo la silla 'John made the chair' **do** '(Juan, ∅) & BECOME **exist** '(silla)
  - b. Juan hizo el estudio
    i) do'(Juan, ∅) & BECOME exist'(estudio)
    ii) do'(Juan, [study'(Juan)])

In (54a), the interpretation is just that Juan did something, we do not know what, resulting in the chair being created. We can make a number of assumptions, depending on how well we know Juan. We could suppose, for example, that the chair is made of mahogany and that Juan cut down the tree by himself; or we could suppose that he bought all the pieces in the supermarket and only assembled them. The crucial point is that there is an unspecified activity, or set of activities, indicated by  $\mathbf{do}'(\mathrm{Juan}, \varnothing)$ , and that the chair came into existence, indicated by BECOME  $\mathbf{exist}'(\mathrm{silla})$ .

In (54bi) we could say the same; there are an unknown number of activities that lead to the creation of the study, the physical object. However, if the interpretation of study is not as a physical object, but rather as an activity, one would have a light verb construction. In this case, the activity expressed by the noun is already telling us the

activity involved. In other words, the **pred** contained in the LS of the process interpretation of the noun replaces the previously unspecified activity.

This systematic process explains LVC formation but also tells us that the noun and the verb are the same in LVCs and in non-LVCs.

# 4 Concluding remarks

In this paper I argued that LVCs are syntactically formed complex predicates, in opposition to lexically (or morphologically) formed complex predicates, where the meanings from the noun and the verb are merged into a single LS. As argued in section 2.2, this does not mean that LVCs are lexical phrases, i.e. a combination of words that at the surface level resembles a phrase (in many cases a VP) but that in fact is a single lexical item. LVCs, on the contrary have phrasal properties, although depending on the type of predicative noun, whether it is event denoting or state denoting, the syntactic flexibility might change (but the restrictions are semantically driven). In addition, it was shown that when the predicative nominal is in object position, it has more or less the same syntactic properties that one might expect of any other direct object NP.

It was also pointed out that in previous studies verbs in LVCs have been equated with auxiliary verbs. Against this view, one can say that auxiliary verbs have rather different syntactic properties than verbs in LVC, and thus there are no good reasons for conflating these two categories.

If one takes into consideration that LVCs are complex predicates in the sense that they are made up from two independent words, one might also want to think of them as nuclear cosubordination. This view would be mistaken, however, because the predicative noun is not at the same syntactic level as the verb, but rather it is a verbal argument.

Under the view proposed in this paper, verbs in LVCs are just like any other verb, and, likewise, nouns are just like any other (action) noun. What is special in LVC is the construction in which they appear, and depending on both the verb and the noun, there are some idiosyncrasies. In this respect, it was argued that there are two main groups of LVCs, depending on whether the noun denotes a state or an event. More specifically, it is possible group LVC in so-called "LVC families". Then, while there is a great deal of idiosyncrasy across families, there is also much regularity within them.

As a final point, it is worth emphasizing that the argument structure falls out from the LS, and so there is no need for a special mechanism such as argument transference or argument substitution.

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