THE SEMANTIC REPRESENTATION OF ANGLO-SAXON (*GE*)*SÉON* AND (*GE*)*LÓCIAN*: SYNTACTIC EVIDENCE FOR MEANING DECOMPOSITION[1]

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Abstract
This paper explores the syntax and the semantics of the Old English verbs of visual perception (*ge*)*séon* and (*ge*)*lócian* in the context of the Lexical Constructional Model (Ruiz de Mendoza and Mairal 2006). The notion of construction, defined as a form-meaning pairing (Goldberg 1995, 1998, 2002 and 2006), is central to this approach that seeks to explain the relationship between lexical and syntactic meaning from a non-projectionist perspective. In addition, this model provides a suitable representational system that facilitates a decompositional account of word meaning and the interpretation of the linking processes between lexicon and grammar. The two basic aims of this paper will be to identify some of the relevant constructions that operate within the lexical class of Old English visual perception verbs and to propose lexical representations that formalize essential features of the syntactic and semantic properties of these verbs.

Keywords: *syntax, semantics, constructions, lexical representation.*

1. Introduction

One of the motivations guiding the analysis of the Old English verbs (*ge*)*séon* and (*ge*)*lócian* within the Lexical Constructional Model (LCM) is that this framework allows us, with some restrictions, to predict lexical meaning from the analysis of morphosyntactic structures. Actually, one of the primary advantages of the LCM as compared with other functionally-oriented frameworks such as Role and Reference Grammar (RRG) is that constructions are defined as structures linking form and meaning and, accordingly, there is no need to postulate lexical projection rules that account for the syntax-semantics interface (*cf.* Van Valin 1997, 2005). In addition, constructions operate at all the levels of meaning structure which enables us to capture, in a more straightforward way, the relationship between lexical items and the syntactic patterns they are integrated in. In order to describe the nature of this relationship, the model provides a system of lexical representation that, in our view, contributes significantly to evidence the results of our analysis.

In the following section, we introduce a brief description of the architecture of the LCM. Since lexical representation will play an essential role in the interpretation of the semantic and syntactic properties of the verbs we analyze, we devote Section 3 to outline the basic components and characteristics of this system of representation. The other sections of this paper concentrate on the description of the syntactic patterns and the meaning of these verbs.

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2. An overview of the LCM

The LCM arises as a cognitive-functional framework with a special concern for the description and explanation of the relationship between syntax and meaning. As propounded by Ruiz de Mendoza and Mairal (2006), this model presents an integrated approach and conflates some fundamental perspectives proposed by other functionally oriented models. In particular, it incorporates aspects of the Functional Lexematic Model (Marín 1998), Role and Reference Grammar (Van Valin 1997, 2005), Cognitive Linguistics (Lakoff 1987; Lakoff and Johnson 1999; Ruiz de Mendoza and Díez 2002) and Construction Grammar (Goldberg 1995, 2006).

The LCM however contributes essential improvement to other frameworks, one of the most relevant being the enhancement of a refined semantic decompositional system for both the representation and the interpretation of grammatical processes.

One fundamental claim of the lexical-constructional perspective is that, rather than being separate components, syntax and semantics form a continuum characterised by the existence of form-meaning pairings at all the levels of linguistic description (*see* Ruiz de Mendoza and Mairal 2006; Martín, in press). Semantic interpretation thus obtains from such form-meaning relations by means of a process of *unification* as Figure 1 shows: the model distinguishes representations at two different levels, lexical templates and constructional templates, which subsequently undergo a unification process regulated by internal and external constraints (*see* Ruiz de Mendoza and Mairal 2006).

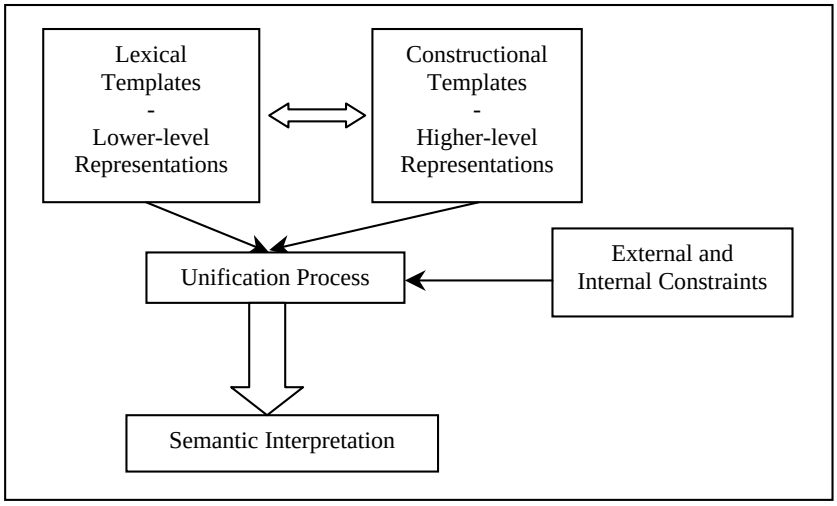

Figure 1: The architecture of the Lexical Constructional Model

An essential condition for the completion of the unification process is that both lexical and constructional templates must be formulated on the basis of a unified metalanguage and notational device that facilitates transparency to the process. In fact, one of the most recently productive areas of research within this framework has been the enhancement of an appropriate metalanguage capable of formalizing semantic-syntactic interactions with sufficient explanatory and typological adequacy (Mairal and Guest 2005; Mairal and Faber 2005; Ruiz de Mendoza and Mairal 2006). This metalanguage has been elaborated on the basis of semantic primitives as presented in Wierzbicka's (1987, 1996) *Natural Semantics*

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Metalanguage as well as on the notion of ¨lexical function¨ propounded by Mel'čuk's Explanatory and Combinatorial Lexicology (*see* Mairal and Faber 2005). More recently, some aspects of Pustejovsky's (1995, 1998) lexical theory have been also incorporated as part of these representations (Cortés 2007).

3. Lexical representation in the LCM

Lexical templates are defined as *lower-level semantic representations of the syntactically relevant content of predicates* (Ruiz de Mendoza and Mairal 2006: 29). The general format of a lexical template is:

(1) [semantic representation] + logical structure = predicate
SEMANTIC COMPONENT + SYNTACTIC COMPONENT = lexical entry

As illustrated in (1), lexical templates consist of a semantic component that specifies the semantic information, and of a syntactic component that encodes the syntactic information relevant to a lexical class. Syntactic information is captured by means of logical structures (LSs) as defined within RRG (Van Valin 2005: 42 ff.). Thus, for example, for verbs of cognition, the basic LS is the following:

(2) **know'** (x, y) where x = cognizer and y = content

The predicates that belong in the same semantic class are subject to lexical inheritance relations so that they share a basic definiens or archilexeme which determines the existence of a hierarchical organization in the lexicon or Thesaurus (Faber and Mairal 1999). This means that, within the domain Cognition, the verbs *understand*, *realize*, *fathom*, etc. integrate the basic predicate in (2) as part of their lexical templates. As presented by Mairal and Faber (2005), Table 1 shows how hyponymic units within the sub-subdomain inherit the semantic properties of the superordinate **understand** (i.e. $\text{CULM}_{12[\text{INTENT}]}$ **know'** (x, y)) while those within the subdomain in turn take in the predicate **know** (i.e. **know'** (x, y)). Besides, **know** is used as a primitive or indefinable semantic term:

Lexical Entry		Lexical Template
Domain	**know** to become aware of something (having it) in one's mind	**know'** (x, y)
Subdomain	**understand** to know the meaning of something	[$\text{CULM}_{12[\text{INTENT}]}$]**know´**(x,y)
Sub-subdomain	**realize** to understand something by seeing it in the mind	[INSTR (see)$_{12}\text{LOC}_{\text{in}}$ (BODY_PART: mind)]& [$\text{CULM}_{12[\text{INTENT}]}$]**know´**(x,y)
	fathom to understand something with	[MAGNOBSTR] & [$\text{CULM}_{12[\text{INTENT}]}$]**know´**(x,y)

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	great difficulty	

Table 1: Hierarchical structure within the lexical domain of Cognition

These lexical templates incorporate the semantic component, represented within brackets and specified by means of lexical functions adapted from Mel'čuk *et al* (1995, 1996) that restrict or modify the basic LS **know´**(x,y). In addition, the subscripts 1 and 2 represent internal variables that express the relationship between the semantic and the syntactic components by correlating with the arguments x and y respectively. Thus, the lexical function CULM expresses the completion of knowledge i.e. understanding; the lexical template associated to *realize* indicates that realizing involves understanding and seeing in the mind, i.e. locating knowledge (LOC_{in}) by using mental perception abilities as an instrument INSTR(see); similarly, the lexical functions MAGN (`to a very high degree´) and OBSTR (`to function with difficulty´) express that *fathom* entails effort and difficulty in the process of understanding.

As for constructional templates, they are defined as higher-level schematizations from recurrent lower-level lexical patterns. Much like lexical templates, they formalize form-meaning pairings but capture higher-level relations or constructions as described in construction-based grammar (Goldberg 1995, 1998, 2002, 2006). To illustrate one of these constructions, consider the representation of the inchoative constructional template given below (Cortés 2007):

(3) [BECOME/INGR **pred´**(x <$Caus_1Fact_1$>)], where 1 = x
E.g. The window broke

Like in lexical templates, this representation integrates an LS as part of the syntactic description, in this case a result state [BECOME/INGR**pred´**(x)] (Van Valin 2005:113), while the lexical functions *Caus* and *Fact* provide the semantic description. The variable 1 identifies x as the argument affected by these functions. In a few words, this template indicates that what brings about the result state (`become broken´) is an internal cause ($Caus_1Fact_1$) associated to argument x, i.e. an unspecified fact caused the window to become broken.

The unified formalization of lexical templates and constructional templates proves particularly suitable for the interpretation of diathesis or syntactic alternations within a given lexical class. One clear example is the alternation between the causative (*E.g. John broke the window*) and the inchoative *(E.g. The window broke*) realizations of verbs of breaking. This alternation is accounted for in terms of a process of Coercion, one of the operations that can take place in the Unification process (*see* Ruiz de Mendoza and Mairal 2006: 13 ff.). As expressed in the following diagram, by virtue of this process the inchoative constructional template represented in (3) brings about (i.e.¨coerces¨) the selection of an inchoative subevent, instead of the result state BECOME **broken'**, to obtain an alternating interpretation of this verb:

(4) ***break**:* **do'** (x, ∅) CAUSE [BECOME **broken'**] ..... *E.g. John broke the window*

[BECOME/ INGR **pred'** (x< $Caus_1Fact_1$>)] .....*E.g. The window broke*

As illustrated in the last two sections, lexical representation performs a prominent role in clarifying the semantic and syntactic properties of lexical items. In the following, we shall

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concentrate on the analysis of the syntactic patterns of (*ge*)*séon* and (*ge*)*lócian* which will lead us to identify specific constructions basically motivated by the transitive/intransitive realizations of these verbs. We will then propose lexical templates for the representation of these verbs. Before that, we address in the next section some issues related to the selection of the corpus and the methodology applied in this study.

4. Methodology and corpus selection

The design of the lexical component within the LCM draws much on the lexicographic groundwork as well as on the methodology developed within the Functional Lexematic Model (Marín 1998; Faber and Mairal 1999). Thus, the lexicon or Thesaurus, as illustrated above for the domain of Cognition verbs, contains lexical items hierarchically organized into domains and subdomains and defined by a nuclear meaning (*E.g.* **know**). Lexical domain membership is determined by a process of factorization according to which lexical semantic structures are decomposed into more basic units. This process is evidenced by looking at the templates in Table 1 above from a bottom-up perspective.

As might be expected, when this procedure is applied to the study of historical languages like Old English, the question arises as to whether it is really possible to ascertain the meaning of lexemes that belong to an extinct parent language. Like in previous work carried out within this project and as Faber and Vázquez (2002) claim, we will assume that ¨turning the dictionaries inside out¨ (Kay and Wotherspoon 2002) is a reliable clue where to start. Accordingly, the first step in the description of visual perception verbs in Old English has been elaborating a basic corpus by compiling data and samples from the existing lexicographical sources and corpora of the language. The following sources have been used: the *Thesaurus of Old English* (Roberts and Kay, hence *TOE*), Bosworth, Toller and Campbell's *Anglo-Saxon Dictionary* (hence *BT*), *A Concise Anglo-Saxon Dictionary* (Hall), the *Helsinki Corpus of English Texts* (Rissanen *et al*.) and *The Oxford English Dictionary* (*OED*).

Furthermore, the assumption within the LCM that semantics and syntax, lexicon and grammar, go along a continuum has crucial theoretical as well as heuristic implications for the study of historical languages: since constructions constitute form-meaning pairings, it is possible to predict morphosyntactic structure from lexical meaning as well as to reconstruct meaning from the morphosyntactic patterns. Also in this connection, Cortés and Mairal (2000:20) reformulate the so-called Lexical Iconicity Principle (*see* Faber and Mairal 1999:187) along the following lines:

(5) "Lexical Iconicity Principle - Beta Reading¨
The greater the semantic coverage of a lexeme is the greater its syntactic variation.

This reinterpretation lays emphasis on the fact that syntactic information has a direct impact on semantic information to the extent that syntactic structure is directly bound to meaning. At this level of the analysis, we examine the complementation patterns of the verbs *(ge)séon* and *(ge)lócian* in the textual contexts provided by the basic corpus. Given the wide range of complementation shown by these verbs (*see* Faber and Mairal 1999: 190-191) and the limitations of space in this paper, we will restrict our analysis to the simple sentence patterns. Besides, since the corpus has provided no conclusive evidence for a clear-cut distinction between the prefixed and the non-prefixed variants of these verbs, we will use the non-prefixed *séon* and *lócian* to refer to both forms.

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5. Complementation patterns and constructions

The complementation patterns of *séon* and *lócian* under analysis in this section are the following:

(6) - *séon*: the transitive pattern with the object in the accusative case.
- *séon*/*lócian*): the prepositional pattern with *on* followed by accusative case.
- *lócian*: the prepositional pattern with *to* and the object in the dative.

As regards the occurrence of *séon to* with dative object, only the following two instances have been registered. Since none of these samples provides unambiguous indication of the existence of a construction, we have excluded them from the analysis.

(7) ***Đær*** *híe* ***tó ségon***. Andr. Kmbl. 1422
There/Where they looked (to)

Flod blode weol ***-folc to saegon-*** *hatan heolfre*. Beo. Th. 2850.
A flood of blood bubbled -the men looked (to)- (with) hot gore.

What is interesting about the patterns summarized in (6) above is that they are prototypically associated to a specific meaning. Thus, transitive complementation denotes pure physical perception (`to see something/someone´) whereas the prepositional patterns indicate either intentional perception (with *séon on* and *lócian on*) or location (with *lócian to*). In terms of the LCM, this means that each of these patterns embodies a form-meaning coupling or construction.

Much like the Present-day English verb *to see*, in the transitive pattern of the verb *séon* exemplified in (8.1) below, the perceptor is the subject and the accusative object designates the percept. However, one important feature distinguishing Present-day English *to see* from Old English *séon* is that, besides the transitive construction, the latter takes prepositional complementation introduced by *on* as illustrated in (8.2) and (8.3):

(8)

(8.1) *Gehwylce sædon þison þæt hig ma on þison timon uncuðra* ***steorra gesawon***,
some- said- this- that-they-more-at-this-time- unknown-star-saw
`some said that they saw a more unknown star at this time´
14.898 c:\icame\texts\helsinki\cochroe4

ac we hit openlicor ne awriton, forðam ðe we ***hit*** *sylfe ne* ***sawon.***
but-we-it- more openly-not-write.about, because-we-it-ourselves-did not see
`but we do not write about it openly, because we did not see it ourselves´.
14.911 c:\icame\texts\helsinki\cochroe4 83

(8.2) *Ealle synd gedréfede ðe* ***hí on sióþ***. Ps. Th. 63, 8.
all- are disturbed- who-them-look to
`All who look at them are disturbed´

(8.3) *Wigláf* ***seah on unleófe*** Beo. Th. 5719; B. 2863
`Wiglaf looked at the conspirators´

Levin (1993) draws a distinction between *see*-verbs (*E.g. to see*), which show the transitive construction as one of its characteristic patterns and designate the actual perception of an entity, and *peer*-verbs, which cannot occur transitively, usually take a locative

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preposition as the head of the prepositional phrase (*E.g. look at*), and do not necessarily denote actual perception, that is to say, ¨one can look at something without seeing it¨ (Levin 1993:187). In addition, the fact that *peer*-verbs like *to look* cannot occur transitively prevents the existence of a possible diathetic relation between the transitive and the prepositional constructions (*cf. She looked at the sky* / **She looked the sky*; *She saw the picture*/ **She saw at the picture*). In contrast, the fact that Old English *séon* participates in these two patterns points to the presence of diathesis or verb alternations. In this connection, we should recall that constructions are defined as form-meaning pairings and, therefore, we assume that changes in the expression of the arguments entail changes of meaning.[2]

One way to help clarify the semantics of prepositional complementation with *séon* is to consider Goldberg's treatment of the verb *to look* and its connection with the conative construction. Defined as `X DIRECTS ACTION AT Y´, the conative construction designates the intended result of the act denoted by the verb. Thus, in *Ethel struck at Fred*, [...] *Ethel does not necessarily strike Fred, but striking him is the intended result of the directed action* (Goldberg 1995: 63). The necessary precondition for a verb to participate in this construction is that it must be a [+motion, +contact] verb like *shoot*, *hit*, *strike* or *cut*. According to Goldberg, however, *look* and other verbs like *aim* are not motion-and-contact verbs and the fact that they occur in sentences like *Fred looked at Ethel* and *Ethel aimed at Fred* is justified on the grounds that these verbs lexicalize the conative construction. i.e. [...] *the verbs semantics is an instance of the semantics of the construction* (Goldberg 1995: 64).

Close inspection of the Old English samples shows that one factor distinguishing the meaning of transitive *séon* from that of *séon on* with accusative object is that the latter involves intentional movement of the eyes towards the percept. Thus, in sample (9.1), showing the transitive use of *séon*, there is no clue indicating that the people (*folc*) had any purposive aim to perceive any wonderful event or entity (*wundor*); they rather just happen to be aware of it through the eyes. In contrast, the warriors (*Beorn*) in (9.2) intentionally direct their eyes towards the city (*burg*) while no overt indication of any actually perceived entity is provided.

(9)

(9.1) *Ðæt folc þis wundor* ***geseah***. Blickl. Homl. 15, 29
The people saw this wonder

(9.2) *Beorn monig* ***seah on*** *ðás beorhtan burg brádan ríces*. Exon. 124 b
many warriors looked at this bright city of a broad realm

As Levin (1993:187) indicates with respect to the verb *look*, therefore, *séon on* denotes intended eye-contact which does not necessarily entail perceiving something via the senses. Notice that the same interpretation applies to examples (8.2) and (8.3) above.

We find a key piece of evidence that supports this interpretation in the assignment of the accusative case to the prepositional object. Both the *BT* and the *OED* define the use of the preposition *on* followed by accusative as marking *motion which is external to the object expressed by the word which on governs* (*see ¨on¨* at *BT*).

It should be noted that this analysis also applies to the prepositional pattern of *lócian on* with accusative object as the similarities between the samples below indicate:

(10) *Wigláf* ***seah on unleófe***. Beo. Th. 5719; B. 2863
`Wiglaf looked at the conspirators´

[2] This view of constructions differs from Levin's (*cf.* Levin 1993:2).

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Óþ hé ***on*** *ðone* ***æþeling lócode***. Chr. 755; Erl. 48, 34.
until-he-at-the-prince-looked
`Until he looked at the prince´

At this stage, one would like to find out sufficient semantic and syntactic data to establish some clear distinction between *séon on* and *lócian on* in this context. Corpus data, however, has provided no conclusive information on this issue. Besides, the limitations imposed by the fact that we have no access to speech in historical languages prevent any pragmatic analysis which would, most likely, evidence important differences.

A clear and substantial distinction holds, however, between *séon* and *lócian* in that, in the case of *séon*, the conative construction alternates with the transitive construction while this is not possible with *lócian* which does not occur transitively in any context (*cf. Hé on heofon lócode --he-looked at-heaven--* vs **Hé heofon lócode*). In their treatment of Old English *run*-verbs, Cortés and Torres (2002:165) propose to consider this kind of prepositional construction as a `pseudo-conative´ construction (*see* (11) below). This label would account for the fact the conative construction with some verbs of motion operates independently rather than as a diathetic transitivity alternation (*cf.* Levin 1993:41ff).

(11) *Hé, getogene ðý wæpne,* ***ræsde on*** *ðone* ***cyning***
He, bringing-the-weapon, rushed-against-the-king

In our view, the Old English construction with both *run*-verbs and *lócian* preserves the set of basic semantic and syntactic parameters that characterize the expression of conation, i.e. intentional motion and intended contact. From this perspective, there is no reason to consider these cases as pseudo-instances, distinct from the conative construction proper. Actually, the notion of construction is not bound to the occurrence of alternations. On the contrary, the occurrence of alternations presupposes the existence of constructions but not the other way round (*see* Levin 1993).

Another significant distinction between *séon* and *lócian* is that the latter exhibits alternating prepositional complementation between the conative construction with *on* and accusative case and the locative construction with *to* followed by dative case. The *BT* specifies that the preposition *to* with dative case objects and verbs of looking or listening marks ¨**the end** towards which an action or object is directed¨, i.e. as opposed to the preposition *on*, *to* does not encode motion. Accordingly, we interpret *to heofenum* (`to heaven´) in sentences like (12.1) as denoting a location rather than the intended object of directed perception. This distinction allows us to draw the line between samples like the following:

(12)

(12.1) *Hé* ***tó heofenum lócade,*** *þider hié witon ðæt hé ástág*. 227, 17: Exon. 50a.
He looked to heaven, whither they know he (God) came from

(12.2) *Hé* ***on heofon lócode***. Mk. Skt. 6, 41
He looked at heaven

The fundamental difference between (12.1) and (12.2) is that, in the former, no eye motion is implied, i.e. he looks from a given position towards heaven as a location, the place `where God comes from´. In contrast, (12.2) denotes conation, i.e. he intentionally directed his eyes at heaven.

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The occurrence of locative adverbials with these patterns, like in (13) below, sheds some light in favour of this interpretation: when conation is intended, the preposition *on* co-occurs with the adverbial as in (13.1) whereas when location is the focus of perception, like in (13.2), *to* does not co-occur with the adverbial. Furthermore, the fact that *lócian tó* codes location, but not motion and direction, is reinforced by expressions such as (13.3) and (13.4) in which directionality is independently expressed by the adverb *up*(*p*):

(13)

(13.1) *Hi deopne seað dulfon widne, **þær** ic eagum **on locade***. Ps. Th. 118, 46.
`They dug a deep whole of great width, where I looked **at** with my eyes´

(13.2) *'Lóca **hider**;' ðá **lócade** hé **ðider***. Wulfst. 236, 20
`¨Look here¨; then he looked **there**´

(13.3) *Heora eágum se weg **wære úp tó heofenum** cúþ tó **lócienne***. Bl. H. 125, 29.
`The way to look up to heaven was/be known to/by their eyes´

(13.4) *Ða ahof ic mine eagan **upp** ond **locade ðider** ond **geond***. Wulfst. 236, 20.
`Then I had (raised) my eyes up and looked here and there´

Summing up, the analysis presented in this section reveals two basic diathetic alternations: on the one hand, the verb *séon* shows a transitive-conative alternation between the patterns *séon* and *séon on* with accusative case complement; on the other hand, *lócian* participates in a conative-locative alternation realized by *lócian on* with accusative case and *lócian to* governing dative case. Finally, we have raised a proposal to consider conation as an instance, rather than a pseudo-instance, of the conative construction.

6. Lexical templates for visual perception verbs

In Section 3, we presented the general layout for the formalization of lexical and constructional templates which involved the specification of the appropriate LS and of the semantic parameters that define both lexical units and constructions. On the basis of the analysis we have carried out in the preceding section, we will now outline specific templates for the representation of the primary realizations of transitivity, conation and location with the verbs *séon* and *lócian*.

Following Faber and Mairal (1999: 190 and 286), we assume **see** as a basic term, a semantic primitive that defines the lexical class of visual perception verbs. Actually, the appropriate LS for the representation of two-argument state perception predicates within RRG's (*see* Van Valin 2005: 57-58) also incorporates the term **see** as shown in (14):

(14) **see´**(x,y)

This representation indicates that *see*, like transitive Old English *séon*, designates a state in which the perceptor (x) has no control over the act of ¨seeing y¨, i.e. x experiences physical perception unintentionally.

The representation of both conative *séon* and *lócian* seems more problematic in terms of RRG´s logical structures. Consider the following logical structure associated to directed perception verbs like *watch* and *look at* (*see* Van Valin 2005: 53):

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(15) *watch*: **do´**(x, [**see´**(x,y)])
E.g. **do´**(Dana, [**see´**(Dana, baby)]) *Dana watched / looked-at the baby*

On first inspection, one may tentatively identify some fundamental distinctions between verbs like *watch* and *look at* that this representation does not code. Thus, for instance, *watch*, unlike *look at*, does not necessarily involve previous eye-motion towards the percept; it rather denotes keeping the eyes fixed in contact with the percept for a time, hence, keep an eye on the baby. More importantly, as expressed previously, intention, motion and intended eye-contact constitute basic semantic parameters for the interpretation of the patterns *séon on* and *lócian on* which instantiate the conative construction, and consequently, these semantic specifications must be part of the corresponding lexical representation.

On the basis of a recent approach by Mairal and Cortés (2007) in which some aspects of Pustejovsky's (1995, 1998) theory have been incorporated to the LCM, we propose to introduce the specification of ¨*qualia* structures¨ that help elucidate the role of semantic parameters in the interpretation of these constructions.

Qualia structures capture essential aspects and properties of word meaning. More specifically, ¨what *qualia* structure tells us about a concept is the set of semantic constraints by which we understand a word when embedded within the language¨ (Pustejovsky 1995:76, 85-86). These semantic constraints are associated to four different values of a word's meaning:

(16)

- CONSTITUTIVE (Q_C): the relation between an object and its constituent parts
  - i. material
  - ii. weight
  - iii. parts and component elements
- FORMAL (Q_F): that which distinguishes it within a larger domain
  - i. orientation
  - ii. magnitude
  - iii. shape
  - iv. dimensionality
  - v. color
  - vi. position
- TELIC (Q_T): its purpose and function
  - i. purpose that an agent has in performing an act
  - ii. built-in function or aim which specifies certain activities
- AGENTIVE (Q_A): factors involved in its origin or 'bringing it about'

For instance, the *qualia* values associated to the word *novel* are the following (*see* Pustejovsky 1995:78):

(17)

novel	
...	CONSTITUTIVE = narrative
QUALIA	FORMAL = book
	TELIC = reading
	AGENTIVE = writing

What this *qualia* structure represents is that, the meaning of the word *novel* embodies four basic values: a novel shows narrative structure, it has the shape of a book, the purpose of a novel is reading and it has been created by writing. Obviously, when the word novel is put in context, not all its values are activated. Thus, in *John bought a novel* both the formal and the constitutive values are focused or foregrounded, i.e. John bought a narrative book, while

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in *John finished the novel* the relevant values are ¨agentive¨ and ¨telic¨, i.e. John finished reading/writing a novel.

In addition, the event structure of a predicate may be decomposed into subevents. As an example, consider the following representation (*see*. Pustejovsky 1995:102)

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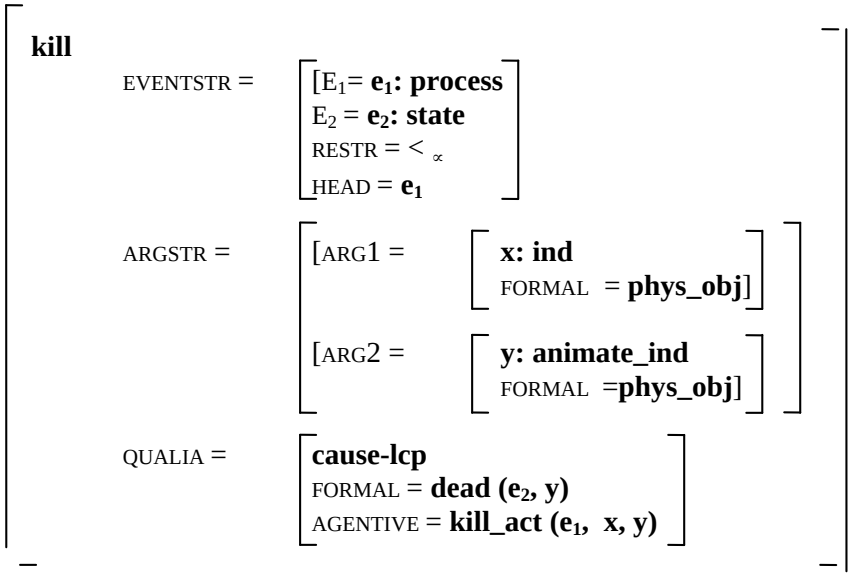
(18)



This representation provides a description of the event structure, the argument structure and the *qualia* associated to the predicate *kill*. The event structure is decomposed into two basic subevents, a process (e_1) and a result (e_2), which indicates that *kill* is an accomplishment verb (*see* Van Valin 2005: 32ff). **HEAD=e_1** indicates that the initial event has been headed or foregrounded so that it is the process that brings about the result state: `**killing** (action) causes someone **to be dead** (result state)´. The relation $<_{\propto}$ specifies a restriction affecting these subevents and expressing that they are determined by the temporal ordering `process before state´. As for the argument structure, there are two arguments for which semantic formal features such as **ind**(ividual), **animate_ind**(ividual) and **phys_obj**(ect) are specified. Finally, the *qualia* structure introduces a lexical conceptual paradigm (**cause-lcp**) indicating that the verb *kill* is a causative verb such that an agentive process (**kill_act)** causes a result state **dead** that affects the second argument y.

Though this kind of intricate formalism may seem counterintuitive, we believe it may contribute to enhance lexical representations in many ways. Some of the reasons that motivate our proposal are:

(19)

(19.1) *Qualia* structures allow us to decompose meaning both into very specific semantic parameters (*E.g.* ¨eye-contact¨ in perception verbs) and into subevents involved by the predicate, regardless of whether they are syntactically realized or not.

(19.2) By introducing them as restrictions over the syntactic component (LS) of the templates we can account for the relationship that such parameters establish with the arguments the verb, thus bridging semantic and syntactic representation.

(19.3) The formalism of *qualia* structures provides an appropriate notational device (Q_C, Q_F, Q_T and Q_A) that, in our view, enriches and, at the same time, restricts and simplifies lexical representation.

Let us now reconsider the representation of transitive *séon* given in (14) above. One important semantic feature that is not captured by this representation is the fact that this verb denotes eye-contact and actual perception. We thus propose to introduce a formal *quale* Q_F and a telic *quale* Q_T as restrictions or modifiers over the event structure of the template. In this way, the Q_F accounts for the fact that transitive *séon* involves actual perception while the

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Q_T formalizes that, though there is no intentionality to see, there is, nonetheless, an underlying subevent that permits eye-contact between perceptor (x) and percept (y), which actually licenses actual perception. The lexical template for this verb is represented as follows:

(20) **séon$_1$:**
EVENTSTR: **see´**(x,y)
QUALIASTR: {Q_F: e_2: **see´**(x,y) actual perception
Q_T: e_1: **be-at´**(y,$x_{(body\_part:\ eyes)}$) eye-contact } **Transitivity**

E.g. Ðæt folc þis wundor geseah Blickl. Homl. 15, 29
The people saw this wonder

EVENTSTR: **see´** (folc, wundor)
QUALIASTR: {Q_F: e_2: **see´** (folc, wundor) / Q_T: e_1: **be-at´**(wundor, eyes)}

The predicate **be_at´** (*see* Van Valin 2005:152) expresses one of the subevents (e_1) involved in the act of perception and encoding contact of the eyes with the percept (y), while the predicate **see´** formalizes the subevent (e_2) indicating actual perception. The restriction *body_part:eyes* is part of the constitutive *quale* Q_C associated to argument x, i.e. eyes are a constitutive part of the perceptor. This way, *qualia* structures identify the specific semantic parameters and the specific way in which they are linked to the syntactic realization and the meaning of the verb.

For the representation of conative *séon* and *lócian*, we propose the following template:

(21) **séon$_2$ /lócian$_1$**
EVENTSTR: [**do´**(x, [**see´**(x,y)]
QUALIASTR: {Q_T: e_2: **be-at´**(y,$x_{(body\_part:\ eyes)}$) eye-contact
{Q_A: e_1: **move.ad´**(y,$x_{(body\_part:\ eyes)}$)} eye-motion intended **at** } **Conation**

E.g. Wigláf seah on unleófe. Beo. Th. 5719; B. 2863
Wiglaf looked at the conspirators

EVENTSTR: [**do´** (Wigláf, [**see´**(Wigláf, unleófe)]
QUALIASTR: {Q_T: e_2: **be- at´** (unleófe, eyes) / Q_A: e_1:**move.ad´** (unleófe, eyes)}

The syntactic component is expressed by means of an activity LS expressing intentional perception (*see* Van Valin 2005: 42 ff). As might be expected, the subevent (e_2) expressed by Q_T is preserved within this representation which accounts for lexical inheritance across the class of visual perception verbs. In contrast, there is no formal *quale* since, as we have shown, the conative construction denotes directing perception at, instead of actual accomplishment of perception. Thus, what the agentive *qualia* Q_A captures is, on the one hand, a subevent (e_1) involving `motion´ expressed by the predicate **move.ad´**, and on the other hand, by introducing the subspecification **ad** with the meaning `directionality to´ (***see ...)***, this predicate indicates that the motion of the eyes is an attempt at eye-contact with the percept.

Let us now turn to the representation of locative *lócian* given in (...)

(22) **lócian$_2$:**
EVENTSTR: [**do´**(x, [**see´**(x,y)]
QUALIASTR: {Q_T: e_1: **be-at´**(y,$x_{(body\_part:\ eyes)}$)} eye-contact } **Location**

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E.g. Hé tó heofenum lócade. 227, 17: Exon. 50a.
He looked (to) heaven

EVENTSTR: **do´** (hé, [**see´** (hé, heofenum)])
QUALIASTR: {Q_T: **be-at´** (heofenum, eyes)}

As we have emphasized in this analysis, the locative construction denotes location, which prevents the interpretation of motion characterizing the conative construction. For this reason, the template does not formalize any agentive *quale* Q_A.

Now, a crucial advantage of this kind of representation is that, by specifying the role of subevents, it provides a straightforward means to interpret syntactic alternations. As Pustejovsky (1995:101) claims ¨event-headedness acts to foreground or *focus* a single *quale* of the verbal semantic representation¨. More importantly, headedness determines that the foregrounded *quale* must be syntactically realized which allows us to keep track of how semantic information and syntactic structure are linked. Consider, for instance, the *qualia* structures, repeated below, representing conative and locative *lócian* respectively:

(23) **lócian$_1$:**
EVENTSTR: [**do´**(x, [**see´**(x,y)]
QUALIASTR: {Q_T: e_2: **be-at´**(y,x)
Q_A: e_1: **move.ad´**(y,$x_{(body\_part:\ eyes)}$)} Foregrounded *quale*: conation

lócian$_2$:
EVENTSTR: [**do´**(x, [**see´**(x,y)]
QUALIASTR: {Q_T: e_1: **be-at´**(y,$x_{(body\_part:\ eyes)}$)} Foregrounded *quale*: location

By applying the notion of headedness, we can now explain the conative-locative alternation by saying that locative *lócian* is the result of ¨focusing¨ the telic *quale* associated to the meaning of the verb. In like manner, though a different process in involved in this case, we can see that conative *séon* results from the foregrounding of the agentive *quale*, which, in this particular case, is imposed by the conative constructional template.

7. Conclusion

As it was argued at the beginning of this paper, the notion of construction within the LCM specifically entails that syntax and semantics are interlinked components of grammar. Certainly, one of the central conclusions drawn from the analysis presented here is that morphosyntactic structure reveals much about word meaning. By examining syntactic complementation, we have been able to evidence some differences between the verbs (*ge*)*séon* and (*ge*)*lócian* that existing Old English lexicographical sources do not account for in detail. Furthermore, we have incorporated Pustejovsky's *qualia* structures to the LCM's system of lexical representation thus enriching and restricting the information encoded in lexical templates. Finally, in profiling the features that characterize conation, we have shown that constructions cut across verb classes. This way, the conative construction mediates both in the configuration of Old English *run*-verbs and of visual perception verbs like *lócian*.

These conclusions open interesting lines for future research. One of them is the formalization of appropriate templates for the constructions we have identified and the

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description of the operations that both lexical templates and constructional templates undergo in the unification process. Another enticing prospect that has not been addressed here is the study of the cognitive mechanisms that motivate these constructions. Actually, this study will be self-justified on the grounds that the LCM holds a functional-cognitive orientation.

References

Bosworth, J. and T. Northcote Toller. 1998 [1972]. An Anglo-Saxon Dictionary. London: Oxford University Press.

Cortés Rodríguez, F. J. 2007. The Lexical Constructional Model. Unpublished manuscript.

Cortés Rodríguez, F. J. and D. Torres Medina. 2003. Old English Verbs of Running: Linking Semantic Representation and Morphosyntactic Structure. *Folia Linguistica Historica* 24/1-2: 153-174.

Cortés Rodríguez, F. J. and R. Mairal Usón. 2000. A preliminary design for a syntactic dictionary of Old English on semantic principles. In J.E. Díaz Vera (ed.), *A Changing World of Words*. 3-46. Amsterdam-New York: Rodopi.

Faber, P. and R. Mairal Usón. 1999. *Constructing a lexicon of English verbs.* Edited by A. Machtelt Bolkenstein, Casper de Groot and J. Lachlan Mackenzie. Berlin-New York: Mouton de Gruyter.

Faber, P. and J.G. Vázquez González. 2002. Adapting functional-lexematic methodology to the structuring of Old English verbs: A programmatic proposal. In J.E. Díaz Vera (ed.), *A Changing World of Words*. 47-77. Amsterdam-New York: Rodopi.

Goldberg, A. 1995. *A Construction Grammar Approach to Argument Structure.* Chicago-London: The University of Chicago Press.

Goldberg, A. 1998. Semantic principles of predication. In J. P. Koenig (ed.) *Discourse and Cognition. Bridging the Gap*. 41-55. Stanford: CSLI Publications.

Goldberg, A. 2002. Surface generalizations: An alternative to alternations. *Cognitive Linguistics* 13-4: 1-31.

Goldberg, A. 2006. *Constructions at work: the nature of generalization in language.* Oxford: Oxford University Press.

Hall, J.R. Clark. 1960). *A Concise Anglo-Saxon Dictionary*. Toronto-Buffalo-London: University of Toronto Press.

Kay, C.J. and I. Wotherspoon. 2002. Turning the dictionary inside out: some issues in the compilation of a historical thesaurus. In J.E. Díaz Vera (ed.), *A Changing World of Words*. 109-135. Amsterdam-New York: Rodopi.

Lakoff, G. 1987. *Women, fire, and dangerous things.* Chicago-London: The University of Chicago Press.

Lakoff, G. and M. Johnson. 1999. *Philosophy in the Flesh.* New York: Basic Books. [Available at http://serbal.pntic.mec.es/~cmunoz11/flesh.pdf]

Levin, B. 1993. *English Verb Classes and Alternations. A Preliminary Investigation.* Chicago-London: The University of Chicago Press.

Mairal Usón, R. and F. J. Cortés Rodríguez. 2007. Revisiting semantic representation in Role and Reference Grammar. (Forthcoming).

Mairal Usón, R. and P. Faber. 2005. Decomposing semantic decomposition. Towards a semantic metalanguage in RRG. Lecture delivered at the 2005 Role and Reference Grammar International Conference. Taiwan. [Available at http://wings.buffalo.edu/linguistics/people/faculty/vanvalin/rrg/MairalRRG05.pdf].

2007, Número 6, páginas 92-107
Recibido: 15-12-2007
Aceptación comunicada: 13-2-2008

Mairal Usón, R. and E. Guest. 2005. Lexical representation based on a universal semantic metalanguage. *RAEL: revista electrónica de lingüística aplicada* 4: 125-173

Marín Rubiales, A., ed. 1998: *El modelo lexemático-funcional. El legado lingüístico de Leocadio Martín Mingorance*. Granada: Editorial Universidad de Granada

Martín Arista, J. Unification and separation in a functional theory of morphology. In R. Van Valin (ed.), *Investigations of the syntax-semantics-pragmatics interface*. Amsterdam: John Benjamins (Forthcoming)

Martín Arista, J. A typology of morphological constructions. In C. Butler and J. Martín Arista (eds.) *Deconstructing Constructions*. Amsterdam: John Benjamins (Forthcoming).

Martín Arista, J. *Ge-* and the descriptive power of Nerthus. *Journal of English Studies* (Forthcoming).

Mel'čuk, A. Clas, A. Polguère. 1995. *Introduction à la lexicologie explicative et combinatoire*, Louvain-la-Neuve: Duculot.

Murray, J.A.H. et al. eds.1971. *The Oxford English Dictionary*. Oxford: Clarendon,.

Pustejovsky, J. 1995. *The Generative Lexicon.* Cambridge MA: MIT Press.

Pustejovsky, J. 1998. The semantics of lexical underspecification. *Folia Linguistica*: *Acta Societatis Linguisticae Europaeae* 32, 3-4: 323-348.

Rissanen, M. et al., eds. *Helsinki Corpus of English Texts: Diachronic and Dialectal*. Helsinki: University of Helsinki, 1984-1990.

Roberts, J. and C. Kay. 1995. *A Thesaurus of Old English* (2 vols.). London: King's College Centre for late Antique and Medieval Studies.

Ruiz de Mendoza, F.J. and R. Mairal. 2006. Levels of semantic representation: where lexicon and grammar meet. *Interlingüística* 17: 26-47. [Available at http://dialnet.unirioja.es/servlet/articulo?codigo=2316363]

Ruiz de Mendoza, F.J. and O. I. Díez, 2002. Patterns of conceptual interaction. In René Dirven and Ralf Pörings (eds.), *Metaphor and Metonymy in Comparison and Contrast*. 489-532. Berlin-New York: Mouton de Gruyter.

Van Valin, R. and R. LaPolla, 1997. *Syntax: Structure, meaning and function.* Cambridge: Cambridge University Press.

Van Valin, R. D. 2005. *Exploring the Syntax-Semantics-Pragmatics Interface*. Cambridge University Press, Cambridge.

Wierzbicka A. 1987. *English speech act verbs: A semantic dictionary*. Sydney-New York: Academic Press.

Wierzbicka, A. 1996. *Semantics: Primes and universals.* Oxford: Oxford University Press

2007, Número 6, páginas 92-107
Recibido: 15-12-2007
Aceptación comunicada: 13-2-2008