Lexical templates and linking rules for some Old English verbs of motion

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0. Introduction

The aim of this talk is to propose a model of description that can comply with the requirements of both the meaning and the syntactic behaviour of a group of Old English motion verbs. In so doing, we will try to develop a maximalized lexical template that accounts for the meaning of a whole class of verbs, following some recent proposals from the Functional Lexematic Model (Faber and Mairal, in press, Cortés and Pérez 2001). Lexical templates are based on Van Valin and LaPolla's system of lexical representation, which characterizes predicates in terms of their *Aktionsarten*.

1. In search of a lexical template for Old English "run" verbs

The use of logical structures (LSs henceforth) has some fundamental advantages: (i) the fact that they are restricted in number forbids the possibility of developing further ad hoc class types, (ii) they are intended to motivate several morphosyntactic processes, as shall be seen later with regard to the verbs under study, and (iii) the assignment of a logical structure characterization to a verb is based on a set of independent criteria (combinability with certain aspectual forms, co-occurrence with different types of temporal expressions, etc), which guarantees the objectivity of the approach.

However, the ascertainment of a verb's logical structure is not sufficient to account for its meaning. Further specifications are required for this task and also for the semantic motivation of a number of syntactic properties of lexical units. Within the framework of Role and Reference Grammar, internal

variables are posited in order to enrich logical structures since they encode the different semantic variants exhibited by predicates that belong to the same class.

With regard to the verb *run*, *its* lexical entry, according to Van Valin and La Polla (1997: 111) is the following:

(1) **do'** (x, [**run'** (x)])

There are two debatable issues in this logical structure. The first one refers to the status of **run'** as a primitive. We believe that this concept is semantically analyzable into **move.quickly.in.a.manner'**; this description permits to locate the verb (and, in fact, all run-verbs) within the general lexical structure of the language; according to the postulates of the Functional Lexematic model (Faber and Mairal 1999) verbs are semantically organized into lexical domains whose internal structure is semantically hierarchical. Thus, a verb such as *run* forms together with other verbs like *race,* speed or *hurry* a subdomain ("To move quickly") that forms part of a wider subdomain ("To move in a particular way") which in turn is one of the subdomains of the domain of verbs of motion (cf. Faber and Mairal 1999: 280):

Notice that the concept **quickly'** is a hyponymic instantiation in ontological terms of the pace component inherent to the meaning of the verbs that belong to the subdomain "To move in a particular way"; within this general subdomain other subgroups are: "To move slowly" (*lumber, trundle…)* whose members instantiate also pace, and "To move in a circular manner" (*circle, turn, spin…)*, "To move smoothly, easily" (*glide, slide…*), among others, where the manner component is lexicalised.

The second issue concerns the interpretation of the verb *run* as basically an activity; as mentioned before, there are other interpretations, however; as a typical verb of motion it also shows uses as an active

accomplishment. This alternation is captured in Van Valin and LaPolla (1997: 180) by means of a lexical rule:

(2) Activity [motion] → active accomplishment: given an activity LS **do'** (x, [**pred'** (x)]), add & BECOME **be-$_{LOC}$'** (y,x)' to form an active accomplishment LS.

Furthermore, given also the possibility of motion verbs, when used in an accomplishment interpretation, to express causative states of affairs (i.e. to be interpreted as Causative Active Accomplishments), another lexical rule must be postulated. The use of such lexical rules involves the existence of a primary, more basic meaning, and of other derived meanings (activity → active accomplishment →causative active accomplishment).

Rappaport and Levin (1998: 111) adopt a similar view to account for the variability of meaning of several types of verbs; they would also consider that the activity reading should be the more basic and that other interpretations are the effect of the so-called "Template Augmentation". One important difference between these two approaches lies in the fact that within Role and Reference Grammar no claim is made as to the directionality of meaning alternations. There are examples in Van Valin and LaPolla (1997: section 4.6) of both expansion and reduction processes in logical structures. In this way, they capture phenomena such as detransitivization by affixation in several languages. Rappaport and Levin's (1998) Template Augmentation is more restrictive in not allowing reduction processes.

The Functional-Lexematic approach allows also both types of processes but it departs from a different theoretical standpoint: verbal meaning is represented firstly by means of a maximal Lexical Template that

is in fact an enrichment of Van Valin and LaPolla's (1997) logical structures as it integrates a richer semantic component. In doing so, Faber and Mairal (in press) propose to encode the meaning of a whole lexical class in a meta-entry which will be accommodated to the different syntactic constructions exhibited by the members of the class. Individual lexical entries will be specifications of this meta-entry; that is, the meaning of a verb is the specification or focalization of some aspects of the conceptual area where it belongs. The main difference, then, is that no claim is made as to which of the different interpretations of a verb is primary with regard to the others. The activity, active accomplishment or causative active accomplishment uses of the verbs of motion are explained in terms of different modeling processes from one single template. The notion of Modeling Process is described by Faber and Mairal (in press) along the following lines:

> *Lexical Template Modeling Process*
> Lexical templates can be modeled by suppressing variables, instantiating internal variables, eliminating operators (e.g. CAUSE), or else, by introducing elements from the fusion with other templates.

The maximal lexical template for both Old and Present day English verbs-of-running would be as follows:

(3) $[\textbf{do'} \ (w, \ \varnothing)]$ CAUSE $[\textbf{do'} \ (x, [\textbf{move.quickly.in.a.manner.toward.}(\alpha)' \ (x,y)]) \ \& \ \text{BECOME} \ \textbf{be-}_{\textbf{LOC}} \ (z, x)]$; where $\alpha = y$

The representation includes an effector (w) that carries out some indeterminate action which causes (x) to move quickly towards some

reference point (y) in such a way that, eventually, the mover (x) would be located at a specific location (z).

The semantic representation comprised within the Lexical template in (3) constitutes the starting point for the application of the Lexical Template Modeling Process, which will enable us to motivate the diathetic alternations shown by the members of the class.

2. Syntactic alternations

It has already been mentioned that verbs-of-running constitute a subgroup the subdomain of predicates that can be labeled as manner-of-movement verbs. According to Van Valin and LaPolla's 1997 description, Present Day English verbs-of-running codify either an Activity or an Active Accomplishment or both, depending on whether there is explicitly a terminal endpoint to the moving action. This difference in meaning correlates with a syntactic difference: activities are typically intransitive and active accomplishments are intransitive-locative. In the case of OE run verbs, this alternation is also found, as shown in the following examples:

Activities:

(4)   Ic of enge up aþringe (Sal. Kmbl. 1008)

I- from-(the)-narrow (place)-out-rushed

(5)   Ðū urne mid him (Ps.Th.49,19)

You-ran-with-him

Active accomplishments:

(6)   […], ðæt hē tō hrædlīce intō Godes hūse æfter ðam racige (Wulfst. 155, 21)

[…], that-he-too-hastily-into-God's-house-after-that-runs

(7)   Ðonne orn hē eft inn tō ðæm temple (Past. 16,3)

Then-ran-he-again-in-to-the-temple

The activity uses of these verbs are the output of modeling the maximal Lexical template to what can be taken as its minimal expression:

(8) [**do'** (x, [**move.quickly.in.a.manner.toward.**(α)**'** (x, $\varnothing$)]])

Notice that there is only one external argument variable (x) that will be saturated by the expression corresponding to the mover, and that the variable (α) is not bound to any external variable, thus leaving out the possibility of giving expression to a referential entity.

The template corresponding to the active accomplishment alternation is as follows:

(9) [**do'** (x, [**move.quickly.in.a.manner.toward.**(α)**'** (x,$\varnothing$)]]) & BECOME **be-$_{LOC}$** (z, x)]

This structure codifies two subevents in which the mover becomes also the referent of a locative relation which results from the activity of running and that implies the final terminal point of a change of location. The (z) argument depicts precisely the destination implicit in the telic meaning of the construction; this argument will be expressed by means of a prepositional phrase in the corresponding clauses.

One interesting alternation that occurs with both the activities and active accomplishment (uses of) verbs is attested in those cases in which the internal variable (α) is syntactically expressed; i.e. it is bounded to the external argument (y); thus, the corresponding templates are:

(10) [**do'** (x, [**move.quickly.in.a.manner.toward.**(α)**'** (x, y]), where α = y

and

(11)[**do'** (x, [**move.quickly.in.a.manner.toward.**(α)**'** (x,y)]) & BECOME **be-$_{LOC}$** (z, x)] , where α = y

In these cases, again we find intransitive structures with a prepositional phrase headed by the preposition *on* followed by an accusative complement:

(12) Hē, getogene ðȳ wǣpne, rǣsde on ðone cyning $_{(Bd.\ 2,9)}$

He, bringing-the-weapon, rushed-against-the-king

(13) Hit on ūs$_{Acc.}$ and on ūre wīcstōwe$_{Dat}$ rǣsde$_{(Nar.15,\ 20:\ Beo.Th.5373)}$

It-towards-us-and-into-our-camp-ran

Note that this phrase is not a directional complement marking telicity. Let's recall that Directional phrases are consistently introduced by a preposition and a dative complement.

As it is clear in example (13), the directional (z) argument is *on ūre wīcstōwe*$_{Dat}$. The meaning of a phrase such as *on ūs*$_{Acc}$ in the above example seems to express together the notions of both motion and (intended) contact. In fact its semantic content reminds to a certain extent that of the Present-Day English conative construction (cf. Levin 1993: 41-42) as in both cases the construction describes an "attempted" action without specifying whether the action was actually carried out. Furthermore, in Present-day English, the

conative construction is expressed syntactically by a prepositional phrase headed by *at* and occasionally *on*. However, there is a fundamental distinction between the contemporary conative construction and the one in OE: the conative construction is in fact an intransitive diathetic alternation from a transitive structure, i.e., the direct object of a transitive sentence appears expressed as a prepositional complement; quite contrarily, the Old English construction is found with inherently intransitive (uses of) verbs and there is no possibility for the accusative complement of *on* to appear as an object. For this reason, we propose to label this structure a 'pseudo-conative construction'.

The last relevant constructions shown by the syntactic behaviour of some Old English verbs-of-running appears in what we can consider as transitive-locative structures; they correspond to causative active accomplishment uses where motion is induced by some participant other than the mover itself. In these cases the maximal lexical template is left (almost) in its complete format, the only difference between both templates is the non-realization of the pseudo-conative internal variable:

(14) **[do'** (w, Ø)] CAUSE **[do'** (x, **[move.quickly.in.a.manner.toward.**(α)**'** (x,Ø)]) & BECOME **be-**$_{LOC}$ (z, x)]

The following sentence can be taken as an example of this construction:

(15) [Sitte him ðīīn mōd on mīnum hrædwǣne], þocrige him on mīnne weg $_{(Bt. 36, I)}$ (You)run-him-to-my-way

4. The linking algorithm: case and preposition assignment

We still need to pay attention to the usefulness of lexical templates in the linking algorithm for the assignment of case and prepositional marking in the different clause structures that instantiate the constructions that have been described.

From the information posited in Logical structures -as far as they are integrated in our Lexical Templates- it is possible to derive the case marking of the arguments. Following Van Valin and LaPolla's (1997) model, case assignment is predicted by the status of the arguments as (non-)Macroroles. Let's recall that two macroroles are distinguished in Role and Reference Grammar, the Actor -or generalized agent-like participant- and the Undergoer -or generalized patient-like argument- and their assignment is predicted in terms of the following scale (Van Valin and LaPolla 1997: 146):

ACTOR				UNDERGOER
Arg. of	1^{st}arg.of	1^{st}arg.of	2^{nd}arg.of	Arg.of state
DO	**do'** $(x,\ldots$	**pred'**(x,y)	**pred'**(x,y)	**pred'**(x)
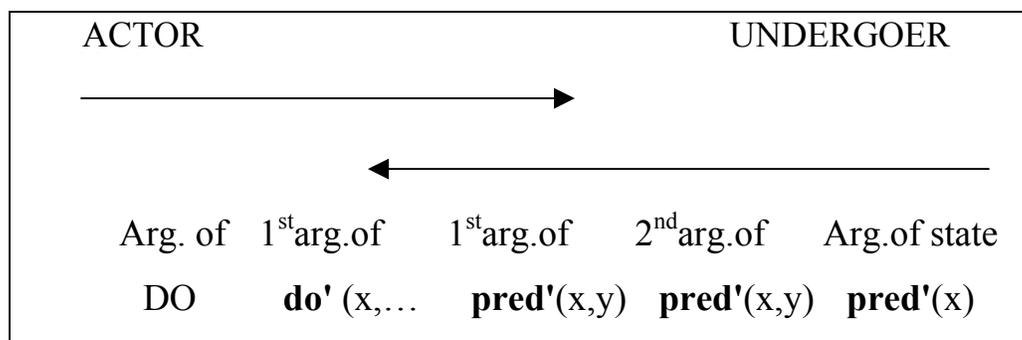
['⟶' = increasing markedness of realization of argument as macrorole]

The arguments of the structures represented before would, then, receive the following assignments:

(16) Activities

[**do'** (x_{ACTOR}, [**move.quickly.in.a.manner.toward.**(α)**'** (x, Ø/y]),
where α = y

(17) Active accomplishments

[**do'** (x_{ACTOR}, [**move.quickly.in.a.manner.toward.**(α)**'** (x, Ø/y)]) &
BECOME **be-$_{LOC}$** (z, x)] , where α = y

(18) Causative active accomplishments

[**do'**   (w_{ACTOR},   Ø)]   CAUSE   [**do'**   ($x_{UNDERGOER}$,
[**move.quickly.in.a.manner.toward.**(α)**'** (x, Ø)]) & BECOME **be-$_{LOC}$**
(z, x)]

As can be deduced from these examples the assignment of Actor macrorole is quite straightforward: on the basis of the Macrorole assignment scale the first arguments of the three templates become Actors since they are arguments of an activity predicate in the logical structure. However, Undergoer assignment does not seem to follow so easily: why are not the (y) or (z) arguments assigned macrorole status in structures (16) and (17)?. The explanation must be sought in the exceptional character of most activity verbs with regard to macrorole-transitivity: with a few exceptions, these verbs take no more than one macrorole. Van Valin and LaPolla (1997: section 4.2), following Talmy (1985, 1991) explain that the behavior of verbs of location and change of location in Germanic languages treat goals as oblique arguments, a sign of their non-Macrorole status. From this point of view, in a language like Old English the intransitivity of motion verbs must be taken as the rule, even though the Scale of Macrorole Assignment seems to reverse these facts.

The only cases where these verbs are transitive are those in which there are two activity subevents in the logical structure; this is the case of the template in (19). In this template there are two effector-type arguments, (w) and (x), and both are potential actors according to the Actor-Undergoer scale; in these situations, the first argument in the causal chain (w) becomes actor, and (x) is assigned Undergoer status. (x) can have such a status given its potential for macrorole and also because the other arguments in the motion-location subevent cannot become macroroles as these structures are inherently intransitive.

We will comment now on some constructions where the case assignment of some arguments is not predicted from the macrorole scale. This is the case of the pseudo-conative construction that forms part of the Old English verbs-of-running template. Given the regularity of appearance of this structure with the verbs under study we can account for it in terms of the following rule:

(19)   Lexical Rule: Pseudo-conative (MOTION verbs)

Assign *on* plus accusative case to argument bound to the internal variable in the structure: [**do'** (x, [**move. toward.**(α)**'** (x, y)])]

Thus, the logical structure corresponding to the sentence *Hē, getogene ðȳ wǣpne, rǣsde on ðone cyning* (Bd.2,9) ('He, leading with the weapon, rushed against the king') would be

(20) [**do'** (hē$_{ACTOR \rightarrow Nom}$, [**move.quickly.in.a.manner.toward.**(α)**'** (hē, se cyning$_{\alpha \rightarrow On+Acc.}$)])

One final question to be considered is the different realizations of the **LOC** variable that appears in the accomplishment subevent that is part of the Logical Structures for telic expressions. There is a wide range of prepositions that saturate lexically such a variable. This variability is due to different nuances of meaning to express the 'locative' relation between the two arguments of this subevent, the theme (x) and the location (z). We agree with Mukhin and Yulikova (1991: 291) in considering this type of structure a "syntaxeme". A syntaxeme is:

an elementary syntactic unit (an invariant) represented in the language by a system of variants, which may be expressed by both individual lexemes and syntactically indissoluble combinations of lexemes with auxiliary elements, e.g. prepositions. The content of a syntaxeme is formed by its syntactico-semantic features which manifest themselves by the distributional characteristics of the syntaxeme, as well as by its specific system of variants.

Given the set of variants of the locative syntaxeme it is necessary to formulate a general lexical rule along the following lines:

(21) <u>General Lexical Rule: Location (MOTION verbs)</u>
Assign loc-preposition to non-macrorole argument in LS:…
BECOME **be-$_{LOC}$** (z,x)

Loc-prepositions:	*Syntaxeme variants*:
on	locative proper
tō	allative
intō (inn tō)	illative
in	illative
etc…	etc…

Examples:

(23) Wǣron hȳ rǣsdon on gīfrum grāpum _(Exon.Th. 126, 27)

(24) Ðæt hī mǣgen iernan and fleon tō ðæs lāreowes mōde _(Past. 16, 4)

(25) Ðonne orn hē eft inn tō ðæm temple _(Past. 16, 3)

(26) On rǣsdon in mē stronge _(Ps. Surt. 58, 4)

There are other variants of the locative syntaxeme which are not realizations of the LOC variable in this rule; the operator BECOME restricts the expression possibilities of the invariant syntaxeme to only those cases in which the expression of a locative relation is compatible with the expression of telicity; i.e. the locative syntaxeme variants to be used here must refer to the notion of location-as-destination. Non-telic locative expressions such as the prepositional phrase in the sentence *Ic ferde to foldan ufan <u>fram eþle</u>, "I came from the village"* _{(Cædmon, *Metr.Par.* Thorpe 205:25, *apud* Mukhin and Yulikova 1991:297),} are not instances of this lexical rule.

5. Conclusions

The elaboration of lexical templates for the representations of lexical classes in the lexicon is one of the most challenging topics in recent studies, both from a purely lexicological perspective and from a wider grammatical, perhaps more ambitious, angle. The application of this type of analysis to extensive areas of the OE lexicon will provide firstly an organized view of the lexical structure of such a language in terms of lexical domains which are motivated both semantically and syntactically; and, secondly, it will help to account for different grammatical phenomena from a new perspective.

6. References

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