RELATIVE PRODUCTIVITY IN OLD ENGLISH PREFIXATION: TYPE

FREQUENCY OF VERBAL PREDICATES¹

ANA IBÁÑEZ MORENO & LAURA CABALLERO GONZÁLEZ

University of La Rioja

ABSTRACT: This paper focuses on lexical productivity in Old English through a study of the derivational morphology of verbs. For this, those verbs that combine with more than ten prefixes have been analyzed from the point of view of their semantic and inflectional features. The results are that most of them are strong verbs of motion, and that there is a strong correlation between the semantic and inflectional properties of verbs and their combinatorial potential with prefixes. Thus, we argue that the morphological behavior of predicates is semantically motivated. We establish a connection between the degree of productivity of verbs and their Aktionsarts and logical structures, as adapted by Role and Reference Grammar (Van Valin & LaPolla 1997), instead of restricting the study to their semantic status as verbs of motion, since ours is a more explanatory approach.

Key words: derivational morphology, semantic motivation, verbs, motion

RESUMEN: Este artículo se centra en la productividad del léxico en inglés antiguo mediante un estudio de la morfología derivativa de los verbos. Para ello, se han analizado aquellos verbos que combinan con más de diez prefijos, desde el punto de vista de sus características semánticas y flexivas. Los resultados muestran que la mayoría son verbos fuertes y de movimiento, y que hay una estrecha correlación entre las propiedades semánticas y flexivas de los verbos y sus capacidades combinatorias con prefijos. Así, argüimos que el comportamiento morfológico de los predicados está motivado semánticamente. Establecemos una conexión entre el grado de productividad de los verbos y sus Aktionsarts y estructuras lógicas, tal y como se utilizan en la Gramática del Papel y la Referencia (Van Valin y LaPolla 1997), en lugar de restringirnos al estudio de su estatus semántico como verbos de movimiento, ya que nuestro enfoque pretende ser más explicativo que descriptivo.

Palabras clave: morfología derivativa, motivación semántica, verbos, movimiento

1. INTRODUCTION

This paper consists of an account of the productivity of the Old English – henceforward OE- derivational morphology of verbs. In order to do this, the analysis of the common semantic and inflectional morphological features of the most productive verbal predicates shows that there is a strong correlation between the semantic features

of verbs and their combinatory potential with prefield verbal affix predicates (that is, verbal prefixes). Such semantic features have been analyzed in terms of predicate *Aktionsart*, as developed by Vendler (1957 [1967]) and later on adapted in Role and Reference Grammar (Van Valin & LaPolla 1997).

2. CORPUS OF ANALYSIS AND THEORETICAL FRAMEWORK

This study constitutes a revision of verbal prefixation (that is, verbs derived from verbs by means of prefixes). The starting point is an exhaustive corpus of 1367 derived verbal predicates, extracted from Clark Hall's (1996) -henceforth CH- dictionary, 1028 of which are weak, 339 are strong and 4 are irregular. These verbs are the result of selecting all those predicates that combine with any of the verbal prefixes outlined below (Ibáñez Moreno 2005):

(1)

a:, æ/æ:, æd/ed, af/æf/æ:f/of, age:an/onge:an/a:ge:n, an/æn/æ:n/en/and/ond, a:r/æ:r, æt/a:t, after, be/bi/bi:, for/fore/forg, for∂, full, geond, in, mid, mis, ofer, on, onemn, o∂, to/to:, ∂urh, un, under, u:p, u:t, u∂, wi∂, wi∂er, ymb

Besides, it has been completed with the aid of Bosworth and Toller's (1973 [1898]) hereafter BT- *Anglo-Saxon Dictionary*, since there are some verbs that are not recorded in CH. Nevertheless, CH keeps a more complete record of Old English vocabulary, and thus it is the work we have selected as the basic axis to compile our corpus. Out of this corpus, those verbal predicates that combine with more than 10 prefixes have been selected for analysis. They are 19, and they are provided below, together with the prefixes that are attached to them:

(2)

cuman: a:, a:ge:n, be, for, fore, forð, full, in, of, ofer, on/an, to:, under, u:p, ymb cweðan: a:, and, æfter, be, for, fore, mis, on, ongeand, to:, wið, wiðer do:n: a:, æt, be, for, forð, full, in, mis, of, ofer, on, oð, to:, under, un, u:t faran: a:, æt, a:r, be, for, fore, forð, in, mis, of, ofer, to:, wið, ymb fo:n: a:, æt, be, for, fore, mis, ofer, on/an, to:, ðurh, under, wið, ymb ga:n: a:, æt, be, for, fore, forð, full, in, of, ofer, on, to:, under, u:p, u:t, wið, ymb gangan: a:, æt, be, for, fore, forð, geond, in, of, ofer, on, to:, ðurh, under, u:t, ymb healdan: a:, an/on, æt, be, for, forð, mis, of, ofer, oð, ymb *læ:dan:* a:, æt, be, for, fore, forð, in/on, lædan, mis, ofer, oð, u:t, wið, ymb niman: a:, æt, be, for, of, ofer, on, to:, under, u:p sce:otan: a:, æt, be, for/fore, on/un, oð, to, un, under, u:t sendan: a:, an, be, for, fore, geond, in, of, ofer, on, to: settan: a:, an, be, for/fore, in, ofer, of, on, to:, wið, ymb sittan: a:, æt, be, for, fore, of, ofer, on/an/and/ond, to:, under, u:p, ymb sle:an: a:, be, for, full, of, ofer, on, to:, ðurh, wið standan: a:, æt, a:ge:n, and, be, for, fore, in, ofer, of, on, oð, to:, under, wið, wit+er, ymb *te:on*: a:, be, for, fore, of, ofer, on, u:p, wið, forð, to: weaxan : a:, be, for, forð, full, mis, ofer, to:, under, ymb wendan: a:/on, be, ed, in, mis, on, oð, to:, under, ymb

At this point, some terminological remarks are necessary, particularly regarding the concept of productivity. The productivity of the verbal predicates is analyzed in terms of their combinatorial possibilities with prefixes, which in this work are considered affixal predicates, as postulated by Mairal and Cortés (2002). Since the data used have been extracted from lexicographical compilations, the analysis of the frequency of the predicates can only be rated either one or zero. It is not possible therefore to deal with the type/ token relation used in the measurement of the absolute productivity of predicates in textual corpora, but instead we obtain the relative productivity of verbal predicates, in the sense that what is measured is the phenomenon that has been called *type frequency* by Aronoff & Fudeman (2005), which Bauer (2004: 102) defines as: "The number of different lexemes in which the affix occurs". This kind of frequency is calculated on the basis of the amount of affixal predicates that a given verb appears with, and so it is indicative of its degree of productivity.

After this brief terminological revision, our aim is to find the common morphological and/or semantic features of these verbal predicates that account for their productive potential. The issue of the productivity of OE verbal derivational processes has been widely studied from the perspective of prefixes, with emphasis on different topics, like their etymology (De La Cruz 1975) or their development towards phrasal verbs (Hiltunen 1983), among others, whereas the study of verbal productivity from the point of view of the internal semantic features of the verb has not been paid much attention until the moment.

There are, nonetheless, two important works on the semantic features of Old English verbs. Weman's (1967 [1933]) analysis of a number of Old English verbs of motion and Penttilä's (1956) account of OE verbs of vision are good examples of the description of the semantics of a number of verbs, as well as of the processes of compounding in which they are involved. However, none of these works attempt to establish the possible relations between the internal features of verbs and the prefixes that can be attached to them. Additionally, Cortés Rodríguez & Torres Medina (2003) carry out a deep semantic study of verbs of running in OE under the framework of the Functional Lexematic Model (Faber & Mairal 1999, 2002). This model supplements Van Valin & LaPolla's (1997) logical structures by integrating a richer semantic component into the semantic representation of predicates: the lexical template, that accounts for all the different interpretations of one single verb through a modeling process that accommodates external and internal variables and operators. Thus, the lexical template for verbs of running, as rendered by these authors (2003: 162), is illustrated below:

(3)

[do' (w, Ø)] CAUSE [do' (x, (move.quickly.in.a.manner.toward.(α)' (x, y)]) & BECOME be-LOC (z, x)]; where $\alpha = y$

This lexical template serves as the starting point for the establishment of the linking algorithms with the syntax of this class of verbs and to account for the semantics of their constructions.

3. OUR STUDY

The main result of our piece of work is that the type of frequency analysis of verbal prefixation, by considering verbal predicates to which ten or more prefixes are attached, renders the conclusion that the verbal predicates that constitute the base of prefixation belong basically to what may be called *verbs of motion*. In order to carry out a more accurate semantic analysis than *verbs of motion* implies, it is necessary to take a step further and consider *Aktionsart* and Logical Structures, as Cortés Rodríguez and Torres Medina (2003) do with verbs of running. In that way, we account for more

general semantic and morphological features. For this, we have selected Van Valin & LaPolla's (1997) system of semantic representation, which accounts for more general phenomena. Additionally, what is important is that we may establish a relation between all these data and the derivational potential of verbs.

After a semantic analysis of the 19 verbal predicates, the result is obtained that 13 of them are verbs of motion, as displayed below:

(4)

cuman 'approach'; *faran* 'set forth, go travel'; *fo:n* 'take'; *ga:n* 'go'; *gangan* 'go', *healdan* 'hold'; *læ:dan* 'lead', *sce:otan* 'throw', *sendan* 'send', *settan* 'set', *sle:an* 'throw', *te:on* 'pull', *wendan* 'turn'.

The amount of 13 verbs out of 19 is indicative of the fact that the semantic field of motion is related to the derivational status of the verbs under analysis. Besides, if we pay attention to four of the verbs that have not been included within the field of motion, namely *niman* 'seize', *standan* 'stand', *sittan* 'sit, remain' and *weaxan* 'increase', we can observe that they share semantic features and structures with these motion verbs. Thus, they also have to do with a certain location. That is, these four verbs do not imply the action or event of moving, but they have to do with spatial features. For instance, *niman* can be paraphrased as 'to cause X to be in Y', where Y is a location. *Standan* and *sittan* are not causative verbs, but they also imply some location, so they can be paraphrased a 'X stands/remains in Y'. Finally, *weaxan* 'increase' may not imply physical movement, but it has to do with motion in a metaphorical sense. When something increases it becomes bigger, thus the space it occupies is also bigger. As a result, there is some kind of "movement" in the organization of the space, either physically or metaphorically.

With respect to the two remaining verbs, they are *do:n* 'do' and *cweðan* speak'. *Cweðan* is a verb of performance and *do:n* 'do' is a verb of unspecified action. As regards the verb *do:n* 'do', it is both highly frequent and productive because of this lack of specificity. Its high degree of semantic generality allows for multiple derivational combinations so as to make it more specific. Due to its generality, the semantic field of actions is primarily expressed through this verb in Van Valin & LaPolla (1997), where the predicate **do'** is used to indicate that the verb is related to an activity.

From the point of view of the *Aktionsart* of these verbs, we have followed the typology of states of affairs and its classification in terms of *Aktionsart* made by Van Valin & LaPolla (1997), originally proposed by Vendler (1957 [1967])². In this typology, verbs are classified in terms of their inherent temporal and spatial properties. There are four basic classes: states, activities, accomplishments and achievements. Thus, *Aktionsart* refers to inherent properties of verbs, and it is defined through three main features (Van Valin and LaPolla 1997: 93):

(5)

a. State	[+static], [-telic], [-punctual]
b. Activity	[-static], [-telic], [-punctual]
c. Accomplishment	[-static], [+telic], [-punctual]
d. Achievement	[-static], [-telic], [+punctual]

The distinction between static and non-static verbs is essential for this classification. Hence, states code non-happenings, and so there is no change involved, while non-static verbs code happenings, and therefore involve internal change. For example, in a sentence like *John believes in fairies* nothing is taking place. Hence, *believe* is [+static]. On the other hand, in sentences like *John runs in the park every*

morning there is something occurring. Hence, *run* is [-static]. In addition, states of affairs may be induced or spontaneous. The four *Aktionsart* classes in (6) correspond to spontaneous States of Affairs. Correspondingly, for each of these classes there is a causative class, which is related to an induced state of affairs.

Besides this, Van Valin and LaPolla (1997) distinguish another class, derived from activities: *active accomplishments*, which are accomplishment uses of activity verbs, and which also have a causative version. As seen in the previous example, an activity verb such as *run* can become an active accomplishment thanks to the argument-adjunct it takes (in this case, the prepositional phrase *to his place of work*). Active accomplishments also have a causative version. An example is posed in Van Valin and LaPolla (1997: 101):

(6)

a. The soldiers marched to the barracks (plain active accomplishment)

a'. The sergeant marched the soldiers to the barracks (causative active accomplishment)

We have followed this typology in order to analyze the *Aktionsart* of the 19 basic verbs under analysis. Once these verbs were analyzed, the results show that they can be divided into four groups: activities, causative accomplishments, active accomplishments and causative active accomplishments. They are outlined below, together with an example taken from *The Dictionary of Old English Corpus*:

(7)

a. Activities: cweðan, do:n

[**do'** (x, [**predicate'** (x) or (x, y)])

[0015 (40.4)] Cweðan

Ic nu mægene cweðe: Miltsa me, drihten [...]

[I now with strength **say**: be merciful to me, Lord (...)] [Now I strongly **say**: be merciful to me, Lord (...)]

b. Causative accomplishments: *fo:n, healdan, niman, sce:otan, sendan, settan, sittan, sle:an , standan, te:on* [do'(x, Ø)] CAUSE [BECOME predicate' (x, y)]

[0479 (1015.3)] Niman

Se cing ða genam ealle heora eahta & het **niman** Siferðes lafe & gebringan binnan Mealdelmesbyri, [...] [and the king then summoned of them eight and commanded to **seize** Siferth's widow and bring to Malmesbury]

[The king then confiscated all their property, and ordered Siferth's widow to be **seized** and brought to Malmesbury]

c. Active accomplishments: cuman, ga:n, gangan, te:on, wendan, weaxan

do' (x, [**predicate**₁' (x, (y))]) & BECOME **predicate**₂' (z, x) or (y)

[1181 (1066.36)] Ga:n

ða eodon gode men heom betwenen & sahtloden heom
[Then went good men them between and brought an agreement (for) them]
[By the intervention of good men, they were reconciled]

d. Causative active accomplishments: læ:dan

 $[\mathbf{do'}(\mathbf{x}, \emptyset)] \text{ CAUSE } [\mathbf{do'}(\mathbf{x}, [\mathbf{predicate_1'}(\mathbf{x}, (\mathbf{y}))]) \& \text{ BECOME } \mathbf{predicate_2'}(\mathbf{z}, \mathbf{x}) \text{ or } (\mathbf{y})]$

[0640 (937.1)] læ:dan

Her Æðelstan cyning lædde fyrde to Brunanbyrig.

[Here Athelstan king led an army to Brunaburgh]

[This year King Athelstan led an army to Brunanburgh]

As can be seen in (7), the logical structures that correspond to each *Aktionsart* type are also provided. However, these are general structures, but they can be granted more specificity in the case of (7.b), (7.c) and (7.d) if we relate them to their motion properties, as is done in (8):

(8)

a. Causative accomplishment motion verbs:

 $[\mathbf{do'}(\mathbf{x}, \mathbf{\emptyset})]$ CAUSE [BECOME **be-LOC'** $(\mathbf{x}, \mathbf{y})]$

b. Active accomplishment motion verbs:

do' (x, [predicate' (x)]) & BECOME be-LOC' (y, x)

c. Causative active accomplishment motion verbs:

[**do'** (x, Ø)] CAUSE [**do'** (x, [**predicate'** (x, y)]) & BECOME **be-LOC'** (z, y)]

According to the data, and if we pay attention to the chart given in (5) of the three semantic features that determine each type of *Aktionsart*, we can see that out of these three there are two in which all verbs coincide: [-static] and [-punctual]. The only feature that distinguishes them is that accomplishments are [+telic], so the action has an end point. Then, it can be stated that the most productive verbs in OE, in terms of prefixal derivation and as far as predicate selection is concerned, are neither states nor achievements, but rather activities and accomplishments, together with their derivations (causatives and active accomplishments).

Taking a step further, a connection can be established between the semantic feature of motion and one part of the logical structures outlined above. As can be seen in (8), this structure is "BECOME **be-LOC**" (y, x)", which corresponds to the [+telic] feature of motion. In this case, this structure indicates the destination of the participant in motion. With respect to the activity verbs given in (7.a), they are not verbs of motion. Thus, the most productive verbs in OE from the point of view of prefixation and predicate selection are verbs of motion which carry the telicity feature, that is, which have an endpoint location. This can explain why they combine with more verbal prefixes than the rest: such affix predicates are mostly locative, and so they serve to

specify or to modify the type of movement expressed by the verb. Some examples of this can be seen below with the verb *cuman*:

(9)

Cuman Strong 4

'approach, get to'

A: - cuman	Strong 4	'to come, come forth (from)'
Be - cuman	Strong 4	'to come, approach, arrive'
For - cuman	Strong 4	'to come before'
Fore - cuman	Strong 4	'to come before'
Forð-cuman	Strong 4	'to come forth, proceed, arrive'
Full-cuman	Strong 4	'to attain'
In - cuman	Strong 4	'to come in, go into'
Of - cuman	Strong 4	'to spring from, be derived from
Ofer - cuman	Strong 4	'to overcome, subdue'
To: - cuman	Strong 4	'to come, arrive'
Under- cuman	Strong 4	'to assist'
U:p - cuman	Strong 4	'to come up, arise'

As can be observed, with the exception of the prefixes *full-*, *ofer-* and *under-*, which grant the basic verb *cuman* with metaphorical sense, the rest provide it with some indication of the direction of the action, as is the case of *a:-* or *be-*, or modify it, as is the case of *for-* or *fore-*, which add information related to the way in which the action predicated by *cuman* takes place. In this sense, after analyzing the *Aktionsart* of the derived predicates of the 19 verbs under study, the results show that the Aktionsart of the derived and basic predicates largely coincide.

There is one exception: *do:n* 'do', originally an activity verb, becomes an active/non active accomplishment verb of motion with most of the prefixes it combines with, as illustrated below:

(10)

Do:n irregular

		'to make, act, perform'
A:-do:n	irregular	'to take away, send away, cast out'
æt- do:n	irregular	'to take away, deprive'
Be- do:n	irregular	'To shut'
For- do:n	irregular	'to undo, destroy'
Forð- do:n	irregular	'to put forth'
full- do:n	irregular	'to complete, finish something'
Mis- do:n	irregular	'to do evil, transgress, do amiss'
Of- do:n	irregular	'to put out, put off, take off (clothes)'
Ofer- do:n	irregular	'to overdo, do in excess'
On- do:n	irregular	1. 'to undo, open'
		2. 'to put on (clothes)'
Oð- do:n	irregular	'to put out (eyes)'
To:- do:n	irregular	'to apply, put to, add'
Under- do:n	irregular	'to put under'
Un- do:n	irregular	'to undo, open, loosen, separate'

All the derivates are causative (active) accomplishments, although there are some that are not related to motion, those that combine with the prefixes *for-*, *full-*, *mis-*, and *ofer-*. The fact that the derived predicates of *do:n* undergo a change of *Aktionsart*, and that most of them are verbs of motion, is due to the high degree of generality of the verb *do:n*, as mentioned above. *Do:n* is a general activity verb, so that the semantic features of the prefixes that combine with it grant their derivates with all the semantic and

Aktionsart value. For instance, from the general sense of *do:n* as 'do' plus the sense of *a:-* or *æt-* as 'away' we obtain 'take away'. Thus, the more specific a basic verb is, the less the prefix it takes modifies it, and vice versa. All this is illustrated by means of two examples, extracted from *The Dictionary of Old English Corpus*:

(11)

[0952 (1016.70)] **Do:n**

ða dyde Eadric ealdormann swa he oftor ær dyde.
[Then did the ealdorman Eadric in the same way he very often before (had) done]
[Then ealdorman Eadric did as he had often done before]

[0069 (218)] a:don

 And eac to flan flæt he fla byrgenne
 ontynde and flone stan aweg adyde [...].

 [And likewise
 when he the grave opened and the stone away put (...).]

 [and likewise, when he opened the grave by taking the stone away (...)]

With respect to the morphological class of the verbs analyzed, most of them are strong (13 out of 19), two are irregular (*do:n* and *ga:n*) and *læ.dan, sendan, settan,* and *wendan* are weak. As we have already indicated, 1028 out of the 1367 verbs of our corpus are weak, while only 339 are strong. Thus, the fact that most of the verbs studied here are strong clearly shows that strong verbs are more productive than weak verbs. Besides, following Kastovsky (1992) among others, strong verbs are the origin of derivation, and they can give both strong or weak verbs, but weak verbs can only give weak verbs, never strong ones. Another interesting fact is that the derived verbal predicates maintain the same conjugation as their primitives.

Te:on has both a strong and a weak version. Important things must be noted on this: *ga:n* and *gangan* are recorded in all lexicographical works and corpora of OE as

the same verb. However, *gangan* is a strong verb of class VII and *ga:n* is irregular. Therefore, they are morphologically different. Besides, although semantically they respond to the same definition, both their basic and their derived predicate, this is not always the case. There are some cases in which one prefix attached to the base denotes different things. An example is given in (12):

(12)

to:-gangan: 'to go away, pass away'

to:-ga:n: to go to, into'

In the case of these two verbs, CH does not relate them as it does in other cases, such as *forega:n* or *ofga:n*, where it directs one to *foregangan* and to *ofgangan* respectively. Moreover, there are some prefixes that appear with *ga:n* and not with *gangan*, and vice versa. Thus, *geond* and *durh* only appear with *gangan*, and *full* and *wið* are only related to *ga:n*. For all this, we consider them as two different verbs.

4. CONCLUSIONS

We may conclude that the degree of verbal productivity in relation to derivational morphology is directly connected with the semantic features of verbal predicates. This is in line with Díaz Vera (2002: 53), who remarks that *the greater the semantic coverage of a lexeme is, the greater its number of derivational formation*. That is, the morphological behavior of predicates is semantically motivated. We have established a connection between the degree of productivity of verbs and their *Aktionsarts* and logical structures, instead of limiting ourselves to their semantic status as verbs of motion, since it is a more explanatory approach. Nonetheless, since this is a study of the lexicon of Old English, and not of the syntax, we have found more differences and regularities, as is obtained by the fact that there are four *Aktionsart* types to account for one semantic field. This is not surprising, as the lexicon is the most idiosyncratic component of language.

With respect to the distinction between type frequency and token frequency, we have also dealt with the former. However, it must be remarked that some of the verbs analyzed here show a high token frequency, such as *do:n* or *ga:n*. That is, they show very frequently in the available texts, and they have survived as such in Present Day English.

5. ENDONOTES

6. References

6.1. Lexicographical works

Bosworth, J. & Toller, N. 1973 (1898) An Anglo-Saxon dictionary : based on the manuscript collections of the late Joseph Bosworth. Oxford : Oxford University Press. Clark Hall, J. R. 1996. A Concise Anglo-Saxon Dictionary. Toronto: University Toronto Press.

¹ This research has been funded through the grant ANGI 2003/08 (CAR).

² There are, nonetheless, other Aktionsart typologies. The most recent one is found in Bache (1997).

Roberts, J., C, Kay, and L. Grundy 2000 (1995). *A Thesaurus of Old English*. (Two Volumes). London: King's College.

6.1. Corpus

The Dictionary of Old English Corpus: Hhttp://ets.umdl.umich.edu/o/oec/H

6.2. Theoretical works

Aronoff, M. & Fudeman, K. 2005. *What is Morphology?* Oxford: Blackwell Publishing.Bauer, L. 2004. *A Glossary of Morphology*. Edinburgh: Edinburgh University Press.

Cortés Rodríguez, F. J. & Torres Medina, D. 2003. "Old English verbs of running: linking semantic representation and morphosyntactic structure". *Folia Linguistica Historica XXIV/1-2*. 153-174.

De la Cruz, J. 1975. "Old English Pure Prefixes: Structure and Function". *Linguistics* 145. 47-81.

Díaz Vera, J. 2002. "The semantic architecture of the Old English verbal lexicon: a historical-lexicographical proposal". In J. Díaz Vera (ed.). *A Changing World of Words: Studies in English Historical Lexicography, Lexicology and Semantics*. New York: Rodopi. 47-77.

Faber, P. & Mairal, R. 1999. Constructing a Lexicon of English Verbs. New York: Mouton the Gruyter.

Faber, P. & Mairal, R. 2002. "Functional grammar and lexical templates. In R. Mairal Usón & M. J. Pérez Quintero (eds.), *New Perspectives on Predicate Argument Structure in Functional Grammar* 39-94. Berlin and New York: Mouton de Gruyter.

Hiltunen, R. 1983. *The Decline of the Prefixes and the Beginnings of the English Phrasal Verb.* Turku: Turun Yliopisto.

Ibáñez Moreno, A. 2005: "La identificación de los predicados afijales en una base de datos lexical del inglés antiguo". Paper presented at the *XXIII AESLA International Conference*.

Kastovsky, D. 1992. Semantics and vocabulary. In Hogg, R. (ed.). *The Cambridge History of the English Language. Vol. I: The Beginning to 1066.* Cambridge: Cambridge University Press. 290-408.

Mairal Usón, R. & F. Cortés Rodríguez. 2002. "Semantic packaging and syntactic projections in word formation processes: the case of agent nominalizations". *Revista Española de Lingüística Aplicada* 14: 271-294.

Penttilä, Erkki. 1956. The Old English Verbs of Vision. Helsinki: Société Néophilologique.

Van Valin, R. D. Jr. & LaPolla, R. 1997. *Syntax: Structure, Meaning and Function*. Cambridge: Cambridge University Press.

Vendler, Z. 1957 (1967). *Linguistics in Philosophy*. Ithaca: Cornell University Press.
Weman, B. 1967. *Old English Semantic Analysis and Theory*. *With Special Reference to Verbs Denoting Locomotion*. Lund: Kraus Reprint Ltd.