

Internal and external constraints in meaning construction: the lexicon-grammar continuum¹

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1. Introduction

The present paper will present some of the key assumptions of the *Lexical Constructional Model* (LCM) as developed in Ruiz de Mendoza and Mairal (2006). The LCM arises from the fruitful interaction between cognitive and functional approaches to meaning construction. Thus, the model makes use of some of the theoretical tools developed by Ruiz de Mendoza and his associates in the domain of Cognitive Model Theory (e.g. Ruiz de Mendoza and Pérez, 2001, Ruiz de Mendoza and Díez, 2002, Ruiz de Mendoza, 2005). It also draws insights from previous work by Faber and Mairal (1999) and Mairal and Faber (2002, 2005) on lexical decomposition. Central to the LCM are the notions of *lexical* and *constructional templates*, and the study of *internal* and *external constraints* on lexical-constructional *subsumption*. The model postulates a representational system for lexical items and for higher-level constructions of the kind identified and discussed by Goldberg (1995, 2005) (e.g. transitive, ditransitive, caused-motion) based on operators, internal and external variables, and an analysis of event structure based on the *primary concepts* of the kind described by Grady (1997) and Lakoff and Johnson (1999) in connection to primary metaphor theory. We shall illustrate the explanatory power of the LCM by making reference to some constructional alternations within the domain of transitivity.

2. Lexical and constructional templates

The notion of lexical template is originally a development of the logical structures (LS) postulated in Role and Reference Grammar (RRG) (cf. Van Valin and LaPolla, 1997; Van Valin, 2005), which uses a decompositional system to represent the semantic structure and argument structure of verbs and other predicates. Drawing on Vendler's well-known *Aktionsart* distinctions (cf. Vendler, 1967), RRG divides verb classes into *states*, *activities*, *achievements*, and *accomplishments* together with their corresponding causatives. States and activities are primitives, while accomplishments and achievements consist of either a state or activity plus a BECOME or an INGR operator. Table 1 below gives a preliminary classification for illustrative purposes (cf. Van Valin, 2005, for a more refined account).

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Verb Class	Logical Structure
State	predicate' (x) or (x,y)
Activity	do' (x, [predicate' (x) or (x,y)])
Achievement	INGR predicate' (x) or (x,y), <i>or</i>
Accomplishment	INGR do' (x, [predicate' (x) or (x,y)]) BECOME predicate' (x) or (x,y), <i>or</i> BECOME do' (x, [predicate' (x) or (x,y)])
Active accomplishment	do' (x, [predicate ₁ ' (x, (y))]) & BECOME predicate ₂ ' (z,x) or (y)
Causative	α CAUSES β where α, β are LS of any type

Table 1: Inventory of RRG logical structures

The LS inventory is intended to capture only those aspects of the meaning of a word that are grammatically relevant. Since it bases its decompositional system on *Aktionsart* distinctions, the inventory is capable of accounting for some important restrictions on constructional alternations. Compare:

- (1) The boy broke the window with a bat.
- (2) He ate his soup with a teaspoon.
- (3) A bat broke the window.
- (4) *A teaspoon ate his soup.

Example (3) is a case of the Instrument Subject construction, which is possible for 'break' verbs but impossible for consumption verbs, as evidenced by (4). The reason for this oddity in the transitivity system whereby two seemingly parallel grammatical configurations have different grammatical properties is to be found in the different predicate-object relationships that characterize each verb class. 'Break' verbs denote causative accomplishments while consumption verbs are active accomplishments. The Instrument Subject construction requires a causal chain, which makes it sensitive only to the former class. Let us now consider another causative accomplishment verb:

- (5) The gunman killed the sheriff with a six-shooter.
- (6) A six-shooter killed the sheriff.

As predicted by its LS configuration, 'kill' can take part in the Instrument Subject construction. However, its grammatical behavior is not always comparable to that of 'break' verbs:

- (7) The boy broke the window into a million pieces.
- (8) *The gunman killed the sheriff into a dead body.
- (9) Finally, Madison broke the window open and went in.
- (10) *Finally, the gunman killed the sheriff dead.

As (8) and (10) reveal, the verb *kill* cannot be used in the caused-motion and resultative constructions. This is not the case for the verb *break*, as is clear from (7) and

(9). This difference in grammatical behavior cannot be explained by simply looking into the LS of both verbs:

break

[do' (x, ∅)] CAUSE [BECOME [broken' (y)]]

kill

[do' (x, ∅)] CAUSE [BECOME [dead' (y)]]

It is necessary to achieve a greater degree of refinement in the semantic representation of the items belonging to the various verb classes. In the case under discussion, both *kill* and *break* have a resultative ingredient in their meaning composition (captured by the primitive concept BECOME in the LS representation). However, killing only admits one possible result, i.e. death, while breaking is compatible with a wider range of possibilities:

(11)

- (a) Harry broke the glass into a thousand pieces.
- (b) July broke the vase into little fragments.
- (c) He broke the bottle into various segments, which wound around themselves, giving the observer the illusion of motion.
- (d) I broke the window-pane into four sections.
- (e) A picture fell from the wall, breaking the glass into thousands of sharp shards.
- (f) I broke the pillar into three parts and glued them to the base.
- (g) He broke the board into three nearly equal pieces when he tested for yellow belt in Taekwondo.

It is for this reason that *break*, unlike *kill*, makes use of the caused-motion construction in order to express the exact nature of the result. This difference between the two kinds of verb, which is grammatically relevant, is not captured by the standard LS formalisms of RRG. A way out of the problem consists in enriching semantic representations in such a way that it is possible to predict with greater accuracy when a given lexical item may or may not take part in a construction. For this purpose the LCM makes use of the notion of *lexical template*, as developed by Mairal and Faber (2002, 2005). A lexical template includes the semantic and syntactic parameters that define the whole set of predicates that belong to the same lexical class². To give an example, what Levin (1993) has classified as 'contact-by-impact' verbs includes 'hit' verbs (e.g. *bang, beat, hit, kick, strike, tap*), 'swat' verbs (e.g. *bite, claw, paw, peck, punch, stab, swat*), and 'spank' verbs (e.g. *belt, cane, club, spank, thrash*). All of these verbs share a number of elements of semantic structure that are specific to each of the predicates

² Lexical templates are constructed on the basis of a universal semantic metalanguage which includes an inventory of primes obtained by extensive factorization of meaning definitions and by a catalogue of operators, which express the way semantic primes combine to express the more specific hyponyms. The set of semantic primes that we have used coincide to a great extent with those used in Wierzbicka's Natural Semantic Metalanguage Research Program, which has been shown to be valid in almost over a hundred languages (cf. Wierzbicka, 1999; Goddard and Wierzbicka, 1994, 2002). As for the operators which express the conceptual syntax, they are based on the notion of lexical function as propounded in Mel'cuk's *Explanatory and Combinatorial Lexicology* (ECL) framework and they have also been shown to be typologically valid (cf. Mel'cuk, 1989; Mel'cuk et al., 1995; Mel'cuk and Wanner, 1996). We refer the reader to Mairal and Faber (2005) for an in-depth account of the intricacies of the metalanguage.

ascribed to the ‘contact-by-impact’ class, i.e. motion toward an object, contact with the object, and the use of a tool -in the broadest sense of this term- to carry out the action. In a lexical template, these idiosyncratic elements of structure are captured by a set of *internal variables* marked by Greek characters. There are also *external variables*, marked by Roman characters, designating elements that range over a number of lexical classes (e.g. effector, instrument, and affected entity)³. Table 2 below represents the lexical templates for ‘contact-by-impact’ and ‘consumption’ verbs:

‘contact-by-impact’	[[do ’ (w, [use.tool .(α). in .(β). manner.for .(δ)’ (w, x)] CAUSE [do ’ (x, [move.toward ’ (x, y) & INGR be.in.contact.with ’ (y, x)], $\alpha = x$.
‘consumption’	do ’ (x, [CAUSE. BECOME. be-in ’.([have.as.part ’.(x, mouth), α). in .(β). manner ’] (x,y)) & BECOME consumed ’ (y) $\alpha = y$

w = effector; y = affected entity; x = tool; x= actor; y= affected entity

Table 2: Lexical templates for ‘contact-by-impact’ and ‘consumption’ verbs

Lexical templates are in fact lower-level constructional representations that share crucial features with higher-level representations, which we shall call *constructional templates*, with which they interact. Thus, there are some verb classes that linguists have traditionally classified as transitive, where we typically have an actor and an object of the action. We regard transitivity in verbs as the potential of a verb (or a whole verb class) to participate in a higher-level configuration called the *transitive construction*, which has the following basic constructional template:

$$[\mathbf{do}'(x, y)]$$

In this template, we specify an action (**do**’), an actor (x) and an object of the action (y). Since the higher-level construction is built by abstracting away elements common to a number of lower-level predicate classes, it is apposite to make use of the same representational mechanisms that characterize lexical templates. The obvious exception is the internal variables, since these are idiosyncratic to each verb and verb class.

A more complex high-level configuration is the caused-motion construction (cf. Goldberg, 1995), as illustrated by (12) and (13) below:

- (12) They kicked me out of the casino
 (13) Then they pushed me into my cell and locked the door.

This construction conflates the roles of ‘affected object’ and ‘actor’ into one element of structure (the speaker in the examples above). It also conflates into one single predicate (‘kick’, ‘push’) two predicate values: causing motion and manner of causing motion. We propose the following constructional template for caused-motion, where the asterisk marks the optional status of an element:

³ Note that this notational device of using internal and external variables is first used in Van Valin and LaPolla’s (1997: 117) analysis of speech act verbs.

[**do'** (x, y)] CAUSE [BECOME *NOT **be-LOC'** (y, z)]

It may be noted that the caused-motion construction is built on the basis of the basic transitive pattern [**do'** (x, y)]. This feature of the construction has consequences that will be addressed in the next section.

3. Lexical-constructional subsumption

Lexical and constructional templates interact in a constrained way. First, there is a general principle of conceptual interaction according to which higher-level conceptual patterns incorporate lower-level patterns. This principle was first identified by Ruiz de Mendoza (1997) and explored in detail on the basis of different kinds of cognitive model interaction by Ruiz de Mendoza and Díez (2002). In our view, a specific case of the principle is what Michaelis (2003) has termed the *Override Principle* in the context of constructional coercion. This constructional principle states that the meaning of a lexical item conforms to the meaning of the structure in which it is embedded. A case in point is the transitivity feature of the caused-motion construction. Consider:

(14) The Washington press corps literally laughed him out of the room.

Example (14) differs from (12) and (13) in the previous section in that 'laugh' has undergone subcategorial conversion from a verb with a prepositional complement (**laugh-at'** (x, y) 'laugh at someone') to a purely transitive verb (**laugh'** (x, y) 'laugh someone'). It may be observed that subcategorial conversion is a consequence of the *Override Principle*, which requires an adjustment of the meaning of 'laugh' to make it acquire attributes compatible with the caused-motion construction. But, in our view, the situation is slightly more complex. We may wonder why 'laugh' can participate – through coercion and subcategorial conversion- in the caused-motion construction, while this is not the case for other action predicates that are naturally transitive and do not need that kind of adjustment:

- (15)
- (a) *They caught him out of the room.
 - (b) *They killed him out of the room.
 - (c) *They described him out of the room.
 - (d) *They drank him out of the room.

We believe the answer lies in a correct understanding of the way internal and external constraints license *lexical-constructional subsumption*, i.e. the principle-regulated fusion of a lexical template into a higher-level constructional pattern. We shall address the two kinds of constraint in the next two sections.

3.1. External constraints

First, let us see why it is possible to convert 'laugh at ' into 'laugh'. The constructional requirement is to find a causative accomplishment predicate that will initiate the causal chain that results in the object of the action moving from one location to another. Since 'laugh' is an activity predicate, without any causal and resultative component, the only way to make it part of the caused-motion construction is by reinterpreting the activity

predicate as if it were a causative accomplishment predicate. This reinterpretation process is metaphorical and it crucially hinges upon the correlation between two kinds of actor and two kinds of object. In the case of causative accomplishments, the actor and object are what we may call an *effector* and an *effectee*, i.e. an actor whose action has a direct impact and subsequent effects on the object. In the case of activities, the actor is a mere “doer” of the action that is experienced by the object. This observation suggests an analysis of the subcategorical conversion process experienced by “laugh” in terms of *source* and *target* domain correspondences, of the kind proposed by Lakoff (1993) for conceptual metaphor within the context of Cognitive Linguistics (CL).

In CL, a metaphor is defined as a conceptual mapping or a set of correspondences between two domains, one of which (called the source) allows us to reason about the other (called the target). Ruiz de Mendoza and Mairal (2006), on the basis of previous work by Ruiz de Mendoza (2005), have identified a number of metaphors that have consequences in terms of grammatical arrangement. For cases like the use of “laugh” in (14) they propose the metaphor EXPERIENTIAL ACTION IS EFFECTUAL ACTION:

SOURCE		TARGET
Effector	↔	actor [both are doers]
Effectee	↔	goal/experiencer [both are objects]
Effecting	↔	acting [both are kinds of doing]
Instrument	↔	∅
Purpose	↔	purpose

The high-level metaphor we have spelled out above imposes positive and negative constraints on lexical-constructional subsumption. On the positive side, the metaphor opens the door to a number of subcategorical conversions of predicates that can be classified as “experiential actions”. This is the case of the predicates ‘listen’, ‘wink’, and ‘wave’, among many others, all of which have an experiential goal, which, in their default syntactic expression, are marked by a preposition (‘listen to’, ‘wink at’, ‘wave at’):

(16)

- (a) Finally, I felt like I was being listened into existence.
- (b) She winked her away through Picadilly.
- (c) She waved me into the kitchen.

But there are also negative constraints that filter out impossible expressions even if we are working with experiential actions. Consider:

(17)

- (a) *They laughed him out of the room with big laughter.
- (b) *John laughed him out of the room with his mouth and lips.

It is not possible to make use of the instrumental role in the metaphor since experiential actions, unlike effectual actions, do not have such an element. The instrumental role is discarded from the mapping by the application of the *Extended Invariance Principle* (EIP). The EIP was first proposed by Ruiz de Mendoza (1998) as a development to all kinds of generic-level structure of Lakoff’s *Invariance Principle*, which was restricted to topological or image-schematic structure. The EIP stipulates

that the generic-level structure of the target domain of a metaphoric mapping has to be preserved in a way that is consistent with the corresponding structure of the source. This means that we cannot do violence to the ‘experiential action’ domain by forcing an instrumental role into it, as evidenced by the impossibility of sentences like (17a) and (17b) above. The metaphor also rules out expressions with activity predicates that cannot take an object, as in (18) below, or those where the object is not an experiencer, as in (19):

- (18) *Sharon shivered me into the room.
 (19) *My mother dressed me into the room.

This metaphorical constraint happens by virtue of the activity of the Correlation Principle (CP), first proposed by Ruiz de Mendoza and Santibañez (2003), which is active in the selection of the best possible source domain in terms of the implicational structure of the target. For example, in ARGUMENT IS WAR, an extremely intense debate between opposing political candidates may appropriately be described as an “all-out war” rather than just a skirmish. In the case of EXPERIENTIAL ACTION IS EFFECTUAL ACTION, both effectors and effectees are appropriate correlates for experiential actors and goals for two reasons: (i) the two pairs of roles stand in an actor-goal relationship; (ii) if we want to preserve the “coerced” meaning implications of the target domain when the lexical template is built into the caused-motion construction, effectors and effectees are the best possible source elements since the caused-motion construction requires literal force applied to an object. In the metaphor we understand the actor and goal of an experiential action as if they were the material doer and object of an effectual action (i.e. an action that has a direct physical effect on the object). A simplified representation of externally constrained lexical-constructional subsumption for *Peter laughed Mary out of the room* is found in figure 1 below:

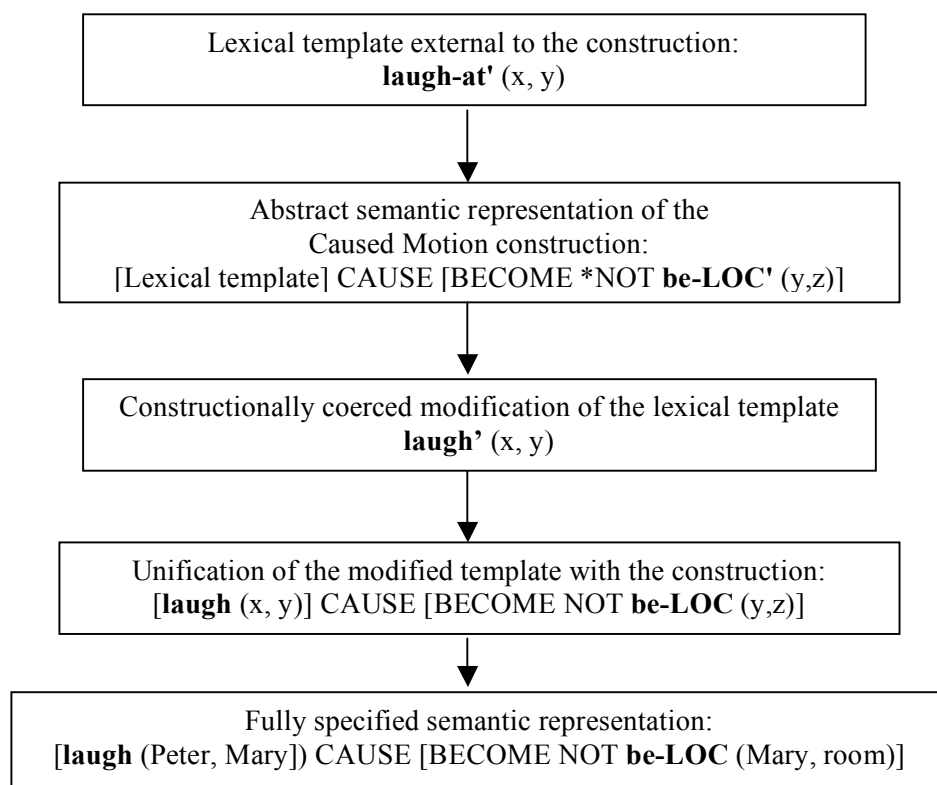


Figure 1: Simplified representation of a case of lexical-constructional subsumption

There are other high-level metaphors that constrain lexical-constructional subsumption. For example, as noted in Ruiz de Mendoza and Mairal (2006), in *He talked me into it*, ‘talk someone (into)’ is based on the metaphor COMMUNICATIVE ACTION IS EFFECTUAL ACTION, which licenses a subcategorical conversion process whereby the receiver of the message is seen as if directly affected by the action of talking rather than as the goal of the message. In *He drank himself into a stupor*, the metaphor AN ACTIVITY IS AN (EFFECTUAL) ACCOMPLISHMENT allows us to interpret the originally intransitive predicate ‘drink’ in terms of a transitive structure of the actor-object kind (in the example, the object is reflexive). To give just one final example –among many possible others– of the constraining power of high-level metaphor consider the following sentence:

(20) Peter loved Mary back into life.

This sentence is an instance of the metaphor AN EMOTIONAL STATE IS AN EFFECTUAL ACTION. The predicate ‘love’ is what Halliday (1994) has called a mental process predicate, which, in his terminology, has two associated roles, a sensor and an object of sensing (i.e. a phenomenon). In (20) the sensor is treated as an effector and the phenomenon as an effectee. The mapping is licensed by the CP to the extent that the object of sensing is a goal of the sensor’s activity.

Metonymy can also act as an external constraint on lexical-constructional subsumption. Following the standard approach in CL, we define metonymy as a domain-internal conceptual mapping where one domain (the source) affords mental access to another domain (the target). In virtue of this operation, the source is taken to stand for the target. Thus, in the sentence *Tie your shoes*, ‘shoes’ is cued by the predicate ‘tie’ to give us immediate access to (and consequently stands for) ‘shoelaces’. The constraining power of high-level metonymy on grammatical arrangement has been discussed in some detail in Ruiz de Mendoza and Pérez (2001) and Ruiz de Mendoza and Mairal (2006). Here we will just address a few relevant facts. Compare the following sentences:

- (21)
- (a) The door closed (easily)
 - (b) The bread cut easily/well.
 - (c) *The bread cut.

- (22)
- (a) This new machine sews nicely.
 - (b) This soap powder washes whiter.

Example (21a) is a case of the *inchoative* construction, which, as is well known from the literature, alternates with the causative construction (cf. *Someone closed the door*). The inchoative construction is very similar to the *middle* construction, exemplified by (21b), with only one crucial distinguishing property: in the middle construction there is an evaluative element, which is obligatory, as is evidenced by the impossibility of (21c). In the inchoative construction the evaluative element is optional. The sentences in (22), in turn, illustrate the *characteristic property of instrument*

construction (Levin, 1993), which we prefer to label, following Ruiz de Mendoza and Peña (2006), *instrument-subject evaluative*. Ruiz de Mendoza and Mairal (2006) give a unified account of the semantic motivation for these three constructions on the basis of two related high-level metonymies: PROCESS FOR ACTION and PROCESS FOR ACTION FOR RESULT. The inchoative construction is grounded in the PROCESS FOR ACTION metonymy. The metonymy allows us to retrieve the implicit agent of the inchoative construction, a situation that is impossible in the case of non-inchoative processes:

(23) The sheriff died (of a heart attack)

In (23) the sheriff's dying does not stand for someone willfully causing his death. Note that in order to have this situation we need to make use of a metaphor, as in (24), where the cause of a natural process is seen as if it were an intentional agent:

(24) A heart attack killed the sheriff.

Furthermore, for the high-level metonymy PROCESS FOR ACTION to be applicable to a verbal predicate, the predicate needs to fulfill a number of conditions: there must be implicit agentive, instrumental, purposive, and beneficiary roles that are retrievable only through the metonymic operation:

(25)

- (a) *The door closed by John (cf. John closed the door).
- (b) *The door closed with his left hand (cf. John closed the door with his left hand).
- (c) *The door closed to start the experiment (cf. The experimenter closed the door to start the experiment).
- (d) *The door closed for me (cf. John closed the door for me).

The impossibility of these examples is to be found in the violation of the EIP, which in its application to metonymy preserves the high-level configuration of domain internal relationships. Evidently, the EIP does not allow us to include in the source the roles mentioned above, which are specific to the target.

The middle and instrument-subject evaluative constructions add an evaluative ingredient that may affect either the process or the result components of the PROCESS FOR ACTION FOR RESULT metonymy. Thus, in *The bread cut easily* and *This new machine sews nicely*, it is the process that is assessed, as revealed by the paraphrases:

(26)

- (a) It was easy to cut the bread.
- (b) It is nice to sew with this new machine.

The paraphrases are not possible in the case of *The bread cut well* and *This soap powder washes whiter*, since in these examples it is not the process but the result that is assessed:

(27)

- (a) *It was well to cut the bread.
- (b) *It is whiter to wash with this soap powder.

This observation suggests that we have two different exploitations of the same high-level metonymic chain. In one of them, special focus falls on the initial source domain (the process); in the other, it is the final target domain (the result) that is particularly highlighted. The difference in focus is to be added to the other factors mentioned above to account for the ability of the two related high-level metonymies to set external constraints on lexical-constructional subsumption and to account for the range of interpretative possibilities of each construction with its variants.

3.2. Internal constraints

Lexical-constructional subsumption is also regulated by other constraints that make reference to the internal semantic make-up of the lexical and constructional templates. The simplest case is *full matching*, which stipulates that there must be full identification of variables, subevents, and operators between the lexical template and the constructional template. Thus, the predicate ‘break’ can take part in the effectual variety of the transitive construction because it shares with the construction the relevant elements of structure, i.e. an effectual action that causes a change of state. In figure 2 below, the higher and lower layers represent the lexical template and the constructional template respectively:

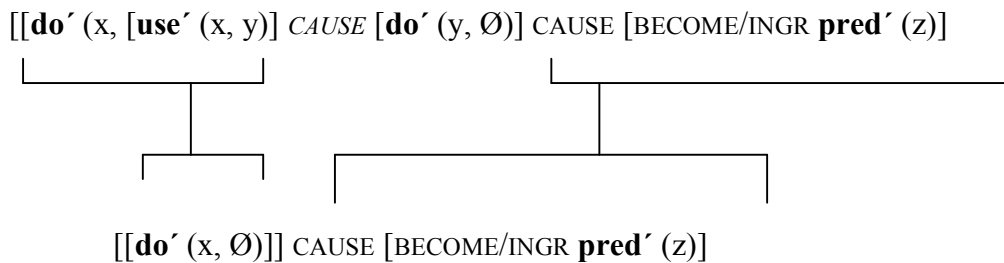


Figure 2. Full matching between a causative accomplishment predicate and the effectual variety of the transitive construction

In a previous section we have discussed some aspects of the Instrument Subject construction. The construction has one less variable than the lexical template of the verbs that make use of the construction (e.g. *break*) since the actor (in fact, an effector) is omitted. Compare (1) and (3) in section 2 with (28):

(28) *A bat broke the window *by the boy.

We will use the label *variable suppression* to refer to the process whereby some element of the semantic configuration of a lexical template is compulsorily discarded because of constructional coercion. In (28) the subsumption process has resulted in the suppression of an external variable (the effector). It is also possible to suppress an internal variable together with its associated operators. Compare (29) and (30), which are cases of the conative construction:

(29) John hit at the wall with a stick.

(30) *A stick hit at the wall.

The verb *hit* is a ‘contact-by-impact’ predicate (cf. Levin, 1993). Predicates belonging to this class share the structure specified in the following lexical template:

[[**do'** (w, [**use.tool**.(α).**in**.(β).**manner.for**.(δ))' (w, x)] CAUSE [**do'** (x, [**move.toward'** (x, y) & INGR **be.in.contact.with'** (y, x)]

The participation of predicates sharing the lexical structure above in the conative construction involves the suppression of the internal variable specifying contact plus the accompanying ingressive operator. This operation results in a modified template:

[[**do'** (w, [**use.tool**.(α).**in**.(β).**manner.for**.(δ))' (w, x)] CAUSE [**do'** (x, [**move.toward'** (x, y)]]

However, the contact component can only be dropped iff the *w* argument (the effector) is specified, which accounts for the impossibility of (30) above, where the additional use of the Instrument Subject construction has already suppressed the effector. Because of this effector-suppressing feature, the Instrument Subject construction has the power to block the activation of other constructions that necessitate an effector.

A third constraint, the *internal variable fusion* constraint, is based on the semantic compatibility between the internal variables of a lexical template and the semantic configuration of the constructional template. A case in point is the verb *jab*, which belongs to the ‘compact-by-impact’ class, but cannot take part in the resultative construction (X CAUSE Y TO BECOME Z). This is mainly due to the semantic clash between one of the internal variables of the predicate (‘repeatedly’) and the telic nature of the resultative construction itself. Compare:

- (31) My father hurled a stone and struck the snake dead.
 (32) *My father hurled a stone and jabbed the snake dead.

In this connection, the occurrence of the middle construction with certain predicates is closely linked to the internal semantic parameters that define the lexical template for that predicate. This construction occurs with predicates that focalize the affectedness of the second argument (e.g. the predicates ‘scare’ or ‘terrorize’) and is blocked by those that emphasize the manner in which the action was performed, as is the case with *hearten* in (33):

- (33) *Lovers hearten easily.

Evidently, the internal variable fusion constraint adds to the set of external constraints provided by the PROCESS FOR ACTION FOR RESULT metonymy discussed in the previous section.

There is a fourth internal constraint that we label the *event identification condition*. According to this condition, the semantics of the construction must allow it to be a proper subevent of the canonical lexical template (be this an adjectival, adverbial or propositional predicate). A nice illustration of this constraint comes from the conative construction. This construction describes an attempted action without specifying the actuality or not of the action. The semantics of this construction, then, must be identified with the subevent expressing either contact or motion, as is the case with *hit*:

[[**do'** (w, [**use.tool**.(α).**in**.(β).**manner.for**.(δ)' (w, x)] CAUSE [**do'** (x, [**move.toward'** (x, y))]

The activity part is modified by another chain, which introduces the idea of attempted action or motion: [**do'** (x, [**move.toward'** (x, y))]. The representation shows an intransitive verb and a second argument, obliquely marked by “at”, which does not have the role of affected object.

A fifth constraint is the *predicate integration condition*. The constructional template may introduce a new predicate into the canonical lexical template on condition that the semantics of the added predicate is compatible with the semantic content of the lexical template. A case in point is the middle construction. The semantics of the middle construction adds a predicate codifying an attribute of the subject (e.g. ‘cutting the meat is easy’). However, this syntactic configuration is not possible with locational predicates (*hit, touch, etc.*) There are two ways to rule out the middle construction. The first is via the INGR **be.in.contact.with'** component, which is the defining feature of the verb. Also the middle involves verbs that have some kind of result state designating a truly affected entity, and if that were defined as the argument of a single argument state predicate, then locational predicates like this would be ruled out.

The sixth internal constraint that we postulate is *lexical blocking*. One of the components of the lexical template can block the unification with a certain construction given that this component is a suppletive form. An interesting case is *kill*: this predicate does not take part in the causative/inchoative alternation since its inchoative form is suppletive, i.e. *die*, and blocks out a potential inchoative form of *kill*.

4. Conclusions

This paper presents an outline of some of the most relevant aspects of the Lexical Constructional Model. This new framework offers an alternative for the understanding of the relationship between lexical and syntactic meaning and draws insights from functional models of language (especially, RRG) and Cognitive Linguistics (especially, Goldberg’s constructional approach). The initial claim is that a theory of semantic interpretation should be constructed on the basis of two representational mechanisms, i.e. a lexical and a constructional template, and a set of cognitive constraints. It is shown that lexical constructional subsumption is regulated by an inventory of both internal and external constraints. Internal constraints refer to the semantic units encoded in a lexical template, while external constraints invoke higher conceptual mechanisms that apply in the domain of metaphor and metonymy.

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