



Le-predicates and event modification in Mexican Spanish

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ABSTRACT

In this paper we will account for the semantic composition of a productive class of predicates in Mexican Spanish formed by lexical verbs that combine with a defective morphosyntactic clitic. Our analysis is that *le* corresponds to a lexical affix that is syntactically analysed as a defective High Appl head that selects for intransitive roots or intransitivized verbal bases, and projects a *LeP*. Semantically, *le* encodes an intensive meaning and imposes certain restrictions on the specific event schemas denoted by the V it may combine with. We show that *le* modifies the selected event by classifying it as an Action; and, in addition, the whole modified event may intersectively combine with a *locus* or *goal* property denoted by an external locative or oblique topic adjunct. *Le* is not an argument of the predicate, and therefore can be associated neither with a referential nor with a coreferential interpretation, but is not expletive either. This paper is relevant for showing how morphosyntax feeds semantics.

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1. Introduction

The present work deals with a phenomenon that has been largely unexplored from a synchronic and formal perspective in the linguistic literature on Mexican Spanish, namely, the composition of a productive class of predicates formed by lexical verbs that combine with a defective morphosyntactic clitic. We know from previous studies (Torres and Hernández, 1999; Torres, 2002; Company, 2006) that, in addition to its morphosyntactic characterization as a third person dative clitic pronoun (e.g., *Le escribí una carta a María* lit. CL.3P.SG.DAT wrote a letter to María ‘I wrote María a letter.’), *le* is a linguistic item that encodes an intensive meaning (e.g., *Le escribí con rojo al letrado* lit. le wrote with red to the sign ‘I performed writing in red (with regard to the sign)’), in the informal sense of entailing an independent force or effort on the part of a participant in doing an action.

The main goal of this paper is to explore the mode of semantic composition involved in the combination of *le* with a verbal stem, and to account for the semantics of the resulting complex predicates.¹ On the one hand, we specify the lexical constraints imposed on Vs; on the other hand, we take a non-lexicalist approach according to which at the syntax–semantics interface the affix modifies a verbal stem and imposes an actionalization of the modified event, i.e., it classifies the eventuality as an action. We will henceforth refer to the result of this process by the term *le*-predicates (Navarro, 2009).

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¹ A complex predicate, in the sense used here, is not a syntactic combination of a main verb with a secondary predicate. It is the output of an operation of predicate formation by means of which a deprotonalized affix forms a semantic compound with the predicate denoted by the verb.

At first sight, this type of complex predicate might appear to belong to the group of idiomatic predicates exemplified by *ándale* lit. *go.IMPERATIVE.le* 'hurry up; come on; wow; etc.', an expression of very high frequency in informal spoken discourse.² Nevertheless, a more careful examination of the systematic characterization of *V + le* predicate formation shows that they are best viewed from a derivational and compositional perspective, and this is the main goal of the present paper: to provide a compositional analysis of *le*-predicates that accounts for the way morphosyntax constrains semantics.³

By way of illustration, some common examples of *le*-predicates are *cerrarle* lit. *close.le* 'to perform closing', *limpiarle* lit. *clean.le* 'to perform cleaning', *moverle* lit. *move.le* 'to perform moving', *salirle* lit. *leave.le* 'to perform leaving', *buscarle* lit. *look.for.le* 'to perform an action of looking for', *correrle* lit. *run.le* 'to perform running', and *trabajarle* lit. *work.le* 'to perform working'. The glosses indicate that a common property of all these combinations is the systematic characterization of the event (or eventuality) as an intensive action, and this property is important because it points to the fact that the verbal base must be of an appropriate conceptual type, one that is compatible with dynamic interpretations. We will come back to this problem in section 3.2, but for the time being let us consider some minimal pairs.

(1) (Situation: The speaker is supposed to have cleaned the shoes, and says:)

- a. *Limpié los zapatos y quedaron bien limpios.*
cleaned the shoes and remained well clean
'I cleaned the shoes and left them completely clean.'
- b. *Le limpié a los zapatos.*
le cleaned to the shoes
'I performed cleaning with regard to the shoes.'
- c. *#Le limpié a los zapatos y quedaron bien limpios.*
le cleaned to the shoes and remained well clean

In the situation described, a comment such as (1a) implies that the speaker cleaned the shoes and, as a result of this action, they ended up completely clean. By contrast, (1b) means that the speaker actively engaged in cleaning the shoes, but may not have actually finished the job. In other words, (1b) implies that the speaker is the agent of an action of cleaning, the internal argument of the verb is no longer interpreted as a participant in the event and, therefore, the full set of shoes is not conceived as an affected object. The claim that this is the interpretation associated with the predicate *limpiarle* lit. *clean.le* 'to perform cleaning' is proved by the unacceptability of the sequence in (1c); in this example the first clause entails that an action of cleaning has been performed, with no implication that as a result of this action the shoes were all cleaned, which contradicts the second clause 'quedaron bien limpios'.

Let us now consider a different pair of examples.

(2) (Situation: Some guests are waiting to get into a party hall, and the doorman says:)

- a. *Señores, por favor, pasen.*
sirs please come.in
'Sirs, please, come in.'
- b. *Señores, por favor, pásenle.*
sirs please come.in.le
'Sirs, please, perform the action of coming in.'

² *Ándale* is just a discourse marker (Company, 2006:558). The basic verb *andar* 'to walk' has completely lost its lexical and syntactic properties, so that the contribution of the expression is merely pragmatic. This is why *ándale* is often used in isolation, as an interjection.

- (i) a. *Ándale, llegamos tarde.*
walk.IMP.le arrived.1P.PL late
'Damn, we're arriving late.'
- b. *Muévete de ahí, ándale.*
move.IMP from there, walk.IMP.le
'Move on, hurry up.'
- c. *Ándale, hermanito, te caíste.*
walk.IMP.le brother.DIM CL.2P.SG fell.2P.SG
'Ok, my little brother, you fell down.'

³ The formation of *le*-predicates is extremely productive and widespread throughout the various registers of Mexican Spanish, not only in oral and colloquial varieties but also in semiformal and written forms, such as newspapers, advertising, etc. This widespread use of the construction might be due to the new meaning associated with the *V + le* pattern, a meaning that focuses on the intensive meaning of the clitic affix and, in its turn, on the interpretation of the event as being the object of predication of an acting force. See also Torres and Hernández (1999), Torres (2002), and Company (2006), among others.

In these examples the difference between (2a) and (2b) strives in the agency of the action. When *le* is missing, as in (2a), the guests are asked to move into the party hall, and they are the themes of this moving event. On the other hand, when *le* is present, as in (2b), the guests are asked to be actively performing the action of getting in.

After considering one example with a transitive verb *limpiar* ‘to clean’ and another with an unaccusative verb *pasar* ‘to go, to come’, we will now consider an unergative verb such as *correr* ‘to run’. Most characteristically, unergatives denote activities, and in this sense what ‘run’ means is ‘do running’. So the question that arises is what the meaning of a *le*-predicate could be when the verbal base already corresponds to an activity, which informally speaking involves an agent doing things. The answer to this question is that when a *le*-predicate is formed from an activity, the activity is strikingly intensive by making more explicit the performance of its action. In other words, when the simple verb is unergative, the intensive *le* counterpart makes salient that an actor is sentient in the discourse context and is responsible for the performed action. This being so, it is commonly the case that the simple verb and complex variant can be freely interchanged. Nonetheless, we can still find instances where switching the simple and complex variants will yield different meanings. Consider the minimal pair in (3).

(3) (Situation: The speaker is describing a state of affairs in the past).

- a. #Iba ya corriendo pero, cuando veo que me iba a alcanzar, entonces corrí.
was already running but when see that CL.1P.SG was to reach then run
- b. Iba ya corriendo pero, cuando veo que me iba a alcanzar, entonces *le* corrí.
was already running but when see that CL.1P.SG was to reach then le run
‘I was already running, but when I realized that (s)he was going to catch up with me, then I performed active running.’

Example (3a) is interpreted as a contradiction since the first proposition of the coordinated structure entails that the speaker was already running and the second proposition states that the speaker started running. (3a) could turn into a grammatical sequence only under the presence of an intensifier (e.g., ... *entonces corrí más* lit. then ran more; ... *entonces sí que corrí* lit. then indeed that run ‘then I ran even harder’). (3b) is semantically well-formed, since the complex verb *correrle* encodes an intensive interpretation and entails that the speaker started running actively, a claim that is not in contradiction with the entailments drawn from the first proposition.⁴

Summing up, the common characteristic of complex predicates formed by an affix *le* and a verbal stem is that the event is characterized as an action, with an external participant that is involved in performing an intensive activity.

In the sections that follow we will provide an analysis of the empirical problem posed by the minimal pairs described in this introduction, namely, what is the meaning of a *le*-predicate, and how it is derived and composed. In order to do so in section 2 we present an overview of the data under study and elaborate on the most relevant syntactic and semantic properties of *le*-predicates (Navarro, 2009). In section 3 we show the defectiveness of this lexical item by analysing its morphosyntactic status (Bibis and Roberge, 2004) and its selecting requirements (Rappaport Hovav and Levin, 1998, 2010; Beavers, 2008). In section 4 we introduce the hypothesis that *le* is the head of a defective High Applicative Phrase (Cuervo, 2003), a function that takes an intransitive or intransitivized VP as its only argument. This analysis is followed by a semantic characterization of the denotation of the functional head *le* in section 5. From section 3 to section 5 we show that lexical constraints on Vs are to be combined with specific functional projections that encode Agency and Action. In section 6 we analyse the semantic composition of *le*-predicates in terms of event modification, and we adapt Doron’s (2003, 2005) compositional analysis of the intensive verbal template in Hebrew to an analysis of the function introduced by *le*. We show that *le*-predicates are not the output of a word-formation process, rather they are derived at the syntax-semantics interface. In section 7 we present the similarities and differences between *le*-predicate formation and various types of noun incorporation (Mithun, 1984). Finally, section 8 presents the conclusions of the paper.

⁴ This same contrast also explains the difference between (i a) and (i b). The first example entails that the subject entered into a reiterative action of running, since the two propositions denote similar events. By contrast, the second example entails that the second event was performed more intensively, with a lot of effort on the part of the participant, and therefore the inference to be drawn is that the two events are not identical.

- (i) a. Corriste y corriste.
ran and ran
‘You kept running.’
- b. Corriste y *le* corriste.
ran and le ran
‘You ran and then performed a more intensive running.’

2. The data

In this section we will describe the main syntactic and semantic properties of *le*-predicates.

First of all, note that *le* - in the context of *le*-predicates does not show syntactic agreement with either an optional oblique DP (4) or a constituent explicit in the discourse context (5). Syntactically, as illustrated in (4) and (5), the defective form *le* does not agree with the only constituent that could be its potential antecedent in each example, marked with the subscript *i*. *Le*-predicates do not show syntactic doubling. Semantically, this lexical item shows lack of anaphoricity and (co)referentiality, which are the most salient properties of canonical argument clitics.

- (4) {*Le*, **les_i*} *apretó* a todos los botones_i y descompuso la lavadora.
 le them.DAT.PL pressed to all the buttons and damaged the washing.machine
 ‘(S)he performed the action of pressing, with regard to all the buttons, and damaged the washing machine.’
- (5) A. ¿*Los_i* encontraron?
 them.ACC.PL found
 ‘Did they find them?’
- B. No, y eso que {*le*, **les_i*} *buscamos* por todas partes.
 no and that that *le* them.DAT.PL looked.for by all parts
 ‘No, even though we performed the action of looking for something everywhere.’

These examples illustrate the fact that *le* does not refer to the internal argument of *apretar* ‘to press’ or *buscar* ‘to look for’; rather, it classifies the event as an intensive action, something that we have translated – following Doron (2003, 2005) – as ‘perform the action of *e*’ (where *e* denotes an event). In accordance with this meaning, *a todos los botones* ‘to all the buttons’ in (4) denotes not an affected object but rather the *locus* where the action of pressing was performed in the past.

Second, *le* is not an argument clitic. This property is tested by the fact that the verbal affix may occur with both intransitive and transitive verbal bases that do not select any dative complement, the canonical morphosyntactic characterization corresponding to the clitic pronoun *le*. See the examples in (6), whose lexical bases are the unergative semelfactive verb *estornudar* ‘to sneeze’, the unaccusative *salir* ‘to go out, to leave’, and the transitive *cerrar* ‘to close’, none of which select the category DATIVE.

- (6) a. ¡*Estornúdale!*
 sneeze.le
 ‘Perform sneezing!’
- b. Esta vez sí *le* salimos temprano.
 this time yes *le* left soon.DIM
 ‘This time we certainly performed the action of leaving soon.’
- ¿*Le* cierras? Por favor.
 le close please
 ‘Could you perform closing? Please.’

Third, the following minimal pairs show that co-occurrence of *le*-predicates with an explicit accusative complement in (7a) or dative complement in (8a) is always ungrammatical. Instead of an accusative or dative complement that denotes the affected object or patient, an optional oblique DP that denotes either the location (where the action of touching is to be performed in the future (7b)) or the goal (with respect to which the action of closing was performed in the past (8b)) is accepted.

- (7) a. **Si* quieres *tócale* tú la puerta.
 if want knock.le you the door
- b. *Si* quieres *tócale* tú a la puerta.
 if want knock.le you to the door
 ‘If you wish, you should perform knocking with regard to the door.’
- (8) a. **Ya le cerré* a Sebastián.
 already *le* close to Sebastián
 Ya le cerré a todas las ventanas.
 already *le* close to all the windows
 ‘I’ve already performed closing with regard to all the windows.’

Fourth, transitive verbal bases can combine with *le* if, and only if, they are intransitivized. This property, illustrated in (7b) and (8b), is generally known as argument demotion, a process by means of which an affected object of the simple verb is demoted to an oblique adjunct.⁵

In support of this intransitivization process the examples in (9) and (10) explicitly illustrate the fact that the adjectival form *abierto* ‘open’, which agrees in gender and number with its argumental subject (within a small clause complement of the verb; (9a)), can no longer agree with the nominal at the time the *le*-predicate is formed (9b). Contrasting with (9), the minimal pair in (10) illustrates that by the time nominal demotion to an adjunct position takes place, the otherwise adjectival form can no longer agree. In other words, under a small clause analysis of (9a), [*la puerta abierta*] should be considered the complement of *dejar* ‘to leave’. In (10b) we can no longer postulate a small clause syntactic analysis of the sort illustrated in *[*a la puerta abierto*] because of the lack of morphosyntactic agreement. The default form (Harris, 1991) selected in (10b) shows that *le*-predicates only allow adverbial modification. Therefore, assuming that the verb projects a VP category while the clitic projects a functional category, the adverb *abierto* would be adjoined to the former, whereas the oblique DP *a la puerta* would be adjoined to the latter; that is, *abierto* (*a la puerta*) do not form a single constituent.

- (9) a. Voy a dejar *abierto* la puerta.
go to leave open the door
‘I’m going to leave the door open.’
b. *Voy a dejarle *abierto* la puerta.
go to leave.le open the door
- (10) a. *Voy a dejarle *abierto* (a la puerta).
go to leave.le open to the door
b. Voy a dejarle *abierto* (a la puerta).
go to leave.le open to the door
‘I’m going to perform leaving open (with regard to the door).’

These paradigms in (9) and (10) also support the claim that *le*-predicates only denote actions, not results, and therefore the modification of the affected object (shown through gender and number agreement) between the A *abierto* ‘open’ and the DP *la puerta* ‘the door’ is not possible in *le*-predicates.

Fifth, as some previous examples of *le*-predicates properly illustrate (mainly those derived from a simple transitive verbal base), oblique DPs are interpreted in informational structure terms as the coda (Vallduvi, 1990); the coda provides the topic of the sentence. These oblique DPs are most often preceded by the preposition *a* ‘with respect to’. The assumption that *a* is a topic marker is based on the following facts⁶: (i) it precedes DPs that are not arguments of the *le*-predicate but instead correspond to demoted arguments of the transitive verbal base, and (ii) oblique DPs must be specific (either inanimate or abstract), as shown in (11a–b). The specificity effects are inferentially derived from the meaning of the preposition as a topic marker, since indefinites are not good topics (Leonetti, 2004). In other words, the topical status forces the specific interpretation of the displaced constituent, a prediction that is borne out by the exclusion of weak indefinites such as bare plurals (11a). Oblique DPs denote the *locus* or location where the event is performed (11a), but, alternatively, they may also denote the abstract goal with respect to which the action is performed (11b).

- (11) a. Si quieres, yo *le pinto* {a la pared, a las paredes, ??a unas paredes, *a paredes}.
if want I le paint to the wall to the walls to some walls to walls
‘If you wish, I will perform the action of painting, with regard to the wall(s).’
b. ¿No *le has pensado* a lo de comprar una casa?
not le has thought to that.NEUT of buy a house
‘Didn’t you perform thinking, with regard to the possibility of buying a house?’

⁵ Argument demotion is the result of a suppression operation which has been postulated, either in the lexicon or in the syntax, in order to account for phenomena such as passivization, reflexivization, anticausatives, middles, incorporation, etc. For the notion of argument demotion see Jackendoff (1990), and Kallulli (2006), among many others. For the notion of noun incorporation see the overview presented in Mithun (1984), among others, and section 7 below. In sections 4 and 6 we argue that the rule of Theme suppression that applies to transitive verbal bases must take place in the lexicon, prior to syntax and semantic composition (Reinhart and Siloni, 2005).

⁶ We assume that the lexical item *a* that precedes oblique DPs is a topic marker, similar to the topic one characteristic of differential object marking constructions. See, among others, Laca’s (1987) and Leonetti’s (2003, 2004, 2006) proposals for Spanish.

Le-predicates may also often co-occur with deictic locative adverbs such as *aquí* ‘here’, or *ahí, allí* ‘there’ (Torres, 2002:291), but oblique DPs and deictic locatives cannot co-occur simultaneously.⁷

- (12) a. Fox *le trabaja ahí* aunque sea festivo.
 Fox le works there although is holiday
 ‘Fox is performing working there even on holidays.’
 b. *Súbele más aquí*, para que agarre la voz de los dos. (Torres, 2002:11c)
 turn.le more here so that gets the voice of the two
 ‘Perform turning up here, so that it gets both your voices.’
 c. Vayan *cerrándole* {allí, a las puertas}.
 go closing.le there to the doors
 ‘Continue performing closing {there, with regard to the doors}.’

A + DP adjuncts allow basically a locative interpretation or what we call an abstract goal (11b) with respect to which the action is performed, but it should be noted that they cannot be interpreted as affected objects, as the result of a change, creation, or modification process. Therefore, a *le*-predicate formed from a lexical verb of creation such as *cocinar* ‘to cook’ is incompatible with an adjoined affected object (13b).⁸ A + DP adjuncts are only possible when they denote complementary (abstract or physical) locative information, as shown in the examples discussed so far.

- (13) a. La abuelita de Arturo cocina mole.
 the grandmother of Arturo cooks mole
 ‘Arturo’s grandmother is cooking mole.’
 b. *La abuelita de Arturo *le cocina* al mole.
 the grandmother of Arturo le cooks to.the mole

Finally, *le*-predicates can only occur in contexts in which the predicate denotes an event realized by an Agent. More precisely, the external argument of a *le*-predicate is preferably an animate Agent, never an inanimate Cause. To illustrate this claim, see the contrast in (14), which shows explicitly that a *le*-predicate is distinguished from the corresponding verbal base in that it characterizes the event as an action and requires that the external argument be interpreted as an agent. In (14b) the subject of the intensive predicate *moverle* ‘to perform moving’ must denote an actor, whereas the causative use of the simple verb *mover* ‘to move’ can denote either a cause or an agent. As will be shown below, whereas the concepts of Action and Agency are associated with two different functional projections in a non-lexicalist analysis, Animacy is a conceptual property that agents may have.⁹

⁷ What we have just said implies that *a* + DP adjuncts are to be interpreted differently from locative goals of unergative verbs expressing motion. Thus, whereas in (i a) *a la puerta* ‘to the door’ denotes a specification of the location with respect to which the action of closing was performed, in (i b) it denotes the goal of the running event.

- (i) a. *Le cerré* a la puerta.
 le close to the door
 ‘I performed closing, with regard to the door.’
 b. *Corrí* a la puerta.
 run.PAST to the store
 ‘I ran to the store.’

⁸ Similarly, *a* + DP adjuncts cannot correspond to cognate objects.

- (i) a. Vamos a *bailarle* toda la noche.
 go to dance.le all the night
 ‘Let’s dance all night.’
 b. *Vamos a *bailarle* a los tangos toda la noche
 go to dance.le to the tangos all the night

⁹ Animacy is not part of Action (Doron, 2003:19) and is independent of Agency (Gobbini et al., 2011). If the external argument is not an animate agent, an interpretive process of personification is responsible for its appropriate interpretation. Note that only very exceptionally it is possible to find data with a non-human, non-animate, external argument, as the examples in (i) illustrate.

- (i) a. La puerta *le raspa* con la pared.
 the door le scrape with the wall
 ‘The door is (performing) scraping against the wall.’
 b. Por aquí *le pasan* trenes toda la tarde.
 by here le pass trains all the afternoon
 ‘Trains do pass by here during the whole afternoon.’

- (14) a. {El viento, mi hermano} *movió* las persianas.
the wind my brother moved the blinds
‘{The wind, my brother} moved the blinds.’
b. {(*El viento), mi hermano} *le movió* a las persianas.
the wind my brother le moved to the blinds
‘My brother performed moving with respect to the blinds.’

Agency requirements on subjects also account for the contrast in (15). In (15a) the individual entity being pushed is coreferential with the null subject of *salir* ‘to go out, to leave’, interpreted as the theme that undergoes the movement and leaves; in this example the subject of *salir* can be conceived as either a proto-patient or a proto-agent (Dowty, 1991) of the leaving action, and the sequence is fully well-formed. By contrast, example (15b) is ill-formed under the interpretation that the action of leaving is performed by an affected entity. Why? Because intensive predicates require an acting agent, and themes or patients are not appropriate as external arguments of *le*-predicates.

- (15) a. Me empujaron y *salí* volando.
CL.1P.SG pushed.3P.PL and went.out.1P.SG flying
‘They pushed me and I rushed away.’
b. #Me empujaron y *le salí* volando.
CL.1P.SG pushed.3P.PL and le went.out.1P.SG flying

The abovementioned set of properties serves as a presentation of the main syntactic and semantic characteristics shown by *V + le* combinations.¹⁰ This description, summarized in (16), provides a general introduction of what is a *le*-predicate in Mexican Spanish.

- (16) A *le*-predicate is a complex predicate formed by a lexical intransitive or intransitivized verbal base and an affix lexical item *le* different from the regular dative clitic. It denotes an intensive meaning by means of which the event is conceived as an Action that requires an Agent as external argument. It may co-appear with a locative or oblique adjunct that specifies either (i) the *locus* or location where the action is performed or (ii) an abstract goal with respect to which the action is being performed.

Now that the most salient properties of *le*-predicates have been presented, in section 3 we will focus on the properties of the affix *le*, both its morphosyntactic status and its selecting requirements.

3. The affix *le*

As mentioned in the introduction, the linguistic form *le* has two basic variants in Mexican Spanish: the regular one, which corresponds to the dative third person singular pronoun, and the marginal one, which is formally defective, unmarked for Person, Number, Gender, and Case (see section 3.1). As a defective item *le* has neither a referential interpretation nor an argument status, but still imposes some semantic restrictions on the set of verbs it can combine with (see section 3.2).

The evolution from the regular pattern to the defective marker is reminiscent of the grammaticalization of the DATIVE category (Company, 2002, 2004a, 2004b, 2006), by which the DATIVE, initially a category that referred exclusively to human entities (i.e., the *true locus* of the person in Kayne’s 2006 terms), was later extended to non-human entities. This process has been associated with an increasing formal and semantic flexibility of the DATIVE, with loss of the pronominal status of the DATIVE clitic, loss of reference and argument status of the clitic, and loss of an individual specific goal (initially human or

¹⁰ An anonymous reviewer has pointed our attention to aspectual *se* in River Plate Spanish. It seems that some properties characteristic of *le*-predicates are also found in constructions with aspectual *se*. For example, aspectual *se* requires an agentive interpretation, and can combine with unergative and transitive verbs if the internal argument is omitted. One difference between the two constructions is, however, that aspectual *se* always involves a quantification of the event, by means of an obligatory quantifier or quantificational DP (see (i)), and it therefore entails a telic event (Krifka, 1989), whereas *le*-predicates are atelic. See below section 3.2.

- (i) a. Juan *se* trabajó *(todo).
Juan se worked a.lot
‘Juan worked a lot.’
b. Juan *se* comió *(todo).
Juan se ate a.lot
‘Juan ate a lot.’

animate, and later inanimate) associated with the indirect object.¹¹ In other words, the evolution of *le* is characterized as having two main states. In the initial state the dative clitic is the pronominal form corresponding to an indirect object argument and combines with either transitive verbs (together with their internal argument) or intransitive verbs. But in the final state the clitic is a defective form that combines only with intransitive verbs or intransitivized (transitive) verbs, and forms with these verbal bases complex *le*-predicates. In both states the clitic can be semantically associated with a goal property, but whereas in the former case the denotation of *le* corresponds to the Goal (i.e., the true *locus* of the person or Ground) of the predicate, and is coreferential with an individual Goal entity, in the latter case the denotation of *le* corresponds to a mere affix that classifies the predicative event as an Action, making the event more intensive. *Le*-predicates may also combine with an optional *locus* or (abstract) Goal property associated with an informational coda.¹² These changes clearly preclude *le* in *le*-predicates from having referential implications.

What remains to be described is the morphosyntactic status and the selecting requirements of *le* at this final state. Let us start with the first one of these two topics.

3.1. Morphosyntactic status

Following Déchaine and Wiltschko (2002), and the minimalist view of the feature composition of lexical items, Mexican Spanish clitic *le*, like French *l*-clitics, should be described as a bunch of φ features for Person, Number, Gender, and Case. These formal features, together with the corresponding phonological and semantic features, define each lexical item.

In addition to formal features, clitics have been described (Bibis and Roberge, 2004) as showing two patterns: the canonical or regular one, and the marginal one. According to Bibis and Roberge (2004:1016) “regular clitics can acquire a marginal status as the result of an alteration of their formal feature composition which triggers compensation from the semantics. In other words, marginal clitics make a semantic contribution to the string while regular clitics make a formal contribution”.¹³

Let us now consider how this double pattern applies to *le*. The canonical pattern of this clitic corresponds to the third person, singular dative weak pronoun, unmarked for gender, which is interpreted as denoting a referential entity and bound to a Goal antecedent; the marginal pattern corresponds to the invariable form, fully defective for φ features, which has no referential antecedent, but still makes a semantic contribution. That is, when *le* follows the canonical pattern its contribution is linked to the instantiation of φ and semantic features of the antecedent, whereas when *le* follows the marginal pattern its grammatical contribution is fully defective for Person, Number, Gender and Case, while its semantic contribution makes salient a new meaning not dependent on any possible antecedent: the intensive meaning.

In other words, the pronominal clitic form that appears in *le*-predicates is homonymous with the canonical dative singular third person clitic *le* ‘him.DAT’, but it differs from the dative clitic form in that the affix *le* is formally defective and invariable, but semantically contentful.¹⁴ The implication then is that, in spite of the fact that *le* does not correspond to an argument of the

¹¹ The evolution of *le*, as extensively argued by Company (2006), is determined by several factors: (i) the fact that the DATIVE category sometimes is part of the argument structure of the predicate and sometimes is not (i.e., there are argumental datives and non-argumental ones, and this category combines with both transitive and intransitive verbs); (ii) the structural proximity of the phrasal dative with other grammatical areas such as the one represented by locative adjuncts; (iii) the prominence of dative doubling and the consequent difficulty of identifying in many cases which item is selected by the verb and which one is the copy; (iv) the possibility for the indirect object to be adjacent to the verb and cause a displacement of the direct object; and (v) the increasing absence of a plural marking on *le* and the special form of the dative *se* (instead of *le*) when combined with the accusative.

¹² At the very final stage *le* can even be used as an affix of non-verbal bases (whether nouns, interjections, conjunctions, etc.). This use, illustrated in (i) (from Company, 2006:66), shows that *le* functions as a lexical suffix devoid of any functional and categorial information. See Wiltschko (2009) for an analysis of lexical suffixes in terms of $\sqrt{\text{roots}}$ in Halkomelem Salish.

- (i) a. ¡Órale! Qué exagerado.
now.le how exaggerated
‘Gosh! You do exaggerate!’
b. ¡Hijole! Si llego a saber, ni vengo.
son.le if arrive.1sg to know not come.1sg
‘Come on! If I had known what was going to happen I would not have come.’
c. No me gusta, pero me lo como, ya qué, no le aunque.
not me likes but me it eat.1sg since what not le although
‘I don’t like it, but I eat it anyway. It doesn’t matter.’

On the formal side, in (i) *le* does not determine the categorial status of the linguistic object to which it is attached; on the meaning side, *le* no longer encodes an Action property. Instead, *le* is a lexical suffix that encodes that the item to which it is attached is a discourse particle that provides information on the emotional attitude of the speaker (Company, 2006; section 6.7.2).

¹³ The case of marginal clitics is exemplified by the occurrence of clitics in idiomatic constructions in languages like Modern Greek and French, an analysis that Bibis and Roberge (2004) extend to the particle *ai* in Niuean. See Bibis (2002) for a syntactic analysis of clitics in idiomatic expressions, and Espinal (2009) for a semantic analysis of inherent clitics in idiomatic constructions according to which they are argued to denote different types of abstract semantic objects, incorporated into the verb to which they are affixed at the syntax–semantics interface.

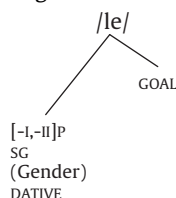
¹⁴ The reader should also bear in mind that Mexican Spanish is not a variant of Spanish that shows the phenomenon of *leísmo* by which an accusative pronoun is turned into *le* (RAE, 2005, 2009).

verbal base (since *le*-predicates take neither a dative nor an accusative argument), *le* is not semantically expletive: the semantic contribution of defective *le* emerges because the clitic is able to denote a conceptual content beyond φ features.

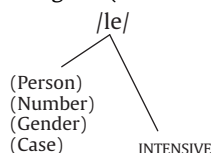
Therefore, focusing on the morphosyntactic status of Mexican Spanish clitic *le* and basing our analysis on Bibis and Roberge (2004), we assume that the lexical entry of *le* shows an asymmetry in its internal structure. Consider (17). In its regular pattern the clitic is more heavily weighted in terms of formal features, whereas in the marginal pattern the clitic is more heavily weighted in terms of semantic specification. What this means is that in the case of regular clitics its meaning “comes from the particular reference of the maximal projection to which it is linked” (p. 1016) in the syntax, the affected object, whereas in the case of marginal clitics its meaning is not dependent on any antecedent

(17) Lexical entry of *le*

a. Regular¹⁵



b. Marginal (defective)



Note that, by hypothesizing that the invariable form that occurs in *le*-predicates is a marginal defective clitic, some of the properties we described in section 2 will follow immediately. It is predicted that this lexical item will show lack of syntactic agreement with any possible constituent that might occur either postverbally (see (4)) or in the preceding discourse (see (5)) and that could apparently be interpreted as an antecedent of the pronoun. Being a syntactic affix, the lexical item *le* cannot be argumental, and therefore can combine with unergative, unaccusative and transitive verbs (6). Furthermore, *le* can co-refer neither with an explicit accusative (7a) nor with a dative phrase (8a). We will account for the rest of the syntactic and semantic properties described in section 2 in sections 4–6. Before that, in the next section we will address the problem of the incompatibility of *le* with certain verbal bases, since it is not the case that any event schema may interact with *le* in the formation of *le*-predicates. Therefore, in section 3.2 we will focus on what the semantic requirements of the affix *le* must be.

3.2. Selecting requirements

Le-predicates are formed from verbal bases that may have different configurational structures from a lexico-syntactic perspective (Hale and Keyser, 2002; Mateu, 2002) but that nevertheless show important restrictions from a lexico-semantic approach (Rappaport Hovav and Levin, 1998, 2010). Let us consider this claim in some detail.

In syntactic terms the argument structures from which *le*-predicates are formed can be either unergative, unaccusative, or transitive, suggesting that the process of *le*-predicate formation imposes no lexico-configurational restrictions on the verbal bases. However, we observe some very significant non-configurational restrictions, in view of the fact that not all verbal types are good candidates for *le*-predicate formation, and these restrictions have to do with whole semantic classes, such as stative verbs (e.g., **serle* lit. be.le, **tenerle* lit. have.le) and non-gradual change of state verbs (e.g., **romperle* lit.

¹⁵ It should be noted that a Gender formal feature is not overt in canonical third person dative weak pronouns. Because of this, the Spanish third person singular dative clitic can be claimed to be defective relative to Gender, since it does not distinguish between masculine or feminine, except for cases related to the phenomena known as *loísmo* and *laísmo* in Spanish grammar (RAE, 2005).

With respect to Number, it is also interesting to bear in mind that the canonical third person dative clitic can show overt plural morphology depending on the position of the antecedent in the discourse context. Compare (i a) with (i b).

- (i) a. *Le(s)_i compré muchos juguetes a mis hijas_i.*
 them.DAT.PL bought many toys to my daughters
 'I bought many toys for my daughters.'
 b. *A mis hijas_i le*(s)_i compré muchos juguetes.*
 to my daughters them.DAT.PL bought many toys
 'I bought many toys for my daughters.'

break.le, **derretirle* lit. melt.le). Therefore, in order to understand the compositional interaction between *le* and the set of possible verbal bases, we have to determine which lexico-conceptual meanings are potential candidates for the formation of *le*-predicates.

In order to proceed with such a study, we adopt the hypothesis that verbs have lexical conceptual structured representations of meaning called *event structures* (Rappaport Hovav and Levin, 1998, inter alia). Event structures consist of two types of elements: *event schemas*, which represent the types of events available for linguistic encoding, and *roots*, which correspond to the idiosyncratic component of the meanings of verbs. The two elements are related in such a way that “a verb’s root determines the basic event structure template for that verb on the basis of its ontological type” (Levin, 2006:9). Formulas (18) through (22) below encode different canonical realization rules, i.e., event schemas, for different ontological categories. These event schemas reflect the fact that a verb may share its event structure template with other verbs, while its root captures what is idiosyncratic to that verb.

- (18) a. manner \rightarrow [x ACT_{<MANNER>}]
(e.g., *jog*, *run*, *creak*, *whistle*)
b. [x ACT_{<MANNER>} y]¹⁶
(e.g., *sweep*, *rub*, *giggle*)
- (19) instrument \rightarrow [x ACT_{<INSTRUMENT>}]
(e.g., *brush*, *chisel*, *saw*, *shovel*)
- (20) container \rightarrow [x CAUSE [y BECOME AT <CONTAINER>]]¹⁷
(e.g., *bag*, *box*, *cage*, *crate*, *garage*, *pocket*)
- (21) a. internally caused state \rightarrow [x <STATE>]
(e.g., *bloom*, *blossom*, *decay*, *flower*, *rot*, *rust*, *sprout*)
b. directed motion verbs \rightarrow [BECOME [x <STATE>]]
(e.g., *ascend*, *descend*, *cross*)
- (22) externally caused, i.e., result state \rightarrow
[[x ACT] CAUSE [BECOME [y <RESULT-STATE>]]]
(e.g., *break*, *dry*, *harden*, *melt*, *open*)

(Rappaport Hovav and Levin, 2010:24, e.g., (7)–(11); (18b) is from Levin, 1999:13, ex. (10b); and (21b) from Levin, 1999:9, ex. (6c)).

This set of event structure templates provides the clue to understanding which verbs may become *le*-predicates. The first generalization concerns those verbs that contain ACT in their basic event structure: verbs of manner and instrument may become *le*-predicates because they denote activities. Activities hold at minimal extended intervals and are inherently iterable, thus showing continued or progressive action on the part of the subject, and implying duration or temporal extent. Accordingly, *correrle* lit. run.le, *cantarle* lit. sing.le, *barrerle* lit. sweep.le, *rascarle* lit. scratch.le, whose verbal bases are of the type described in the templates in (18a–b), and *martillarle* lit. hammer.le and *taladrearle* lit. drill.le, of the type in (19), are well-formed *le*-predicates. All of them mean ‘perform *e*’, where *e* stands for the event denoted by the verbal predicate.

The second generalization concerns a systematic restriction that affects the semantic class of stative verbs, which predicts that the following *le*-predicates are impossible: **serle* lit. be.le, **existirle* lit. exist.le, **tenerle* lit. have.le, **quedarle* lit. stay.le,

¹⁶ According to Rappaport Hovav and Levin (1998) and Levin (1999) there are two types of arguments, those legitimated by both the event structure and the idiosyncratic (core) meaning of the verb, and those only legitimated by the core meaning of the verb, as is the case of *y* in (18b), a ‘pure constant participant’. Non-pure constant or structural participants need to be associated with abstract predicates such as ACT, CAUSE, STATE or RESULT-STATE.

¹⁷ The canonical realization in (20) is basically the template attributed to *location* verbs, denominal verbs that express the place or container in which a variable *y* is located. Verbs of *locatum* are attributed a variant of this canonical pattern in which a placeable object is covered with something.

- (i) placeable object \rightarrow [x CAUSE [BECOME [y WITH <THING>]]]
(e.g., *butter*, *oil*, *paper*, *tile*, *wax*) (Rappaport Hovav and Levin, 1998:109, (19))

Placeable objects, like *saddle* in English, may be associated with an alternative template that, according to Rappaport Hovav and Levin (1998:note 9), may have the form in (ii):

- (ii) [x CAUSE [BECOME [<THING> AT y]]]

These differences appear to be important because verbs of *location* and verbs of *locatum* that have the form in (ii) (e.g., *ensillar* ‘to saddle’), that is, those verbs that have a final end-point, cannot form *le*-predicates, while verbs of *locatum* that have the event schema in (i) (e.g., *enharinar* ‘to flour’) are good candidates for *le*-predicate formation.

*florece_{le} lit. blossom.le, *decae_{le} lit. decay.le, etc.¹⁸ All these verbs, which are neither active nor dynamic, are assumed to have the template in (21a).

The third generalization concerns non-stative result verbs (22), container verbs (20), and directed motion verbs (21b). These types of verbs are dynamic and are able to participate in a *le*-predicate formation process if, and only if, they are associated with a scale structure that encodes a multiple-point scale (Beavers, 2008; Rappaport Hovav and Levin, 2010). Let us consider in more detail the import of this claim.

The dynamic property just mentioned has been correlated in the literature with the fact that these verbs lexically specify a scale, “where a scale is a set of degrees – points or intervals indicating measurement values – on a particular dimension (e.g., height, temperature, cost), with an associated ordering relation (Kennedy, 2001; Kennedy and McNally, 2005)” (Rappaport Hovav and Levin, 2010:28). In principle, we expect that container and result verbs that are dynamic should be able to turn into *le*-predicates. Similarly, unaccusative directed motion verbs that have a dynamic interpretation would also be expected to be able to turn into *le*-predicates, given that they denote a scale in the motion domain constituted by a set of contiguous locations that form a path (Rappaport Hovav and Levin, 2010:29). If these expectations were true, it should turn out that all dynamic verbs, as represented in (20), (21b), and (22), are able to form *le*-predicates, since they all involve a scale of changes. However, the scenario we find in Mexican Spanish does not exactly fit this prediction.

On the one hand, with regard to the template in (20) we observe that *location* verbs such as *embolsar_{le} lit. in.bag.le and *enjaular_{le} lit. in.cage.le, in which an end point is entailed, are not well-formed. By contrast, *locatum* verbs such as embarrar_{le} lit. on.mud.le ‘to perform spreading with mud’ and enjabonar_{le} lit. on.soap.le ‘to perform spreading with soap’ (see note 17) are both well-formed. With regard to the schema in (21b), ascender_{le} lit. ascend.le ‘to perform ascending’ and subir_{le} lit. go.up.le ‘to perform raising’ are also well-formed, but morir_{le} lit. die.le and venir_{le} lit. come.le are not. Finally, with respect to the event schema in (22) we observe that abrir_{le} lit. open.le ‘to perform opening’, calentar_{le} lit. warm.le ‘to perform warming’, and limpiar_{le} lit. clean.le ‘to perform cleaning’ are well-formed, but helar_{le} lit. freeze.le, romper_{le} lit. break.le, and hervir_{le} lit. boil.le are not.

The puzzle presented in these contrasts, as far as we understand it, can only be solved if we assume that *le*, although morphosyntactically defective, is semantically active, thus being able to select both activities (with the templates in (18) and (19)) and dynamic predicates (with the templates in (20), (21a) and (22)). Following Beavers (2008), dynamic predicates correlate durativity with gradability: the basic property of dynamic verbs is that they impose a relation between events *e* and scales *s* (or paths *p*).¹⁹ In other words, dynamic predicates introduce a coextensive homomorphism between durative events and gradable scales.²⁰ This correlation follows from a preservation of mereological complexity, by which each part of the event maps surjectively to a part of the scale, and adjacency, by which progress from one part of the event to an adjacent part corresponds to progress from one part of the scale to another. Thus, the claim that *le* imposes a semantic constraint on the class of Vs it may combine with can be represented as in (23). Both *e* and *s* must be conceived as complex objects (CO) with at least three subparts (i.e., a beginning, a middle and an end), and an appropriate homomorphism takes place between *e* and *s*. Durativity refers to the subdivisibility of *e* (durative events have multiple discernible subparts), and gradability (binary or multi-valued) refers to the subdivisibility of *s*.²¹

(23) Lexical constraint on *V*

Let $\alpha \in (\text{CO}(e) \wedge \text{CO}(s))$,

then α is a dynamic predicate, with a durative reading and a gradable reading, iff

$\text{CO}(e): e = e' \oplus e'' \oplus e'''$ (durative event)

↓ ↓ ↓

$\text{CO}(s): s = s' \oplus s'' \oplus s'''$ (gradable scale)

¹⁸ Torres (2002:287, ex. (4)) provides an example, see (i), with an apparent stative lexical base *saber* ‘know’, but the gloss makes clear that an elided clause with an action verb must be assumed in complement position.

(i) (Situation: A two-year old girl has just discovered how to manipulate a toy so that it produces a sound. Her mother exclaims:)

Ya le sabe.

already le knows

‘She now knows [how to do it], she has figured it out.’

Similarly, *pensar_{le}* lit. think.le ‘to perform thinking’ is a well-formed *le*-predicate (see ex. (11b) in the text) when it refers to an event involving a process of thinking, thus no longer denoting a stative verb but rather an activity. Therefore, we conclude that *saber_{le}* and *pensar_{le}* denote concealed activities, not true statives.

¹⁹ We assume that scales are paths. Path structures “are applicable to a wide variety of concepts, e.g. for paths in space, but also for paths that describe qualitative changes of properties” (Krifka, 1998:204).

²⁰ According to Beavers (2008:257) “*P* is a dynamic predicate iff *P* predicates over an event *e*, a force-recipient *x*, a scale of change *s*, and possibly other entities”. We must omit from our description reference to a potentially affected theme or recipient *x* because *le* can only combine with intransitive or intransitivized verbs. See below, in (30), the lexical rule of intransitivization postulated for *le*-predicates.

²¹ Scalar changes fall into two sub-classes: those associated with *two-point scales* and those associated with *multiple-point scales* (Beavers, 2008; Rappaport Hovav and Levin, 2010), whereby “two-point scales only have two values as they are associated with attributes that basically encode having or not having a particular property” and “multiple-point scales are associated with attributes which can have many values” (Rappaport Hovav and Levin, 2010:30).

With this model of the event-to-scale homomorphism in mind (which is based on the mereological event-to-path homomorphism defined by Krifka, 1998), we can provide an explanation for the lexical inconsistencies observed in *le*-predicate formation.

The gradable scale component is important because it happens to be the case that the verbs associated with templates (20), (21b), and (22) that are disregarded as possible *le*-predicates are those associated with a two-point scale, while the ones that are possible candidates for *le*-predicate formation are those associated with a multiple-point scale. With this generalization we predict that true achievement verbs (e.g., *llegar* 'to arrive'), which are punctual events and involve simple transitions (i.e., non-gradable scales), are not candidates for *le*-predicates, whereas degree achievement verbs (e.g., *levantar* 'to raise') and accomplishment verbs (e.g., *construir* 'to build'), which are durative and, furthermore, involve gradable scales, are.²² A second prediction is that verbs of *locatio* (e.g., *archivar* 'to file') will not accept *le*-predicates since they involve a two-point scale, but verbs of *locatum* (e.g., *engrasar* 'to grease') will. A third prediction is that a *le*-predicate can be formed from a result-state verbal base if, and only if, the denoted event is associated with a multiple-point scale (e.g., *construir* 'to build'), but not with a two-point scale (e.g., **hervirle* lit. boil.le). All these predictions are borne out by the data we have been examining.

It should be further noted that some externally caused result events such as *abrir* 'open' may be used in situations that involve either two-point or multiple-point scales, depending on the participant they are linked to. According to what we have just said, *abrirle* lit. open.le 'to perform opening' is expected to be well-formed only when the predicated event denotes a multiple-point scale, but not when it denotes a two-point scale. Example (24a) is ungrammatical because the action of opening a checking account is not gradual in nature: it denotes an event with an end-point result-state, an open checking account, but (24b) is well-formed because the action of opening a curtain denotes an event in which the curtain is displaced along increasing degrees of openness over time. This prediction is borne out when we consider the co-occurrence of this predicate with degree quantifiers and adjunct modifiers, which are only accepted in (24b).

- (24) a. **Abrirle* a la cuenta bancaria {mucho más, poquito a poco, lentamente}.
 open.le at the bank account much more few by few slowly
 b. *Abrirle* a la cortina {mucho más, poquito a poco, lentamente}.
 open.le at the curtain much more few by few slowly
 'To perform opening [a lot, slowly], with regard to the curtain.'

Therefore, the combination with degree quantifiers and modifiers supports the constraint that dynamic predicates are conceived as complex objects built on scales *CO(s)*, as stated in (23).

In order to support the durative component characteristic of activities and dynamic predicates, conceived as complex objects built on events *CO(e)*, we will consider their atelicity. Good candidates for *le*-predicate formation allow *durante* 'for' adjunct modifiers (25b), but *en* 'in' modifiers are discarded (25a).

- (25) a. **Ábrele* a la cortina en un minuto.
 open.le at the curtain in one minute
 b. *Ábrele* a la cortina durante unos minutos.
 open.le at the curtain for some minutes
 'Perform opening for a few minutes, with regard to the curtain.'

With this in mind we can also explain why ditransitive verbs (e.g., *dar* 'to give', *regalar* 'to give as a present', *enviar* 'to send') cannot be involved in *le*-predicate formation (e.g., **enviarle* lit. send.le).²³ This is due to the fact that, even though these verbs

²² A note is in order here concerning true achievement verbs such as *llegar* 'to arrive', *entrar* 'to enter', *caer* 'to fall', etc. *Llegarle* lit. arrive.le, *entrarle* lit. enter.le, and *caerle* lit. fall.le are well-formed, because they are no longer interpreted as directed motion verbs but are instead associated with a metaphoric inchoative meaning 'to start the action of doing something'. Similarly, *irle* lit. go.le is used with the metaphoric meaning 'to show sympathy or support for something'. Verbs such as *salirle* lit. leave.le and *alcanzarle* lit. reach.le are often used under a progressive, dynamic interpretation (e.g., *Voy saliendo* lit. go.1sc leaving.le 'I am performing leaving').

²³ Company (2006:555, ex. (64a)), when discussing the process of referential weakening involved in the evolution of the *DATIVE* category, provides the example in (i) which is formed from the ditransitive lexical base *dar* 'to give'. However, it should be noted that the salient meaning of *dar* in this example is idiomatic, since it entails not an affected goal entity but rather an activity.

- (i) A. -¿Cómo estás?
 how are
 'How are you?'
 B. -Pues aquí, *dándole*, qué remedio
 well here giving.le what remedy
 'Here, working, what else can I do?'

can be associated with an agentive external argument, they also entail the existence of an individuated Goal entity (prototypically, a (pro)noun that denotes a referential human/animate entity) towards which a Theme object is moved, and this Goal imposes a bound or terminal point on the event/scale. Therefore, ditransitive verbs cannot be said to denote multiple-point scales, but rather two-point scales, and are excluded from *le*-predicates.

To sum up, there are two main lexical properties of the affix *le* that should be specially highlighted. First, the affix is a defective variant of the canonical dative singular third person clitic *le* ‘him.DAT’ that lacks Person, Number, Gender and Case features. This has been discussed in section 3.1. Second, we have also pointed out the fact that the affix *le*, in spite of being formally defective, encodes an intensive meaning. In accordance with this active semantics, in section 3.2 we have argued that *le* imposes specific semantic constraints on the event schema denoted by the verb it can combine with: it must correspond to an activity or dynamic predicate, that is, a predicate that encodes a mereological complex object and introduces a correlation between durative events (subevents) and gradable scales (subscales). A coextensive homomorphic relationship is required between the various subevents of the durative event and the various scale positions of the gradable scale they are composed of. *Le* constrains the verbal bases it may combine with, in the sense that these verbal bases cannot encode a simple <STATE> or a punctual change of state, entailing a non-gradual two-point scale in its conceptual structure.

Once we have described the lexical requirements imposed by *le*, in the next section we address the syntax of *le*-predicates.

4. The syntax *le*-predicates

In section 3.1 we have shown that *le* is morphosyntactically defective. Accordingly, in this section we will postulate that *le* is the head of a defective High Applicative projection (Cuervo, 2003) which does not relate an indirect object with a direct object, but only takes a VP argument. Furthermore, being defective *le* is responsible neither for valence reduction nor for valence increase. On the one hand, we will postulate that the demotion of the Theme (e.g., (7)) is due to a lexical rule that applies to transitive verbal bases before they are merged with the affix *le* (cf. Espinal and McNally, 2011). On the other hand, the addition of an Agent to the event structure is due to a functional Voice projection that is responsible for severing the external argument from its verb (Kratzer, 1996).

The questions that will be addressed in this section are the following: what is the syntactic category corresponding to *le*? What is the structure of a *le*-predicate? How is the intransitivization of transitive verbal bases guaranteed? How is the external argument introduced? And, finally, what is the syntactic status of oblique DPs that may co-occur with *le*-predicates?

The starting point, regarding the syntactic status of the marginal (defective) *le*, is the observation that it corresponds to a syntactically visible head. We know that this is the case because it shows clitic climbing just like any other regular clitic (e.g., the canonical dative clitic). This is illustrated in (26).

- (26) a. *Ve moviéndole a la sopa.*
 go moving.le to the soup
 ‘Perform mixing, with regard to the soup.’
 b. *Vele moviendo a la sopa.*
 go.le moving to the soup
 ‘Perform mixing, with regard to the soup.’

Therefore, it must be concluded that the affix *le* is a syntactic object. But then, the next question to be answered is what sort of syntactic category should be attributed to the defective *le*? Our hypothesis is that the set of inherent formal features introduced in section 3.1 and the set of syntactic properties characterized in section 2 can only be accounted for appropriately if we assume that *le* is a special case of a defective *High Applicative head* (Cuervo, 2003), in the sense that it is a function that selects a VP (ignoring the vP phases) and does not project a specifier.

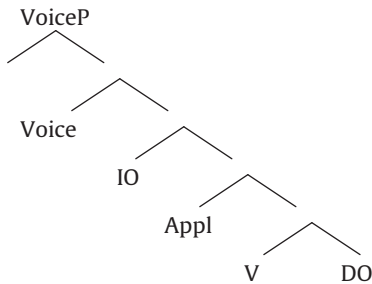
The general idea of the classical applicative analysis (Pylkkänen, 2002) emerges from the need to provide an account of ‘non-core’ arguments (i.e., unselected benefactives) and their relation to the verbal argument structure and event structure of the corresponding predicates, since most languages have a means of adding an indirect external object to the argument structure of a verb. In accordance with this claim, Pylkkänen (2002:19) (who follows Marantz, 1993) postulates two different types of applicative heads: “*high applicatives*, which denote a relation between an event and an individual, and *low applicatives*, which denote a relation between two individuals. High applicatives attach above the verb and low applicatives below it”.

Following these assumptions, Cuervo (2003) analyses Spanish dative clitics as Applicative functional heads, that is, as functions that relate two arguments, an internal argument with an external one. In canonical structures, Spanish dative clitics are syntactic heads that introduce an external argument to the predication by means of a specifier-complement relationship. The variety of meanings associated with indirect objects is explained both by the type of Appl that the clitic denotes and by the syntactic position where the head is inserted. Thus, Spanish high applicatives (HAppl) can be exemplified by datives that occur with psychological stative verbs such as *asustar* ‘to be frightened’ (e.g., *A Juan le asustan los perros* lit. to Juan him.DAT frighten the dogs ‘Juan is frightened by dogs’)²⁴ and with intransitive unergative verbs such as *bailar* ‘to dance’

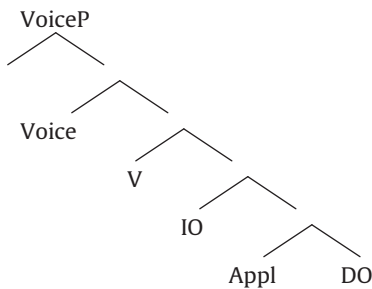
²⁴ See Masullo (1993), Longa et al. (1998), and Fernández Soriano (1999), among others, for an alternative analysis of presentational oblique *a* + DP phrases as quirky subjects.

(e.g., *La pareja ganadora les bailó a los miembros del jurado* lit. the couple winning them.DAT danced to the members of the jury 'The winning couple danced for the members of the jury'). Spanish low applicatives (LAppl), on the other hand, can be exemplified by datives that are interpreted as the patient or benefactive (*a sus electores* 'to his voters') of somebody (*el presidente* 'the president') having exerted a force on an entity (*la carta* 'the letter'), as shown in the example *El presidente les envió una carta a sus electores* lit. the president them.DAT sent a letter to his voters 'The president sent a letter to his voters'. These two types of Applicative constructions, represented in (27a) and (27b), respectively, share the structural property that the indirect object asymmetrically c-commands the direct object.

(27) a. HAppl



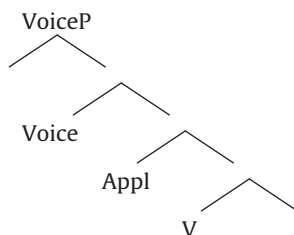
b. LAppl



Now, from what we have presented so far it should be clear that the affix defective *le* involved in *le*-predicates is neither a HAppl nor a LAppl head, since it does not relate an external argument to an internal one. So let us consider a different hypothesis, namely, that *le* is a defective HAppl head.

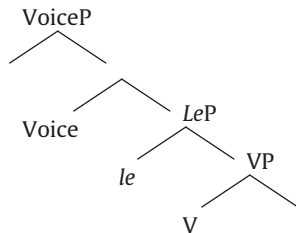
Cuervo (2003:chapter 4) differs from Pylkkänen (2002) in introducing a third type of Applicative structure to account for Spanish ethical datives (e.g., *Juanita ya le camina* lit. Juanita already him/her.DAT walks 'Juanita can already walk for him/her'); an ethical dative corresponds to the expression of a defective HAppl head that only takes a dynamic agentive event as its complement. This type of clitic is claimed to be defective because it introduces an internal event argument but does not relate this event with an external semantic argument, and therefore does not project a specifier (a full dative DP). Ethical datives are most commonly identified with first and second person pronouns (*me*, *nos*; *te*, *os*; *le*, *les*), but these pronouns are not part of the valency of the verb. The structure corresponding to this defective HAppl is represented in (28) (adapted from Cuervo, 2003:198).

(28) Defective HAppl



Starting with this proposal, we will extend this hypothesis to Mexican Spanish affix *le*. In fact, assuming that the marginal (defective) clitic *le* is the head of an Applicative projection, it must necessarily be the head of a defective HAppl, a projection that will be named *LeP*. In other words, given the structural similarities between ethical datives and the defective *le*, we are going to assume the syntactic structure in (29) for *le*-predicates in Mexican Spanish.

(29) Syntactic structure of *le*-predicates.



Several arguments support this structure: (i) the clitic co-occurs with verbal bases that lack a direct object, which means that it cannot be a LAppl (see (7a)); (ii) the clitic is not a function that relates two argumental entities (it requires neither a direct object nor a full indirect object) (see (8a)), which also means that it cannot be a LAppl (cf. the incompatibility with ditransitive verbs); (iii) the clitic takes only a complement, identified with the whole VP, which means that it is a HAppl (see the examples in (6)); and (iv) it does not relate the event denoted by the VP with an external semantic argument, which means that it is a defective HAppl.

On the empirical side, postulating this structure we can predict that *le* is not an argument clitic, it is incompatible with true datives and explicit accusatives, and it merges with verbs that do not select a canonical dative, apart from meeting the lexical requirements specified in section 3.2.

Let us now move to the next three questions posed at the beginning of this section: how is the intransitivization (of transitive verbal bases) and the consequent argument demotion of the Theme argument guaranteed? What is the syntactic status of the oblique DPs? And, furthermore, how is the external argument introduced?

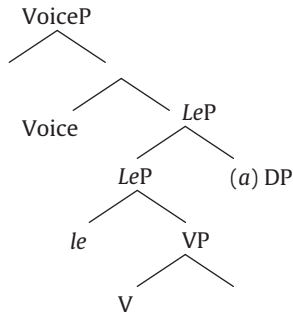
We have already shown that *le*-predicates correspond to intransitive verbs (either unergative or unaccusative) or to intransitivized (transitive) verbal bases (see (6) and (7)). However, it does not seem to be the case that *le* is responsible for triggering a valence reduction in the verb, since – being morphosyntactically defective and having lost the argumenthood characteristic of canonical clitics – its presence cannot have any effect on the argument structure of the verb it combines with. We therefore postulate that valence change in the verb is due to a lexical rule, much in the spirit of other intransitivization rules that have been proposed in the literature (for example for middle constructions; see note 5, above), but we would like to insist on the fact that in *le*-predicates this process is not syntactically but lexically induced.

Our rule in (30) draws its inspiration from the lexical rule of Theme suppression that has been postulated in Romance languages such as Spanish and Catalan in order to account for those verbs that allow bare count nominals unmarked for number in object position (Espinal and McNally, 2011:24). The lexical rule suppresses the Theme argument of the transitive verbal base (e.g., *limpiar* ‘to clean’, *cerrar* ‘to close’), so that this Theme argument is no longer identified with a specific entity; crucially, however, the entailment that the predicate describes a situation involving two participants still persists, which implies that the participant corresponding to the suppressed internal argument is treated as merely a thematic participant $\theta(e)$, rather than as the variable that corresponds to a Theme argument.

(30) **Input:** $\lambda y \lambda e [V_T(e) \wedge \theta(e) = y]$
Output: $\lambda e [V_T(e) \wedge \theta(e)]$

This lexical rule constrains the class of verbs allowed in *le*-predicate formation and guarantees that, if the simple verb is transitive, it will have the Theme suppressed before it is inserted in syntax. This rule will not apply to unaccusative verbs (e.g., *salir* ‘to leave’) that have an internal Theme argument (i.e., the object of movement) since this internal argument can be identified with the Agent at the time of composing the meaning of a *le*-predicate with an external argument (e.g., *Juan le salió* lit. Juan le left ‘Juan performed leaving’). (See section 6 below.)

Furthermore, in the task of composing a sentence with a *le*-predicate the thematic participant $\theta(e)$ of the output in (30) can even be conceptually associated with a *locus* or abstract Goal property denoted by an optional oblique adjunct DP external to both VP and *LeP* (see (1b), (4), (7b), (8b), (10b), (11a,b)). In order to account for this possibility, we postulate that the syntactic status of this oblique DP is that of an adjunct to *LeP*.

(31) Syntactic structure of *le*-predicates with an oblique DP.

It should further be pointed out that the lexical rule in (30) follows those authors (Marantz, 1984; Hale and Keyser, 1993; Kratzer, 1996; Doron, 2003, 2005; and others) that posit that the external argument is introduced outside the verb via a functional projection. In fact, as the structures in (29) and (31) make explicit, the external argument of a *le*-predicate is not a true argument of the simple verb it comes from, but rather an argument of a functional head, mainly Voice (Kratzer, 1996). As will become clear in the following sections, the Agent will be licensed as the specifier of Voice. That is, since the internal argument of transitive verbs has been suppressed, Voice in (29) and (31) can only introduce the external argument, but cannot assign accusative Case.

To sum up, in this section we have argued that the syntactic category corresponding to the affix *le* is a defective HAppl head that projects a functional *LeP*. We conclude that *le* is not the trigger of valence reduction and its consequent argument demotion, because – being defective – it cannot be responsible for argument and Case manipulation; *le* combines with intransitive verbs or with transitive verbs that have been intransitivized by the lexical rule in (30) and satisfy the lexical constraint in (23). Furthermore, being the head of a defective HAppl, *le* is not the trigger of valence increase either; a higher functional projection Voice is responsible for Agency, and therefore for introducing the external Agent argument. Oblique DPs introduced by the preposition *a* ‘with regard to’, a topic marker, are analysed as adjunct constituents to *LeP*.

The syntactic analysis that we have presented accounts for the status of oblique DPs (11)–(12), the lack of affected objects (13) and secondary predications (9)–(10), the lack of canonical indirect objects (8a), and the obligatory agentivity associated with the external argument (14)–(15).

So far, we have shown that the affix clitic that participates in the composition of *le*-predicates has a defective morphosyntactic status and is the head of a defective HAppl syntactic head. We have also shown that, despite this defectiveness, *le* is semantically active, since it restricts the class of event schemas of the verb it combines with to activities and dynamic predicates. An additional ingredient of our account is the lexical rule of intransitivization in (30), which is independently needed in the grammar of Spanish. In the next two sections we consider in more detail the semantic denotation of *le* and the semantic composition of *le*-predicates.

5. The semantic denotation of *le*

In this section we will approach the question of how the intuitive idea that defective *le* conveys an intensive meaning (see (17b)) can be formalized, in the light of the semantics for applicatives that has been proposed in the literature (Pylkkänen, 2002; Cuervo, 2003).

The formulas in (32) follow the neo-Davidsonian tradition (Davidson, 1967; Parsons, 1990) in representing functional heads and thematic roles as functions, either relations between entities and events, or relations between individual entities.

- (32) a. Semantics for HAppl (Pylkkänen, 2002:21)
 $\lambda x.\lambda e. \text{APPL}(e, x)$
 b. Semantics for LAppl (Pylkkänen, 2002:22)
 $\lambda x.\lambda y.\lambda f_{\langle e \langle s, t \rangle \rangle}.\lambda e.f(e, x) \ \& \ \text{theme}(e, x) \ \& \ R(x, y)$
 c. Semantics for defective HAppl (Cuervo, 2003:201)
 $\lambda e. (\exists x) \text{APPL}(e, x)$

The semantic representation in (32a) makes explicit that the applicative head of a HAppl construction (see (27a)) encodes a specific semantic relationship (e.g., Benefactive, Malefactive, Instrumental, etc.) between the event identified by the VP and an external individual *x*. By contrast, the applicative head of a LAppl construction (see (27b)) encodes a specific semantic relationship *R* (e.g., Recipient, Source) between two individuals, a theme argument *x* and an external individual *y* the

recipient or the source of the possession).²⁵ The semantic representation in (32c) makes explicit that a defective HAppl head (e.g., the Spanish ethical dative represented in (28)) denotes the existence of an individual that relates to the event as its benefactive or malefactive participant, but what is crucial is that this participant is not identified with any semantic argument of the predication.²⁶

This notwithstanding, we have encountered some significant semantic differences between a defective HAppl head, as has been discussed in Cuervo (2003), and defective *le*, since the affix *le* that occurs in Mexican Spanish *le*-predicates does not introduce a relationship between an implicit benefactive or malefactive participant and an eventuality, but rather simply modifies the event denoted by the verb by classifying it as an Action.

In Table 1 we summarize these main differences.

Table 1

Defective HAppl vs. defective *le*.

| Defective HAppl | Defective <i>le</i> |
|---|--|
| Implies that there is some individual related to the event. This individual is interpreted as a benefactive or malefactive entity. | Introduces an intensive meaning that modifies the event. The eventuality is interpreted as an Action. |

According to what we have just said, we would like to support the idea that the semantic denotation of the affix *le* is very close to the semantics of the intensive template in Hebrew (Doron, 2003, 2005).²⁷ *Le*-predicates must be conceived as intensive correlates of the simple verbs from which they are composed, and this intensiveness adds entailments of Action. Therefore, we postulate that the semantic denotation of *le* has the form shown in (33).

(33) *Semantic denotation of le.*

$$Le = \lambda P \lambda e [P(e) \ \& \ \text{Action}(e)]$$

The formula in (33) makes explicit that *le* selects for predicative events P and adds the condition that the event must be interpreted as an Action (what we have translated in the examples above as ‘perform V-ing’). From this formula it follows that the clitic should combine in a straightforward way with predicates that can be actionalized: basically, activities and dynamic predicates (e.g., degree achievements, gradual directed motion verbs, and accomplishments that denote a multiple-point scale). The combination of *le* with verbs that denote stative events or punctual achievements crashes unless certain modes of thought that facilitate, beyond grammar, an intensive interpretation of the V apply (see notes 18 and 22 above).

The notion of Action involved here implies sentience and volition, which means that *le*-predicates are necessarily predicated of an acting force. In this regard note that while most of the examples given so far have a human animate as external argument, it could also be non-human (see note 9).

Note, furthermore, that Action cannot be reduced to causation. The actionalization of the event (i.e., the entailment that the event must be interpreted as denoting an action, even though the lexical base does not denote an activity) combines with requirements on subjects: the external argument must introduce an Agent. As postulated in (29) and (31), the optimal candidate for accounting for this requisite is the functional projection Voice, and more specifically Active or Agentive Voice.²⁸

²⁵ More accurately, the formalization in (32b) depicts the head of LAppl as taking three arguments: the first two are the direct and indirect objects and the third one is the verb. R makes a distinction between a Recipient applicative and a Source applicative, whereby the first stands for a *to-the-possession* relation and the latter stands for a *from-the-possession* relationship.

²⁶ According to Cuervo (2003:201) the proposal of a ‘defective’ high benefactive applicative head parallels the behaviour of impersonal Voice, formalized as in (i), and she postulates an analysis of impersonal *se* as the spell-out of a defective Voice head.

(i) Voice (passive): $\lambda e \exists x [\text{Agent}(e, x)]$

²⁷ See Doron (2003, 2005) for the hypothesis that the verbal system for the active voice in Semitic languages shows different templates (i.e., the simple, the intensive, and the causative), and that the intensive template is semantically conceived not as adding an argument to the simple verb but rather as adding entailments to the effect that the event denoted is an action. This idea is formalized by Doron (2005:161) as in (i).

(i) $\iota = \lambda e [\text{Action}(e)]$

²⁸ Voice is a functional head (Kratzer, 1996) that selects a predicate VP as complement and denotes a thematic relation that holds between the external argument and the event described by the verb. Generally speaking, VoiceP can be either causative or agentive; that is, it can introduce two different Voice notions R(Caus) and R(Agent), with the semantics depicted in (i), from Alexiadou and Schäfer (2005:46).

(i) a. Voice: $\lambda P \lambda x \lambda e. (R(x, e) \ \& \ P(e))$
 b. R (Caus): the NP names the causing event (following a proposal in Pytkänen, 2002).
 c. R (Agent): (a property of) the NP grounds the coming about of the event.

According to Kratzer (1996) an active or agentive Voice is formalized as in (ii):

(ii) Voice (active): $\lambda x \lambda e [\text{Agent}(e, x)]$

See also Doron (2003, 2005) for the relationship between the notions of Agency and Voice.

Therefore, we assume, following Marantz (1984), Kratzer (1996), and later work on applicatives (Pylkkänen, 2002; Cuervo, 2003), that the external argument is introduced not by the verb itself but by a separate predicate, referred to as Voice. In the particular case of *le*-predicates the external argument must express an Agent property, and therefore a Cause or a Patient is ruled out, thus predicting the minimal pairs in (14) and (15) in section 2.

In addition to what has been claimed so far, and in parallel terms to Doron's (2003, 2005) analysis of the templatic verbal morphology in Semitic languages, we would like to put forward the hypothesis that the external argument is an Actor; that is, the subject of a *le*-predicate is not only interpreted as an Agent (as determined by VoiceP_{Active}), but since the events denoted by *le*-predicates are classified as Actions by *le*, the inference to be drawn is the one in (34) (Doron, 2003:40)). This formula entails that the external argument is interpreted as the Actor of the action denoted by the semantic complex predicate.

$$(34) \quad \text{Agent}(e,y) \ \& \ \text{Action}(e) \rightarrow \text{Actor}(e,y)$$

The Agent is introduced by the functional head Voice and the Action by the functional head *le*. The output of applying these two functional heads to a verbal base is that the final denotation will necessarily entail an action with an actor as external argument. If the verbal base denotes an activity (e.g., *correr* 'to run'), the affix *le* will ensure that the *le*-predicate is predicated of an acting force, thus entailing the intensiveness of the activity (see (3)). If the verbal base denotes a degree achievement (e.g., *salir* 'to leave'), the affix *le* will ensure that the moved object is identified with the agent of the action (see (6b)). If the verbal base denotes an accomplishment (e.g., *limpiar* 'to clean'), the affix *le* will ensure that the focus is on the external agent that performs the action, rather than on the result-state (see (1a)). Therefore, we conclude (together with Doron, 2003:25) that intensive *le* does not involve a valence change relative to the simple verb, but only entailments of Action. In other words, intensive *le* does not involve an increase of valence, but only reclassifies the event as an intensive Action. Thus, the internal argument of unaccusative verbs is reclassified as an actor argument, and the external argument of unergatives and transitives is not only interpreted as Agent but as Actor as well.

These entailments will be crucial in section 6 for understanding how the meaning of a *le*-predicate is formally composed. In this section we will show how the defective syntactic structures presented in (29) and (31) (in section 4) combine with the semantic denotation of *le* provided in (33). The hypothesis that we will defend is that *le* contributes to the meaning of *le*-predicates a property Action that is to be understood as a predicate/modifier of the event (Davidson, 1967; Parsons, 1990); this property does not introduce a new thematic relation but simply a property of the event.

6. Event modification and semantic composition of complex *le*-predicates

Semantically speaking, we have argued that *le*-predicates entail an intensive activity with regard to the event denoted by the verbal base *le* can combine with. This meaning is the result of a process of event modification triggered by the affix that entails an actionalization of the event (i.e., the event must be interpreted as an Action). In this section we will show how *le*-predicates are semantically composed starting from different verbal bases.

Before we proceed it is necessary to bear in mind that functional heads are postulated (Kratzer, 1996) to combine with their complements not by the standard mode of composition, *function(al) application* (FA), but by a different mode that Kratzer calls *event identification* (EI).²⁹ The former consists in applying a function to its argument; heads and their arguments usually combine via FA. The latter is a conjunction operation that consists in joining together various conditions for the event described (Kratzer, 1996:122).

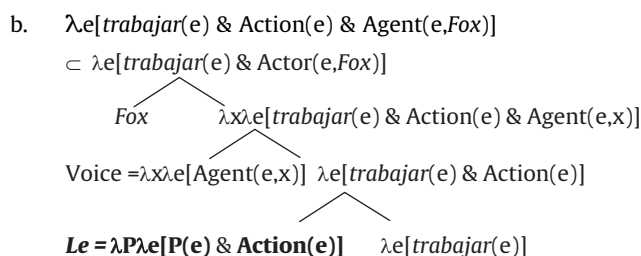
In our analysis of complex *le*-predicate formation, we will show the need to combine these two modes of composition. Let us start from the semantic denotation of *le* in (33). At the level of composition where the meanings corresponding to the verbal domain and *le* are combined, we need both operations. First, λP will apply to V and the result of substituting that V for the variable bound by λ in the formula reduces the λ -expressions by one. Second, the condition Action(e) introduced by *le* will be chained together with other properties of the event by EI. We are also going to need EI at the subtree level where the semantics of *LeP* is combined with the meaning of Voice, since the property Agent(e,x) is to be added to the formula corresponding to *LeP*. For the rest of the composition FA seems to work quite well.

Let us next examine the computation of the meaning of *le*-predicates within a neo-Davidsonian event semantics framework. We shall start with a *le*-predicate whose verbal root is an intransitive unergative verb such as *trabajar* 'to work'. The semantic representation corresponding to the sentence in brackets in (35a) is given in (35b).³⁰

- (35) a. Para que no digan, [Fox *le trabaja*] aunque sea festivo.
 for that not say Fox le works even is holiday
 'To avoid gossip, [Fox is performing working] even though it's a holiday.'

²⁹ As recognized by this author, the term *event identification* is reminiscent of Higginbotham's (1985) operation of theta identification for adjectival modification, whereby a theta role of the adjective becomes identified with the theta role of the modified noun.

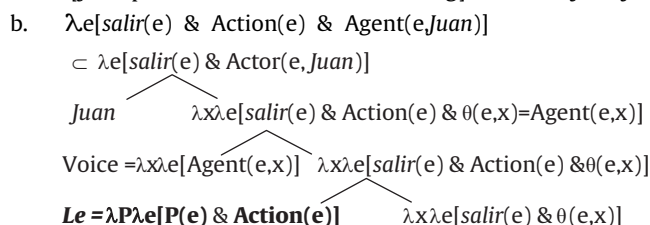
³⁰ Note that this analysis is neo-Davidsonian in that it follows Parsons (1990) in treating verbs as predicates of events and thematic roles as functions relating events and individuals.



In this structure, which is a semantic correlate of (29), we omit vP projections. *Trabajar* ‘to work’ is an intransitive unergative verb with the event schema in (18a). Bottom-up, in the first subtree *P* combines with the property denoted by *trabajar* by FA and the two variables *e* of which the conditions *Action* and *trabajar* are predicated are identified by EI. The output is a formula that has to combine with the meaning of *Voice*, responsible for introducing the external argument *Agent*. The operation involved at this level is again EI, since the entailment is that the event of working is not only an intensive subtype of event (i. e., an Action), but that it also requires an *Agent*, to be identified by FA in specifier position in the next subtree level. At the upper level of the tree we apply rule (34), which entails that the external argument is not only an *Agent* but an *Actor*. With unergative verbs (see (3) above) the *Actor* is indistinguishable in its entailments from the *Agent* of an event of *Action*, and *le* therefore adds intensiveness to the performed *Action*.³¹

The second computation we will consider involves a verbal root which is intransitive and unaccusative. *Salir* ‘to go out, leave, exit’ expresses movement and inherent direction. It has associated the event schema in (21b), characteristic of directed motion verbs; this *V* has the additional formal feature encoding multiple-point scale/path. Note that this type of verbal base is not stative. Being unaccusative, this verb structurally selects an internal argument, the object of movement. In (36b) we refer to this internal argument by means of the formula $\theta(e, x)$; we opt for such a neutral formula because the interpretation of this internal argument as either Theme or *Agent/Actor* is going to depend on the final position that the corresponding nominal expression occupies in the functional domain. In our semantic analysis of (36a) we postulate that in the course of the derivation $\theta(e, x)$ is identified with the external *Agent* by Thematic Identification (a variant of Higginbotham’s 1985 thematic discharge), by which the thematic requirement of the verb is identified with the thematic requirement of the functional *Agentive* or *Active Voice*.

- (36) a. [Juan *le* *salió*] primero que nadie.
 Juan *le* left first than anybody
 ‘[Juan performed the action of leaving] before anybody else did.’



In this semantic representation we illustrate once more that *le* encodes a property *Action* on the event and that *Voice* introduces a thematic *Agent* relation. In order to calculate the denotation of the complex expression we need again the two composition principles mentioned above: FA and EI, similar to what we described for (35). What is new is that at the third level (bottom-up) of the computation the thematic requirement imposed by the verb is identified with the *Agent* requirement encoded by *Voice*. As a result of this operation an inference is drawn such that the initial internal argument of the unaccusative verb *salir* is finally interpreted as the actor of the corresponding intensive *le*-predicate.

Third, we will consider the case of transitive verbs, verbs that have the event schema seen in (22). We have shown that complex transitive verbs that involve a multiple-point scale (see section 3.2), such as *cerrar* ‘to close’, *abrir* ‘to open’, or *estirar* ‘to stretch’, allow the formation of *le*-predicates, whereas complex transitive verbs that involve a two-point scale, such as *hervir* ‘to boil’ or *encoger* ‘to shrink’, are excluded.

We have also shown that transitive verbs are subject to a lexical rule that intransitivizes the lexical base (see (30)). This lexical rule suppresses the Theme argument of the predicate and, instead of identifying the Theme of the event with a specific variable *y* over entities, it reduces it to a thematic participant, thus entailing that the verb has an unidentified internal participant. According to the output of this rule, in (37b) we represent the verbal base complement of *le* as denoting a

³¹ Simple transitive verbs (so called non-core transitive verbs) that involve pure constant participants whose event template has the form in (18b) (see note 16 above), such as *barrer* ‘to sweep’, *trapear* ‘to mop’, or *frotar* ‘to rub’, are activity verbs whose internal argument is not conceived as being structural. Therefore, regarding their compositional meaning, they are conceived as unergatives and should be subject to an analysis similar to (35b).

predicate of type $\lambda e[V(e) \ \& \ \theta(e)]$, where the thematic requirement is to be conceived as a predicate of the event.³² Note that this formula for intransitivized transitives, which presupposes argument demotion, is different from the one postulated for unaccusatives, the reason being that with respect to transitives the suppressed argument is the object, whereas with respect to unaccusatives the variable x corresponds to an internal subject (Hale and Keyser, 1993, 2002; Mateu, 2002). The entailment that an intransitivized transitive verb has an unidentified thematic participant is maintained throughout the computation. As before, the two operations that apply at the time of composing the meaning of this structure are FA and EI.

- (37) a. [Juan *le abre*] a la puerta.
 Juan le opens at the door
 'Juan is performing the action of opening, with regard to the door.'
- b. $\lambda e[abrir(e) \ \& \ \theta(e) \ \& \ \text{Action}(e) \ \& \ \text{Agent}(e, \text{Juan})]$
 $\subset \lambda P \lambda e [abrir(e) \ \& \ \theta(e) \ \& \ \text{Actor}(e, \text{Juan})]$
-
- Juan $\lambda x \lambda e [abrir(e) \ \& \ \theta(e) \ \& \ \text{Action}(e) \ \& \ \text{Agent}(e, x)]$
 Voice = $\lambda x \lambda e [\text{Agent}(e, x)]$ $\lambda e [abrir(e) \ \& \ \theta(e) \ \& \ \text{Action}(e)]$
 Le = $\lambda P \lambda e [P(e) \ \& \ \text{Action}(e)]$ $\lambda e [abrir(e) \ \& \ \theta(e)]$

In sections 2 and 4 we pointed out that *le*-predicates whose verbal base is a complex transitive verb that encodes a multiple-point scale (e.g., *abrir* 'open', *cerrar* 'close', *calentar* 'heat', *enfriar* 'cool', *limpiar* 'clean', *tocar* 'touch, hit', etc.) may co-occur with an oblique DP. This constituent has been postulated in (31) to occupy an adjunct position with respect to *LeP*. Semantically, the preposition *a* 'with regard to' introduces a locative or goal meaning, entailing either the specific *locus* where the action is performed or the goal with respect to which the action is performed. Instead of an oblique adjunct, a deictic locative expression is also permitted in adjunct position to *LeP*, as exemplified in (38a).

- (38) a. [Juan *le abre* {a la puerta, aquí}]
 Juan le opens at the door here
 'Juan is performing the action of opening, {with regard to the door, here}.'
- b. $\lambda e[abrir(e) \ \& \ \theta(e) \ \& \ \text{Action}(e) \ \& \ \text{Agent}(e, \text{Juan}) \ \& \ a(e, \text{la puerta})]$
 $\subset \lambda P \lambda e [abrir(e) \ \& \ \theta(e) \ \& \ \text{Actor}(e, \text{Juan}) \ \& \ a(e, \text{la puerta})]$
-
- Juan $\lambda x \lambda e [abrir(e) \ \& \ \theta(e) \ \& \ \text{Action}(e) \ \& \ \text{Agent}(e, x) \ \& \ a(e, \text{la puerta})]$
 Voice = $\lambda x \lambda e [\text{Agent}(e, x)]$ $\lambda e [abrir(e) \ \& \ \theta(e) \ \& \ \text{Action}(e) \ \& \ a(e, \text{la puerta})]$
 $\lambda e [abrir(e) \ \& \ \theta(e) \ \& \ \text{Action}(e)]$ $\lambda e [a(e, \text{la puerta})]$
 Le = $\lambda P \lambda e [P(e) \ \& \ \text{Action}(e)]$ $\lambda e [abrir(e) \ \& \ \theta(e)]$

In this structure the internal argument of the verb has been suppressed and reduced to a thematic participant, as in (37b). The formulas corresponding to the verb and *le* combine via FA and EI. At the second level of the subtree EI takes place in order to unify the meaning of the adjunct with the meaning of the V + *le* compound. At the third level EI unifies the meaning corresponding to *LeP* with the meaning of Voice, and at the upper level FA guarantees the interpretation of *Juan* as Agent and Actor.

Note that in this representation no formal link is established between the internal thematic participant of the verb $\theta(e)$ and the oblique adjunct, which implies that if there exists such a relationship in a particular situation it is not encoded in the logical form representations but rather is inferred in accordance with the discourse and contextual information available. This hypothesis is supported by the fact that the oblique DP must be definite and specific, and it is usually interpreted as denoting background, known information that is interpreted as an afterthought: the *locus* where the action is performed, or the goal with regard to which the action of the event is realized. This oblique DP is introduced by a topic marker *a* (Leonetti, 2004) which should not be confused with a terminal coincidence preposition (Hale and Keyser, 1998) since it does not entail telicity (see (25) above). In the spirit of Parsons's (1990) analysis of event modifiers, in (38b) we represent the topic marker as a function that relates the event with a specific and definite *locus*.

³² See Espinal and McNally (2011) for a detailed analysis of incorporating verbs and bare nominal objects in Catalan and Spanish based on an initial lexical rule that treats the suppressed internal argument of a verb of the class of 'have'-predicates as merely an unspecified thematic participant $\theta(e)$, rather than as an argument variable that corresponds to the Theme argument. In their analysis of object bare nominals this lexical rule is followed by a compositional rule that treats the bare nominal as an indirect modifier of the verb, by applying N to the thematic participant: $N(\theta(e))$.

To sum up, structures (35) through (38) show that *le*-predicates are syntactic constructions built from verbal bases and functional heads. One functional head is intensive *le* that encodes Action and selects for open verbal bases. The other functional head is Agentive or Active Voice that encodes Agency. These two functional heads combined entail that the external argument is an Actor of the performed event.

Furthermore, these structures make explicit that the marginal (defective) clitic does not share any formal relationship with an argument of the root or with any other potential antecedent, but simply modifies the event itself, which it classifies as an Action. The outcome of this analysis is that *le*-predicate formation is conceptually very similar to noun incorporation. We will expose these similarities in the next section.

7. Final discussion: *le*-predicate formation and noun incorporation

In this section we will focus on the idea that *le* denotes a property that is interpreted as an event modifier, and we will look for similarities with other natural language phenomena that involve noun incorporation (Mithun, 1984).

First, like incorporated nominals, *le* must take obligatory narrow scope. This property accounts for the contrast we find in (39).

- (39) a. No *la* cerré.
not it.ACC closed
'I didn't close it.'
- b. No *le* cerré.
not *le* closed
'I didn't perform the action of closing.'

In (39a) the third person accusative singular pronoun maintains a discourse reference with an antecedent. This sentence has the entailment that there is an individual entity (e.g., the gate) which I did not close. By contrast, in (39b) the defective clitic does not hold any sort of discourse anaphoric relationship; an entailment of this sentence is that the transitive verb maintains its internal participant, while what is negated is the active performance of closing. In other words, the intensive head *le* can only be interpreted as having scope under negation.

Second, like incorporated nominals, *le* is unable to support pronominal discourse anaphora, because it has lost the individual salience that *le* had in its origins as a dative marker. It is non-referential and non-individuated, as illustrated in (39). Third, also like incorporated nominals, *le* forms with V an intransitive predicate denoting a unitary concept (Mithun, 1984:849). It narrows the scope of the verb to an activity, but – unlike bare nominal incorporation in languages like Hindi – must not be an institutionalized activity. And fourth, again like incorporated nominals, *le*-predicate formation presupposes suppression of the theme argument, and the property encoded by the marginal clitic does not correspond to an argument but instead must be interpreted as a modifier of the event denoted by the verbal predicate.

All these similarities seem to suggest that we have positive arguments to support the hypothesis that *le* in *le*-predicates is an incorporated affix. However, we must still decide what type of incorporation (Mithun, 1984) it manifests. On the one hand, what the affix *le* and Type I noun incorporation have in common is the loss of their syntactic and semantic status as argument of the clause; the fact that they are unmarked for definiteness, number and case; the lack of entity denotation; and the fact that they form a unit, an intransitive predicate, with the V they qualify.

Le-predicate formation resembles Type II noun incorporation in that when it derives an intransitive predicate from a transitive one there is a valence lowering of V. However, some differences also apply: *le* is not itself responsible for lowering the valence of V, because *le* is defective and cannot trigger case manipulation. Let us recall that the lexical rule we have postulated in (30) is triggered not by the marginal clitic but by the verb itself (i.e., transitive dynamic verbs are good candidates to drop their internal argument). In addition, also due to its defectiveness, *le* differs from Type II noun incorporation in that it does not advance an oblique argument into the case position vacated by the incorporated nominal.

What is common between the affix *le* and Type III noun incorporation is that *le* is an obligatory pronominal morpheme, and it is used as a device to manipulate the presentation of information in discourse³³: *Le*-predicates are used in contexts in which the aim is to express the idea that the action should be performed more intensively. *Le* marks the predicate as foregrounded information, involving focus on the action, which corresponds exactly to the new information encoded by the clitic.

Finally, what is common between the affix *le* and Type IV noun incorporation, the so-called classificatory noun incorporation, is that the complex predicate may occur with a more specific external DP that gives information regarding the *locus* where the action is performed, perhaps deictic locative information, or information regarding the object with respect to which the action is performed. This backgrounded topic information is presented as the coda, and must be interpreted as known or incidental information within discourse.

³³ Interestingly, this type of incorporation has been described for Huastla Nahuatl, a Uto-Aztecan language spoken in Mexico (Merlan, 1976; Mithun, 1984).

All in all what is relevant about the relationship between *le*-predicate formation and noun incorporation is that, although the formation of *le*-predicates has a lexical as well as a structural component, it also shows important discourse information effects, since by classifying the event as an action it backgrounds certain information to a coda topic position. We conceive the postulated event modification as an instantiation of the semantic operation of pseudo-incorporation because, like NPs in Hindi (Dayal, 2003, 2011) and bare object nominals in Catalan, Romanian, and Spanish (Dobrovie-Sorin et al., 2006; Espinal and McNally, 2007, 2011), *le* functions as a predicate modifier.

8. Conclusions

In this paper we have shown that in Mexican Spanish a productive class of predicates emerges by combining the clitic *le* with different types of verbal bases. The clitic encodes certain constraints on the event schemas of the verbs with which they co-occur: it can only combine with activities and dynamic changes of state (*locatum* verbs, directed motion verbs, and externally caused result states) that introduce a coextensive homomorphic relationship between the durative event and the gradable scale in which they are composed. Being both morphologically and syntactically defective, *le* cannot trigger case manipulation, and argument demotion; an independent lexical rule is responsible for the intransitivization of transitive verbs. It has been argued that, syntactically, *le* is the head of a defective HAppl projection, a function that has only one internal argument, the VP complement. The semantic denotation of *le* is that it classifies the modified event as an Action, so that *V + le* constitutes a semantically complex predicate. We have further shown that at the syntax-semantics interface the clitic is semantically composed with the verb by both function application and event identification, the output of which is that the property Action(e) encoded by the defective clitic is conjoined with the property denoted by the verb, and thus the various conditions for the event described by the sentence are identified. Finally, we have discussed an existing similarity between *le*-predicate formation and different types of noun incorporation.

As a final note it should be remarked that *le*-predicates are the output of a process of complex predicate formation that exists in different varieties in various natural languages (e.g., the reflexive/reciprocal and middle/anticausative constructions in French (Labelle, 2008) and Spanish (Maldonado, 1992; Cuervo, 2003); the intensive template in Hebrew (Doron, 2005); and noun incorporation in Hindi (Dayal, 2003, 2011), in Romance (Dobrovie-Sorin et al., 2006; Espinal and McNally, 2007, 2011), and in many other languages (Mithun, 1984)). This set of processes suggests that the phenomenon that we have analysed is not to be conceived as an isolated case in Language but is rather the manifestation of a general property of Universal Grammar.

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