

SUFFIX COMPETITION IN OLD ENGLISH WORD FORMATION

SILVIA AMUTIO PALACIOS
UNIVERSIDAD DE LA RIOJA

Abstract. This article deals with noun formation in Old English and, to be more precise, the competition that arises in suffixation. Four questions are addressed: What are the instances of affix competition in the formation of Old English nouns? Can affix competition be explained exclusively on morphological grounds? Can affix competition be accounted for in terms of the semantics of the base of derivation exclusively? and What is the role of diachronic evolution? The conclusion is reached that morphological or semantic explanations in isolation do not suffice. Regarding diachronic evolution, this discussion leads to the conclusion that the winner of competition is the affix that has survived for a longer time throughout the evolution of the language.

Key words: *noun formation, affix competition, morphological, semantics, diachronic evolution*

1. Aims and scope

The aim of this paper is to identify and explain the instances of affix competition that arise in the suffixation of Old English nouns. With this aim, this article tries to answer the following research questions: (i) What are the instances of affix competition in the formation of Old English nouns? (ii) Can affix competition be explained exclusively on morphological grounds? (iii) Can affix competition be accounted for in terms of the semantics of the base of derivation exclusively? and (iv) What is the role of diachronic evolution in the competition that arises among the affixes that attach to Old English derived nouns?¹

Lieber (2004: 2) poses *the multiple-affix question* in these terms: "why does English often have several affixes that perform the same function or create the same kind of derived word (e.g. -ize, -ify for causative verbs; -er, -ant for agent nouns)?" Lieber (2004: 17) puts further examples of the multiple affixes that attach to agent nouns in English and gives the agent several interpretations, which can be of the semantic (experiencer), syntactic (indirect object), morpho-syntactic (governed preposition) or morphological (denominal object) type, as can be seen in (1):

- (1)
- a. *-er*
 - agent: *writer*
 - instrument: *opener*
 - experiencer: *hearer*
 - stimulus: *pleaser*
 - patient/theme: *keeper*
 - denominal noun: *Londoner*
 - measure: *five*
 - location: *diner*

¹ The following abbreviations are used in this article: n. (noun), v. (verb), adv. (adverb), adj. (adjective), num. (numeral), m. (masculine), f. (feminine), n. (neuter), w. (weak class), st. (strong class), sg. (singular), pret. (preterite), Af. (affix), DOE (*Dictionary of Old English*), BT (*Bosworth-Toller Dictionary*).

- b. *-ee*
 - patient/theme: *employee*
 - agent: *escapee*
 - indirect object: *addressee*
 - governed preposition: *laughee*
 - no argument: *amputee*
 - denominal person noun: *biographee*
- c. *-ant/-ent*
 - agent: *accountant*
 - instrument: *irritant*
 - experiencer: *discernant*
 - patient/theme: *descendant*
- d. *-ist*
 - denominal person noun: *Marxist*
 - deadjectival person noun: *purist*

In this article, I shall be using the term *affix competition* to refer to a situation such as depicted by (1), in which several affixes overlap in the expression the same or a very similar meaning. The object of analysis is Old English, a stage of the language that recent research has studied as to the typological changes relating to the rise of word-formation from stem-formation (Kastovsky 2006), the increasing importance of analytic tendencies (Haselow 2011), the existence of lexical layers motivated by word-formation processes (Martín Arista 2010a, 2012b, 2011a, 2011b, 2011c, 2012, fc.-a, fc.-b, fc.-c, fc.-d) and the grammaticalization of directionals (Martín Arista and Cortés Rodríguez fc.). On the other hand, not many studies focus on affix competition. An exception in this respect is the chapter by Bauer (2006), who discusses some phenomena of competition that can be identified in diachronic evolution, such as the Old English suffix *-ster*, which is in competition with *-ess* from the fourteenth century. Unlike Bauer's, this analysis centres on the Old English period exclusively thus taking a strictly synchronic approach.

Another remarkable contribution to the topic of affix competition in Old English is the book by Trips (2009). This author deals with the suffixes *-hood*, *-dom* and *-ship* and their development throughout the history of English and points out that:

We could say that the three suffixes building abstract nouns form a paradigm with the feature 'state of N' (...) but each of them also shows meanings different from the meanings of the others suffixes in the paradigm like for example 'skill of N' for *-ship*. These semantic differences must not be underestimated or ignored because they still play a role in the distribution of derivations with the three suffixes today and actually can explain why sometimes a derivation with one of the suffixes is not possible while it is possible with another one. (Trips 2009: 165)

Although I agree with Trips on the importance of not overlooking the semantic side of the phenomena under consideration, the analysis that is carried out in this journal article focuses on the characteristics of the bases of derivation rather than on the affixes. The line is taken then that bases of derivation can explain or at least show tendencies that can explain why a certain affix is preferred over (or co-occurs with) others when competition arises. In stressing the importance of bases of derivation, this research draws on theoretical work by authors like Giegerich (1999) and Hay (2003), who opt for analyzing the properties of bases of derivation to explain phenomena like lexical strata or constraints on suffix combination.

To implement an analysis of suffix competition that rests on the properties of the bases of derivation, the following steps are taken: (i) the delimitation of the scope of suffix competition Old English noun formation; (ii) the compilation of a corpus of analysis that

comprises all derived nouns displaying the derivational affixes identified through task (i); (iii) the analysis of the morphological processes that turn out derived nouns, including the categorial and inflectional features of the bases of derivation; (iv) the analysis of the semantics of the bases of derivation of nouns; (v) the quantification of the textual occurrences of the suffixes in competition; and (vi) the assessment of the impact of diachronic evolution on the competition under analysis.

Beginning with the scope of suffix competition, the suffixes listed in (2) with their variants are discussed in the remainder of this paper:

(2)

- a. *-dōm*: *læcedom* ‘medicine’
- b. *-end* (*-gend*, *-iend*, *-igend*, *-ende*, *-anne*, *-enne*, *-iende*, *-nd*, *-wende*): *agend* ‘owner’
- c. *-er* (*-ere*, *-era*): *leornere* ‘disciple’
- d. *-estre* (*-gestre*, *-igystre*, *-istre*, *-ystre*): *hleapestre* ‘female dancer’
- e. *-hād*: *mæghad* ‘virginity’
- f. *-incel*: *husincel* ‘little house’
- g. *-ing* (*-eung*, *-ging*, *-gung*, *-iung*, *-ning*, *-nung*, *-ung*, *-unga*, *-enga*, *-enge*, *-inga*, *-inge*, *-unge*): *lising* ‘free man’
- h. *-lāc* (*-lāc*): *bodlac* ‘decree’
- i. *-ling* (*-lung*, *-linga*): *fostorling* ‘foster child’
- j. *-ness* (*-enes*, *-nes*, *-nis*, *-nys*): *clænness* ‘purity’
- k. *-rāden* (*-rāden*): *bebodrāden* ‘command’
- l. *-scipe* (*-scype*): *unwāerscipe* ‘carelessness’
- m. *-ð* (*-ða*, *-að*, *-eð*, *-nað*, *-noð*, *-oð*, *-ðo*, *-oða*, *-ðu*, *-uð*, *-ud*): *fylþ* ‘filth’

The suffixes in (1) give rise to the following patterns of competition: *-end/-ere*, *-ere/-estre*, *-incel/-ing/-ling*, *-dōm/-nes/-hād*, *-lāc/-rāden/-scipe*, *-ð/-nes* and *-nes/-ing/-ung*. The discussion of these suffixal patterns relies on data retrieved from the lexical database of Old English *Nerthus* (www.nerthusproject.com), which yields the following figures of derivatives per affix:

Affix	Derivatives (type)
<i>-dōm</i>	52
<i>-end</i>	311
<i>-ere</i>	258
<i>-estre</i>	52
<i>-hād</i>	44
<i>-incel</i>	14
<i>-ing</i>	305
<i>-lāc</i>	31
<i>-ling</i>	46
<i>-nes</i>	1,249
<i>-rāden</i>	46
<i>-scipe</i>	102
<i>-ð</i>	168
<i>-ung</i>	778
Total	3,456

Table 1: Derivatives per affix in type analysis.

The figures in table 1 include the reference form of the suffixes under analysis, as well as the variants listed in (2). Such figures are based on type analysis (dictionary forms) rather than tokens (textual forms). The occurrences of each textual form are discussed below.

2. The morphological and semantic status of the bases of derivation

The deverbal suffixes *-ere* and *-end* compete to express the agentive meaning in Old English. There are 311 derivatives of *-end* and 258 of *-ere* in *Nerthus*. Neither of these two suffixes creates *i*-umlaut when added to the infinitive stem and both of them form masculine nouns from verbs. Exceptionally, these suffixes derive from nouns. In the following figure it can be seen how these two suffixes compete in some complex words that share a base of derivation:

Base	<i>-end</i>	<i>-ere</i>	Translation
<i>(ge)sciold</i>	<i>(ge)scildend</i>	<i>(ge)scildere</i>	'protector'
<i>(ge)drōwian</i>	<i>drōwend</i>	<i>drōwere</i>	'sufferer'
<i>(ge)āgnian</i>	<i>āgniend</i>	<i>āgnere</i>	'owner'
<i>æfterfolgian</i>	<i>æfterfylgend</i>	<i>æfterfolgere</i>	'follower'
<i>(ge)andettan</i>	<i>andettend</i>	<i>andettere</i>	'confessor'
<i>berēafian</i>	<i>berēafigend</i>	<i>berēafere</i>	'despoiler'
<i>bescēawian</i>	<i>bescēawigend</i>	<i>bescēawiegere</i>	'beholder'
<i>biddan</i>	<i>biddend</i>	<i>biddere</i>	'petitioner'
<i>(ge)blāwan</i>	<i>blāwend</i>	<i>blāwere</i>	'blower'
<i>(ge)byrgan</i>	<i>byrgend</i>	<i>byrgere</i>	'burier'
<i>(ge)cwellan</i>	<i>cwellend</i>	<i>cwellere</i>	'executioner'
<i>(ge)dāelan</i>	<i>dāelend</i>	<i>dāelere</i>	'dealer'
<i>(ge)dēman</i>	<i>dēmend</i>	<i>dēmere</i>	'deemer'
<i>(ge)dihtan</i>	<i>dihtend</i>	<i>dihtere</i>	'informant'
<i>eahtan</i>	<i>eahtend</i>	<i>eahtere</i>	'valuer'
<i>(ge)eardian</i>	<i>eardiend</i>	<i>eardere</i>	'dweller'
<i>(ge)efenlācan</i>	<i>efenlācend</i>	<i>efenlācere</i>	'imitator'
<i>(ge)feohtan</i>	<i>feohtend</i>	<i>feohtere</i>	'fighter'
<i>(ge)feormian</i>	<i>feormend 1</i>	<i>feormere</i>	'purveyor'
<i>foreðingian</i>	<i>foreðingiend</i>	<i>foreðingere</i>	'mediator'
<i>foreiernan</i>	<i>foreiernend</i>	<i>foreiernere</i>	'forerunner'
<i>(ge)gēotan</i>	<i>gēotend</i>	<i>gēotere</i>	'founder (of metal)'
<i>(ge)hālsian</i>	<i>hālsigend</i>	<i>hālsere</i>	'soothsayer'
<i>(ge)hāelan</i>	<i>hāelend</i>	<i>hāelgere</i>	'sanctifier'
<i>(ge)hāeman</i>	<i>hāemend</i>	<i>hāemere</i>	'consort'
<i>(ge)hergian</i>	<i>hergiend</i>	<i>hergere</i>	'plunderer'
<i>(ge)hlystan</i>	<i>hlystend</i>	<i>hlystere</i>	'hearer'
<i>(ge)lādan</i>	<i>lādend</i>	<i>lādere</i>	'leader'
<i>(ge)lānan</i>	<i>lānend</i>	<i>lānere</i>	'lender'
<i>ōleccan</i>	<i>ōlectend</i>	<i>ōleccere</i>	'flatterer'
<i>reccan</i>	<i>reccend</i>	<i>reccere</i>	'teacher'
<i>rīcsian</i>	<i>rīcsiend</i>	<i>rīcsere</i>	'ruler'
<i>rīdan</i>	<i>rīdend</i>	<i>rīdere</i>	'rider, trooper'
<i>(ge)sāwan</i>	<i>sāwend</i>	<i>sāwere</i>	'sower'
<i>(ge)scēawian</i>	<i>scēawigend</i>	<i>scēawere</i>	'spectator'
<i>selfdōm</i>	<i>selfdēmende</i>	<i>selfdēmere</i>	'monk living subject to his own rules'
<i>spilian</i>	<i>spillend</i>	<i>spillere</i>	'player, jester'
<i>stēor 1</i>	<i>stēorend</i>	<i>stēorere</i>	'steerer'
<i>(ge)stihtan</i>	<i>stihtend</i>	<i>stihtere</i>	'director, ruler'
<i>(ge)strūdan</i>	<i>strūdend</i>	<i>strūdere</i>	'spoiler, robber'
<i>(ge)swelgan</i>	<i>swelgend</i>	<i>swelgere</i>	'glutton'
<i>tyht 1</i>	<i>tyhtend</i>	<i>tyhtere</i>	'inciter'
<i>unrihthāman</i>	<i>unrihthāmend</i>	<i>unrihthāmere</i>	'fornicator'
<i>wēman</i>	<i>wēmend</i>	<i>wēmere</i>	'procurer'
<i>(ge)wendan</i>	<i>wendend</i>	<i>wendere</i>	'translator'
<i>(ge)wrēgan</i>	<i>wrēgend</i>	<i>wrēgere</i>	'accuser; informer'

Figure 1: The competition of the suffixes *-end* and *-ere*.

Two parameters of explanation for the instances of competition just listed are proposed. In the first place, the morphological nature of the bases is considered, including the gender of nouns, the type of verb and the class of verb. The second parameter is the semantic status of the base of derivation. In this respect, nouns have been divided into concrete and abstract (that is, *tree* vs. *contempt*, for instance) whereas verbs have been divided into stative (*see*, *have*), active (*jump*, *break*) and causative (*make be*, *make do*).

Base	Inflectional morphology	Semantic analysis	Predicate translation
(ge)sciold	N. m	Concrete	'protection'
(ge)ðrōwian	v. w 2	Stative	'endure, suffer'
(ge)āgnian	v. w 2	Stative	'own'
æfterfolgere	N. m	Concrete	'follower, successor'
(ge)andettan	v. w 1 and 2	Active	'confess'
berēafian	v. w 2	Active	'bereave, despoil, rob'
bescēawian	v. w 2	Active	'observe, survey'
biddan	v. st. V	Active	'ask, entreat; order, command'
(ge)blāwan	v. st. VII	Active	'blow, breathe; sound; inflate'
(ge)byrgan	v. w 1	Active	'raise a mound, hide, bury'
(ge)cwellan	v. w 1	Active	'kill, murder, execute'
(ge)dālan	v. w 1	Active	'divide, distribute'
(ge)dēman	v. w 1	Active	'judge, condemn; assign'
(ge)dihtan	v. w 1 and 2	Active	'arrange, dispose, direct, rule'
eahtan	v. w	Active	'persecute'
(ge)earðian	v. w 2	Active	'inhabit, dwell'
(ge)efenlāccan	v. w 1	Causative	'make like, imitate'
(ge)feohtan	v. st. IIIc	Active	'fight, strive'
(ge)feormian	v. w 2	Active	'entertain, clean, polish, furbish'
foreðingian	v. w 2	Active	'plead for, intercede'
foreiernan	v. st. IIIb	Active	'forerun'
(ge)gēotan	v. st. II	Active	'flood, found'
(ge)hālsian	v. w 2	Active	'adjure; convoke; implore'
(ge)hālan	v. w 1	Active	'heal cure, save; greet, salute'
(ge)hāman	v. w	Active	'have intercourse with'
(ge)hergian	v. w 1 and 2	Active	'plunder'
(ge)hlystan	v. w 1	Active	'listen, obey'
(ge)lādan	v. w 1	Active	'bring; excuse; lead, guide'
(ge)lānan	v. w 1	Active	'lend'
ōleccan	v. w 1	Active	'flatter'
reccan	v. w 1	Active	'take care of'
ričsian	v. w 2	Active	'bear rule, reign'
riðan	v. st. I	Active	'ride, move about; float, sail'
(ge)sāwan	v. st. VIIe	Active	'sow; disseminate'
(ge)scēawian	v. w 2	Active	'look, observe, view'
selfdōm	N. m	Abstract	'independence'
spilian	v. w	Active	'sport, play'
stēor I	N. f	Abstract	'direction, guidance; rule'
(ge)stihtan	v. w 1 and 2	Active	'protect, rule'
(ge)strūðan	v. st. II	Active	'ravage, spoil, plunder'
(ge)swelgan	v. st. IIIb	Active	'swallow'
tyht I	N. m	Abstract	'instruction; course'
unrihtthēman	v. w	Active	'commit adultery'
wēman	v. w	Active	'be heard; announce'
(ge)wendan	v. w 1	Active	'turn, translate'
(ge)wrēgan	v. w	Active	'accuse, impeach'

Figure 2: Analysis of the bases of derivation of *-end* and *-ere*.

From the morphological point of view, there is a tendency for these suffixes to attach to weak verbs from class 1, although there are also many derivatives from class 2 weak verbs and several classes of strong verbs. On the semantic side, it is interesting that the competition

between the suffixes *-end* and *-ere* only arises when there is an active verb that functions as base of derivation of the derivatives with both affixes. The only exception that has been found is *(ge)āgnian* ‘to own’.

There is also semantic competition for conveying the agentive meaning involving the suffixes *-ere* and *-estre*. As has been remarked above, there are 258 instances of *-ere* in *Nerthus*. There are another 52 derivatives taking the suffix *-estre*. In general, the competition can be explained on the grounds of the gender of the derivative, so that *-ere* is usually attached to masculines (not always) while *-estre* is found in feminines. The derivatives displaying this type of competition are given in figure 3:

Base	<i>-ere</i>	<i>estre</i>	
<i>(ge)ðrōwian</i>	<i>ðrōwere</i>	<i>ðrōwestre</i>	'martyr'
<i>bacan</i>	<i>bæcere 1</i>	<i>bæcestre</i>	'baker'
<i>bīgeng</i>	<i>bīgengere</i>	<i>bīgengestre</i>	'worshiper'
<i>byrd 2</i>	<i>byrðre 1</i>	<i>byrðestre</i>	'bearer'
<i>(ge)efenlæcan</i>	<i>efenlæcere</i>	<i>efenlæcestre</i>	'imitator'
<i>fīðele</i>	<i>fīðelere</i>	<i>fīðelestre</i>	'fiddler'
<i>(ge)hǣlan</i>	<i>hǣlere</i>	<i>hǣlestre</i>	'exorcist (m.); saviour (f.)'
<i>hearpian</i>	<i>hearpere</i>	<i>hearpestre</i>	'harper'
<i>(ge)hlēapan</i>	<i>hlēapere</i>	<i>hlēapestre</i>	'dancer'
<i>hoppian</i>	<i>hoppere</i>	<i>hoppestre</i>	'dancer'
<i>hordian</i>	<i>hordere</i>	<i>hordestre</i>	'steward'
<i>(ge)leornian</i>	<i>leornere</i>	<i>leornestre</i>	'student'
<i>nīedhǣmed</i>	<i>nīdhǣmedre</i>	<i>nīdhǣmestre</i>	'mistress, adulterer'
<i>plegan</i>	<i>plegere</i>	<i>plegestre</i>	'athlete'
<i>sang</i>	<i>sangere</i>	<i>sangestre</i>	'singer'
<i>sēam 2</i>	<i>sēamere 2</i>	<i>sēamestre</i>	'tailor'

Figure 3: The competition of the suffixes *-ere* and *-estre*.

As can be seen in figure 4, the bases of derivation that enter the pattern of competition just described are, from the morphological point of view, weak verbs and feminine nouns mainly while, and, from the semantic point of view, they are active verbs and concrete nouns.

Base	Inflectional morphology	Semantic analysis	Predicate translation
<i>(ge)ðrōwian</i>	v. w 2	Stative	'suffer'
<i>bacan</i>	v. st VI	Active	'bake'
<i>bīgeng</i>	N. f	Concrete	'worker'
<i>byrd 2</i>	N. f	Concrete	'bearer'
<i>(ge)efenlæcan</i>	v. w 1	Active	'imitate'
<i>fīðele</i>	N. f	Concrete	'fiddle'
<i>(ge)hǣlan</i>	v. w 1	Causative	'sanctify'
<i>hearpian</i>	v. w	Concrete	'harp'
<i>(ge)hlēapan</i>	v. st VII b	Active	'dance'
<i>hoppian</i>	v. w	Active	'dance'
<i>hordian</i>	v. w	Concrete	'treasure'
<i>(ge)leornian</i>	v. w	Stative	'learn'
<i>nīedhǣmed</i>	N. n	Concrete	'adulterer'
<i>plegan</i>	v. w and st	Active	'play'
<i>sang</i>	N. m	Concrete	'singer'
<i>sēam 2</i>	N. m	Concrete	'tailor'

Figure 4: Analysis of the bases of derivation of *-ere* and *-estre*.

For the formation of the diminutive in Old English, the suffixes *-incel*, *-ing* and *-ling* show a competition. There are 14 derivatives with *-incel*, as well as 305 with *-ing* and 46 with *-ling* (although not all of them are diminutives). From the start, a morphological difference holds among the three suffixes. Whereas the suffix *-incel* is found in neuter nouns both *-ing* and -

ling form masculine nouns, mainly from other nouns or adjectives. The instances of competition can be seen in figure 5:

Base	<i>-in cel</i>	<i>-ing</i>	<i>-ling</i>	Translation
<i>ðēow 1</i>	<i>ðēowin cel</i>	<i>ðēowing</i>		'little servant'
<i>efne 1</i>		<i>efning</i>	<i>efenling</i>	'partner'
<i>feorðe</i>		<i>feorting</i>	<i>fēorling</i>	'farting'
<i>fōstrian</i>		<i>fōstring</i>	<i>fōstorling</i>	'foster-child'
<i>(ge)hæft 1</i>	<i>hæftin cel</i>		<i>hæftling</i>	'captive'
<i>tendan</i>		<i>tending</i>	<i>tendling</i>	'burning'
<i>wæsc</i>		<i>wæscing</i>	<i>wæstling</i>	'coverlet'

Figure 5: The competition of the suffixes *-in cel*, *-ing* and *-ling*.

The semantic analysis of these suffixes does not show any clear tendency. Moreover, too few instances are available to make generalisations:

Base	Inflectional morphology	Semantic analysis	Predicate translation
<i>ðēow 1</i>	N. fm.	Concrete	'servant'
<i>efne 1</i>	adj.	Abstract	'even, equal'
<i>feorðe</i>	adv.		'fourthly'
<i>fōstrian</i>	v. w	Active	'foster, nourish'
<i>(ge)hæft 1</i>	N. m.	Concrete	'slave'
<i>tendan</i>	v.	Active	'kindle'
<i>wæsc</i>	N. f	Abstract	'washing'

Figure 6: Analysis of the bases of derivation of the suffixes *-in cel*, *-ing* and *-ling*.

When dealing with deverbal abstract nouns of the type *drive-driving* two patterns of suffix competition arise. In the first place, there is rivalry among the suffixes *-dōm*, *-nes* and *-hād* when they mean 'state or condition'. There are, respectively, 52, 1,249 and 44 derivatives of these suffixes in *Nerthus*. Morphologically, there are some differences among the three. The suffixes *-dōm* and *-hād* are added to nouns and adjectives to form mainly masculine nouns while the suffix *-nes* is attached only to adjectives in order to form mainly feminine nouns. Figure 7 lists all the instances of competition (25) with these affixes. The only case of three-suffix competition is *cynelicnes-cynedōm-cynehād*.

Base	<i>-nes</i>	<i>-dōm</i>	<i>-hād</i>	Translation
<i>ðēow 1</i>		<i>ðēowdōm</i>	<i>ðēowhād</i>	'servitude'
<i>abbod</i>		<i>abboddōm</i>	<i>abbodhād</i>	'abbatial rank'
<i>arcebiscop</i>		<i>arcebiscopdōm</i>	<i>arcebiscop hād</i>	'post of archbishop'
<i>bisceop</i>		<i>bisceopdōm</i>	<i>bisceophād</i>	'bishophood'
<i>(ge)camp 1</i>		<i>campdōm</i>	<i>camphād</i>	'warfare'
<i>cifes</i>		<i>cifesdōm</i>	<i>cifeshād</i>	'adultery'
<i>cynelic 1</i>	<i>cynelicnes</i>	<i>cynedōm</i>	<i>cynehād</i>	'dignity'
<i>martyr</i>		<i>martyrdōm</i>	<i>martyrhād</i>	'martyrdom'
<i>pāpa</i>		<i>pāpadōm</i>	<i>pāpanhād</i>	'pappal office'
<i>woruld</i>		<i>worulddōm</i>	<i>woruldhād</i>	'secular state'
<i>crīst</i>	<i>crīstennes</i>	<i>crīstendōm</i>		'Christianity'
<i>druncen 2</i>	<i>druncennes</i>		<i>druncenhād</i>	'drunkenness'
<i>(ge)dysgian</i>	<i>dysgines</i>	<i>dysigdōm</i>		'foolishness'
<i>(ge)ealdian</i>	<i>ealdnes</i>	<i>ealddōm</i>		'age'
<i>ealdor 1</i>	<i>ealdorlicnes</i>	<i>ealdordōm</i>		'power, lordship'
<i>geoguð</i>	<i>geoguðhādnes</i>		<i>geoguðhād</i>	'adolescence'
<i>hālig 1</i>	<i>hālignes</i>	<i>hāligdōm</i>		'holiness'
<i>hæðen 1</i>	<i>hæðennes</i>	<i>hæðendōm</i>		'paganism'
<i>hagosteald 1</i>	<i>hagostealdnes</i>		<i>hagostealdhād</i>	'virginity; unmarried state'

<i>Base</i>	<i>-nes</i>	<i>-dōm</i>	<i>-hād</i>	<i>Translation</i>
<i>(ge)riht 1</i>	<i>rihtnes</i>	<i>rihtdōm</i>		'just judgement'
<i>scacan</i>	<i>sceacnes</i>	<i>sceacdōm</i>		'flight'
<i>unriht 2</i>	<i>unrihtnes</i>	<i>unrihtdōm</i>		'iniquity'
<i>geuntrum</i>	<i>untrumnes</i>		<i>untrumhād</i>	'infirm state'
<i>wōh 2</i>	<i>wōhnes</i>	<i>wōhdōm</i>		'unjust judgement'

Figure 7: The competition of the suffixes *-dōm*, *-nes* and *-hād*.

Figure 8 provides the morphological and semantic analysis of the bases of the affixes *-dōm*, *-nes* and *-hād*:

<i>Base</i>	<i>Inflectional morphology</i>	<i>Semantic analysis</i>	<i>Predicate translation</i>
<i>ðēow 1</i>	N. fm.	Concrete	'servant, slave'
<i>abbod</i>	N. m.	Concrete	'abbot'
<i>arcebiscep</i>	N. m.	Concrete	'archbishop'
<i>bisceop</i>	N. m.	Concrete	'bishop'
<i>(ge)camp 1</i>	N. mn.	Concrete	'war, battle'
<i>cifes</i>	N. f.	Concrete	'harlot'
<i>cynelic 1</i>	adj.	Abstract	'kingly, royal'
<i>martyr</i>	N. m.	Concrete	'martyr'
<i>pāpa</i>	N. m.	Concrete	'pope'
<i>woruld</i>	N. f.	Concrete	'world'
<i>crīst</i>	N. m.	Concrete	'Christ'
<i>druncen 2</i>	adj.	Concrete	'drunken'
<i>(ge)dysgian</i>	v. w 2	Active	'act foolishly, blaspheme'
<i>(ge)ealdian</i>	v. w 2	Stative	'grow old'
<i>ealdor 1</i>	N. m.	Concrete	'superior, authority'
<i>geoguð</i>	N. m.	Abstract	'youth'
<i>hālig 1</i>	adj.	Abstract	'holy'
<i>hæðen 1</i>	adj.	Abstract	'pagan'
<i>hagosteald 1</i>	adj.	Abstract	'unmarried'
<i>(ge)riht 1</i>	N. n.	Abstract	'justice; privilege'
<i>scacan</i>	v. st VI	Active	'shake off'
<i>unriht 2</i>	adj.	Abstract	'wrong, evil'
<i>geuntrum</i>	adj.	Abstract	'sick, ill'
<i>wōh 2</i>	adj.	Abstract	'crooked'

Figure 8: Analysis of the bases of derivation of the suffixes *-dōm*, *-nes* and *-hād*.

As can be seen in table 8, the nominal bases of derivation involved in the competition of the suffixes *-dōm*, *-nes* and *-hād* are, in general, concrete and reflect social status whereas the basic adjectives are, as a general rule, abstract and refer to social or moral qualities. The second set of competing suffixes is the one formed by *-lāc*, *-ræden* and *-scipe*. The total figure of derivatives displaying these suffixes is, respectively, 31, 46 and 102. These three suffixes compete since the meaning they add to the base is that of 'order, condition, state, position, rank or activity'. In the case of the suffix *-lāc* it is added mainly to nouns - although it can also be seen as a suffix of some verbs - in order to form neuter and masculine nouns. Regarding *-ræden*, it is a suffix added to nouns in order to form other nouns from the feminine gender. Finally, *-scipe* is added to both nouns and adjectives and forms masculine nouns. Figure 9 shows the competition involving this triplet of suffixes.

<i>Base</i>	<i>-lāc</i>	<i>-ræden</i>	<i>-scipe</i>	<i>Translation</i>
<i>ðoft</i>		<i>(ge)ðoftræden</i>	<i>(ge)ðoftscipe</i>	'fellowship'
<i>ðegn</i>		<i>ðegnræden</i>	<i>ðegnscipe</i>	'service'
<i>(ge)brōðor</i>		<i>brōðorræden</i>	<i>brōðorscipe</i>	'brotherliness'
<i>burg</i>		<i>burhræden</i>	<i>burgscipe</i>	'borough'

Base	-lāc	-rāden	-scipe	Translation
<i>fēond</i>		<i>fēondrāden</i>	<i>fēondscipe</i>	'hostility, enimity'
<i>folc</i>		<i>folcrāden</i>	<i>folcscipe</i>	'nation, people'
<i>frēond</i>		<i>frēondrāden</i>	<i>frēondscipe</i>	'friendship'
<i>(ge)hāeman</i>	<i>hāmedlāc</i>		<i>hāmedscipe</i>	'cohabitation'
<i>hīwan</i>		<i>hīwrāden</i>	<i>hīwscipe</i>	'family'
<i>hold 1</i>		<i>holdrāden</i>	<i>holdscipe</i>	'loyalty'
<i>land</i>		<i>landrāden</i>	<i>landscipe</i>	'region'
<i>lēod 1</i>		<i>lēodrāden</i>	<i>lēodscipe</i>	'nation, people'
<i>mann</i>		<i>manrāden</i>	<i>manscipe</i>	'dependence'
<i>sibb 1</i>	<i>sibblāc</i>	<i>sibbrāden</i>		'relationship'
<i>wīte</i>	<i>wītelāc</i>	<i>wīterāden</i>	<i>wītscipe</i>	'punishment'
<i>wrōht 1</i>	<i>wrōhtlāc</i>		<i>wrōhtscipe</i>	'slander'

Figure 9: The competition of the suffixes *-lāc*, *-rāden* and *-scipe*.

The semantic analysis of these bases is given in figure 10, which reflects a tendency towards concrete nouns:

Base	Inflectional morphology	Semantic analysis	Predicate translation
<i>ðoft</i>	N. f	Concrete	'bench of rowers'
<i>ðegn</i>	N. m	Concrete	'servant'
<i>(ge)brōðor</i>	N. m	Concrete	'brother, fellow'
<i>burg</i>	N. f	Concrete	'dwelling, borough'
<i>fēond</i>	N. m.	Concrete	'enemy'
<i>folc</i>	N. n	Concrete	'nation'
<i>frēond</i>	N. m	Concrete	'friend'
<i>(ge)hāeman</i>	v. w	Active	'cohabit with'
<i>hīwan</i>	N. mp.	Concrete	'family'
<i>hold 1</i>	N. n	Concrete	'carcase'
<i>land</i>	N. m.	Concrete	'land'
<i>lēod 1</i>	N. m.	Concrete	'region'
<i>mann</i>	N. m	Concrete	'human'
<i>sibb 1</i>	N. f	Abstract	'relationship'
<i>wīte</i>	N. n	Abstract	'punishment'
<i>wrōht 1</i>	N. f	Abstract	'crime'

Figure 10: Analysis of the bases of derivation of *-lāc*, *-rāden* and *-scipe*.

The suffixes *-ð* and *-nes* also compete to form feminine nouns from adjectives. There are 168 derivatives of *-ð* and 1,249 of *-nes*, which is one of the most frequent suffixes in Old English.

Base	-ð	-nes	Translation
<i>ārlēas</i>	<i>ārlēast</i>	<i>ārlēasnes</i>	'wickedness'
<i>ābylgan</i>	<i>ābylgð</i>	<i>ābylgnes</i>	'anger, offence'
<i>behēfe</i>	<i>behēfðu</i>	<i>behēfnes</i>	'convenience, utility'
<i>carlēas</i>	<i>carlēast</i>	<i>carlēasnes</i>	'freedom for care'
<i>(ge)scendan</i>	<i>gescendð</i>	<i>gescendnes</i>	'shame, confusion'
<i>gīemelēas</i>	<i>gīemelēast</i>	<i>gīemelēasnes</i>	'negligence'
<i>giccan</i>	<i>gicða</i>	<i>gicenes</i>	'itch'
<i>gif 2</i>	<i>gift</i>	<i>gifnes</i>	'gift'
<i>(ge)hāelan</i>	<i>hāelð</i>	<i>hāelnes</i>	'healing, salvation'
<i>lang</i>	<i>langoð</i>	<i>langnes</i>	'longing, desire'
<i>gelēaflēas</i>	<i>lēaflēast</i>	<i>lēaflēasnes</i>	'unbelief'
<i>(ge)lēaf</i>	<i>lēft</i>	<i>lēafnes</i>	'leave, permission'
<i>myrge 1</i>	<i>myrgð</i>	<i>myrgnes</i>	'melody'
<i>rēcelēas</i>	<i>rēcelēast</i>	<i>rēcelēasnes</i>	'recklessness, negligence'
<i>rīpian</i>	<i>rīpð</i>	<i>rīpnes</i>	'ripeness, harvest'
<i>strang</i>	<i>strengð</i>	<i>strangnes</i>	'strength, power, force'
<i>wanhāl</i>	<i>wanhālð</i>	<i>wanhālnes</i>	'weakness, sickness'

Base	-ð	-nes	Translation
wiergan	wyrğðu	wyrğnes	‘abuse, cursing’

Figure 11: The competition of the suffixes -ð and -nes.

As table 12 shows, the group of bases is rather heterogeneous, both from the morphological and the semantic point of view, except for the fact that nouns are of the abstract type. It is also worth commenting on that the verbal bases belong without exception to the weak class.

Base	Inflectional morphology	Semantic analysis	Predicate translation
ārlēas	adj.	Abstract	‘disgraced’
ābylgan	v. w	Active	‘offend’
behēfe	N. m	Abstract	‘convenience’
carlēas	adj.	Abstract	‘careless’
(ge)scendan	v. w	Causative	‘put to shame, confound’
gīemelēas	adj.	Abstract	‘negligent’
giccan	v. w	Stative	‘itch’
gijf 2	N. n	Abstract	‘grace’
(ge)hālan	v. w	Active	‘save’
lang	adj.	Concrete	‘long’
gelēaflēas	adj.	Abstract	‘unbelievable’
(ge)lēaf	N. f	Abstract	‘vow’
myrge 1	adj.	Abstract	‘pleasant’
rēcelēas	adj.	Abstract	‘careless’
rīpian	v. w	Active	‘rip, harvest’
strang	adj.	Abstract	‘strong’
wanhāl	adj.	Abstract	‘weak’
wiergan	v. w 1	Active	‘curse’

Figure 12: Analysis of the bases of derivation of -ð and -nes.

Along with -nes, the other very frequent suffix in the formation of nouns is -ing and the related form -ung. The suffix -ing has 305 derivatives while -ung has 778. The three suffixes coincide in forming abstract feminine nouns. On the other hand, they diverge in that the suffix -nes forms such nouns from adjectives while the suffixes -ing and -ung are found in deverbal nouns. The following two figures present the competition among these three suffixes. Figure 13 shows the competition between -nes and -ing, of which 54 pairs of derivatives have been found.

Base	-nes	-ing	Translation
ācennan	ācennednes	ācennīng	‘birth’
āgyltan	āgyltnes	āgyltīng	‘guilt, offence’
ālīesan	ālīesednes	ālīesīng 1	‘redemption’
ātendan	ātendnes	ātendīng	‘incentive’
āwendan	āwendendnes	āwendīng	‘subversion, change’
āwierdan	āwierdnes	āwierdīng	‘corruption, blemish’
(ge)bærnan	bærnnes	bærnīng	‘burning’
(ge)brȳtan	brytednys	brȳtīng	‘breaking (of bread)’
(ge)būan	gebūnes	bȳīng 2	‘dwelling’
(ge)byrgan	byrignes 1	byrgīng 1	‘burial’
(ge)cierran	gecierrednes	(ge)cierring	‘turning, conversion’
(ge)fēgan	gefēgnes	(ge)fēging	‘conjunction, composition’
(ge)forðfēran	forðfērednes	forðfēring	‘death’
(ge)fremman	(ge)fremednes	(ge)fremming	‘purpose, effect’
(ge)fyllan 1	(ge)fylnes 1	(ge)fyllīng	‘filling, completion’
(ge)hālan	hālnes	hāling	‘healing’
(ge)healdan	(ge)healdnes	healdīng	‘keeping, observance’
(ge)hierwan	hierwnes	hierwīng	‘blasphemy’
(ge)hrīnan	(ge)hrinenes	hrīnīng	‘touch’
(ge)hwītan	hwītnes	hwīting	‘whiting, chalk and size’

Base	-nes	-ing	Translation
(ge)līesan	līesnes	līesing 2	‘deliverance, release’
(ge)lōmlācan	gelōmlācnes	gelōmlācing	‘frequency’
(ge)mētan	gemētednes	(ge)mēting	‘meeting; assembly’
(ge)riht 1	rihtnes	rihting	‘correction’
(ge)rōwan	rōwnes	rōwing	‘rowing’
(ge)swīcan	geswicennes	geswīcing	‘intermission, cessation’
(ge)tālan	tālnes	tāling	‘reproof; derogation; slander’
(ge)tȳn	tȳnnes	tȳning	‘a closing, fencing’
(ge)wemman	gewemmednes	(ge)wemming	‘defilement’
(ge)wierdan	wierdnes	wierding	‘bodily injury; blemish’
(ge)wrīdan	gewrīdennes	gewrīding	‘binding’
(ge)wȳscan	gewȳscednes	gewȳscing	‘adoption’
gebirgan	birgnes	barging	‘taste’
gewesan	gewesnes	wesing	‘soaking, steeping’
gīeman	gīemenes	gīeming	‘care, anxiety; custody, rule’
gielp	gielpnes	gielping	‘glory, boasting’
holian	holnes	holing	‘hollow place’
hræd	hrædnes	hræding	‘haste quickly’
hrēof 1	hrēofnes	hrȳfing	‘scab’
īdel 1	īdelnes	īdelinga	‘frivol’
līhtan	līhtnes	līthing 2	‘brightness’
onbærnan	onbærnnes	onbærning	‘incense’
onbryrdan	onbryrdnes	onbryrding	‘incitement’
onbyrgan 1	onbyrignes 1	onbyrging	‘tasting’
oncunnan	oncunnes	oncunning	‘accusation’
onhyrian	onhyrenes	onhyring	‘imitation, zeal’
onlīhtan	onlīhtnes	onlīhting	‘illumination, enlightening’
ōrīe	ōrines	ōridding	‘the doing of a thing for the third time; trinity’
sūr	sūrnes	sȳring	‘sour milk, buttermilk’
tōbrȳtan	tōbrȳtednes	tōbrȳting	‘crushing, contrition’
tōlȳsan	tōlȳsednes	tōlȳsing	‘loosing; destruction’
tyht 1	tyhtnes	tyhting	‘incitement, instigation’
understandan	understandennes	understanding	‘understanding’
wiðmetan	wiðmetennes	wiðmeting	‘comparison’

Figure 13: The competition of the suffixes -nes and -ing.

The morphological and semantic analysis given in figure 14 shows that we are dealing mainly with active weak verbs, most of them from class 1, and with concrete nouns.

Base	Inflectional morphology	Semantic analysis	Predicate translation
ācennan	v. w 1	Active	‘bring forth, produce’
āgyltan	v. w 1	Active	‘offend’
ālīesan	v. w 1	Active	‘redeem’
ātendan	v. w 1	Causative	‘set on fire, kindle’
āwendan	v. w 1	Active	‘turn aside, change’
āwierdan	v. w 1	Active	‘spoil, corrupt’
(ge)bærnan	v. w 1	Causative	‘cause to burn’
(ge)brȳtan	v. w 1	Active	‘crush, pound’
(ge)būan	v. w 1	Active	‘dwell’
(ge)byrgan	v. w 1	Active	‘bury’
(ge)cierran	v. w 1	Active	‘convert’
(ge)fēgan	v. w 1	Active	‘join, unite, fix’
(ge)forðfēran	v. w 1	Stative	‘die’
(ge)fremman	v. w 1	Active	‘make, do; support’
(ge)fyllan 1	v. w 1	Active	‘fill’
(ge)hālan	v. w 1	Active	‘heal, save’
(ge)healdan	v. w 1	Active	‘hold, contain, keep’

Base	Inflectional morphology	Semantic analysis	Predicate translation
<i>(ge)hierwan</i>	v. w	Active	'abuse, blaspheme; despise'
<i>(ge)hrīnan</i>	v. st I	Active	'touch, lay hold of, reach'
<i>(ge)hwītan</i>	v. w	Causative	'whiten; brighten, polish'
<i>(ge)līesan</i>	v. w I	Causative	'loosen'
<i>(ge)lōmlācan</i>	v. w I	Stative	'frequent; be frequent'
<i>(ge)mētan</i>	v. w I	Stative	'find, find out, fall in with'
<i>(ge)riht I</i>	N. n	Abstract	'equity, justice, law'
<i>(ge)rōwan</i>	v. st VII f	Active	'go by water, row, sail'
<i>(ge)swīcan</i>	v. st I	Active	'wander, depart, abandon'
<i>(ge)tālan</i>	v. w	Active	'blame, censure, reproach'
<i>(ge)tȳn</i>	v. w	Active	'to instruct, teach'
<i>(ge)wemman</i>	v. w I	Active	'profane, injure, ill-treat'
<i>(ge)wierdan</i>	v. w I	Active	'spoil, injure, destroy'
<i>(ge)wrīðan</i>	v. st and w	Active	'twist; wrap, bind up'
<i>(ge)wȳscan</i>	v. w	Stative	'wish'
<i>gebirgan</i>	v. w I and II	Active	'taste, eat'
<i>gewesan</i>	v. w	Active	'strive, contend; to soak'
<i>gīeman</i>	v. w I	Active	'correct, reprove'
<i>gielp</i>	N. mn.	Abstract	'boasting, pride, arrogance'
<i>holian</i>	v. w II	Causative	'hollow, scoop out'
<i>hræd</i>	adj.	Abstract	'quick, nimble, ready, active'
<i>hrēof I</i>	adj.	Concrete	'rough, scabby, leprous'
<i>īdel I</i>	adj.	Abstract	'worthless, useless, vain'
<i>līhtan</i>	v. w I	Causative	'lighten, illuminate'
<i>onbærnan</i>	v. w I	Causative	'kindle, ignite, heat, excite'
<i>onbyrdan</i>	v. w I	Active	'strive against, resist, oppose'
<i>onbyrgan I</i>	v. w I	Active	'taste, eat'
<i>oncunnan</i>	v. st and w	Stative	'know'
<i>onhyrian</i>	v. w I	Active	'emulate, imitate'
<i>onlīhtan</i>	v. w I	Causative	'enlighten'
<i>ðrīe</i>	num.		'three'
<i>sūr</i>	adj.	Concrete	'sour, tart, acid; made sour'
<i>tōbrȳtan</i>	v. w I and 2	Active	'destroy'
<i>tōlȳsan</i>	v. w I	Causative	'dissolve, loosen, relax'
<i>tyht I</i>	N. m.	Abstract	'instruction, training, habit'
<i>understandan</i>	v. st VI	Stative	'understand, perceive'
<i>wiðmetan</i>	v. st V	Causative	'liken to'

Figure 14: Analysis of the bases of derivation of *-nes* and *-ing*.

Figure 15 tabulates the competition between *-nes* and *-ung*, of which 88 pairs of derivatives have been found:

Base	<i>-nes</i>	<i>-ung</i>	Translation
<i>āblācan</i>	<i>āblācnes</i>	<i>āblācung</i>	'pallor'
<i>ādenian</i>	<i>ādenenes</i>	<i>ādenung</i>	'distension; stratum'
<i>āðindan</i>	<i>āðundennes</i>	<i>āðindung</i>	'swelling'
<i>āblāwan</i>	<i>āblāwnes</i>	<i>āblāwnung</i>	'inflation'
<i>ārweorð</i>	<i>ārweorðnes</i>	<i>ārweorðung</i>	'honour'
<i>āswindan</i>	<i>āswundennes</i>	<i>aswindung</i>	'idleness, sloth'
<i>bebyrgan I</i>	<i>bebyrgednes</i>	<i>bebyrgung</i>	'burial'
<i>beswīcan</i>	<i>beswicenes</i>	<i>beswīcung</i>	'deception'
<i>cwīðan</i>	<i>cwīðnes</i>	<i>cwīðung</i>	'complaint'
<i>deorcian</i>	<i>deorcnes</i>	<i>deorcung</i>	'gloaming, twilight'
<i>forsacan</i>	<i>forsacennes</i>	<i>forsacung</i>	'denial'
<i>(ge)ðrāstan</i>	<i>ðrāstnes</i>	<i>ðrāstung</i>	'affliction, torment'
<i>(ge)ðrīstlācan</i>	<i>ðrīstlācnes</i>	<i>geðrīstlācung</i>	'presumption'
<i>(ge)ðwārian</i>	<i>(ge)ðwārnnes</i>	<i>geðwārung</i>	'consent'
<i>(ge)æfestian</i>	<i>æfestnes</i>	<i>æfestung</i>	'envy'

Base	-nes	-ung	Translation
<i>(ge)andettan</i>	<i>(ge)andettes</i>	<i>andettung</i>	‘confession, profession’
<i>(ge)blāwan</i>	<i>blāwennys</i>	<i>blāwung</i>	‘blast; inflation’
<i>(ge)cīegan</i>	<i>gecīgednes</i>	<i>(ge)cīgung</i>	‘invocation’
<i>(ge)costian</i>	<i>gecostnes</i>	<i>(ge)costung</i>	‘temptation’
<i>(ge)drēfan</i>	<i>(ge)drēfednes</i>	<i>drēfung</i>	‘disturbance’
<i>(ge)dreccan</i>	<i>(ge)dreccednes</i>	<i>(ge)dreccung</i>	‘affliction’
<i>(ge)dysgian</i>	<i>dysignes</i>	<i>dysgung</i>	‘folly, madness’
<i>(ge)ēhtian</i>	<i>ēhtnes</i>	<i>ēhtung</i>	‘persecution’
<i>(ge)ealdian</i>	<i>ealdnes</i>	<i>ealdung</i>	‘process of growing old’
<i>(ge)fāgian</i>	<i>fāgnes</i>	<i>fāgung</i>	‘variety’
<i>(ge)feorrian</i>	<i>feornes</i>	<i>feorrung</i>	‘removal, departure’
<i>(ge)forhtian</i>	<i>forhtnes</i>	<i>forhtung</i>	‘fear’
<i>(ge)frætwan</i>	<i>frætwednes</i> <i>frætene</i>	<i>(ge)frætwung</i>	‘adorning, ornament’
<i>(ge)frēfran</i>	<i>frēfernes</i>	<i>frēfung</i>	‘consolation’
<i>(ge)frignan</i>	<i>(ge)frignes</i>	<i>frignung</i>	‘question’
<i>(ge)heardian</i>	<i>heardnes</i>	<i>heardung</i>	‘hardening’
<i>(ge)hīwian</i>	<i>hīwnes</i>	<i>(ge)hīwung</i>	‘appearance’
<i>(ge)hlēowan</i>	<i>hlēownes</i>	<i>hlēowung</i>	‘shelter’
<i>(ge)leornian</i>	<i>leornes</i>	<i>leornung</i>	‘learning; discipleship’
<i>(ge)lustfullian</i>	<i>(ge)lusfullnes</i>	<i>(ge)lustfullung</i>	‘desire, delight’
<i>(ge)lȳtan</i>	<i>lȳtelnes</i>	<i>gelȳtung</i>	‘insufficiency, want’
<i>(ge)māene</i>	<i>gemāennes</i>	<i>gemānung</i>	‘marriage; fellowship’
<i>(ge)māensumian</i>	<i>gemāensumnes</i>	<i>māensumung</i>	‘fellowship’
<i>(ge)medemian</i>	<i>medemnes</i>	<i>medemung</i>	‘measuring, measure’
<i>(ge)nerian</i>	<i>generdnes</i>	<i>nerung</i>	‘guard, protection’
<i>(ge)openian</i>	<i>openness</i>	<i>(ge)openung</i>	‘opening, disclosure’
<i>(ge)pīnian</i>	<i>pīnnes</i>	<i>pīnung</i>	‘torment’
<i>(ge)reordian</i>	<i>gereordnes</i>	<i>(ge)reordung</i>	‘refection, meal’
<i>(ge)scendan</i>	<i>gescendnes</i>	<i>scendung</i>	‘reproach, affliction’
<i>(ge)sēðan</i>	<i>gesēðnes</i>	<i>(ge)sēðung</i>	‘affirmation, proof’
<i>(ge)styrian</i>	<i>styrenes</i>	<i>styrung</i>	‘motion; disturbance’
<i>(ge)swāes</i>	<i>(ge)swāesnes</i>	<i>swāesung</i>	‘lenitive’
<i>(ge)weaxan</i>	<i>(ge)weaxnes</i>	<i>weaxung</i>	‘growth, increase’
<i>(ge)wīsian</i>	<i>(ge)wīsnes</i>	<i>wīsung</i>	‘direction, guidance’
<i>(ge)wrēgan</i>	<i>(ge)wrēgednes</i>	<i>wrēgung</i>	‘accusation’
<i>(ge)wyrcean</i>	<i>wyrcnes</i>	<i>wyrcung</i>	‘working, work’
<i>gefegnian</i>	<i>fæfennes</i>	<i>(ge)fegnung</i>	‘rejoicing’
<i>genyhtsumian</i>	<i>genyhtsumnes</i>	<i>genyhtsumung</i>	‘abundance’
<i>geornan</i>	<i>geornnes</i>	<i>geornung</i>	‘desire; diligence’
<i>gūtsian</i>	<i>gūtsiendnes</i>	<i>gūtsung</i>	‘avarice, greediness’
<i>gif 2</i>	<i>gifnes</i>	<i>gifung</i>	‘consent’
<i>hār</i>	<i>hārnes</i>	<i>hārun</i>	‘hoariness, old age’
<i>hātian</i>	<i>hātnes</i>	<i>hātung</i>	‘heating, inflammation’
<i>habban</i>	<i>hæbbednes</i>	<i>hæbbung</i>	‘continence, constraint’
<i>heord 1</i>	<i>(ge)heordnes</i>	<i>geheordung</i>	‘guard, watch’
<i>herian 1</i>	<i>(ge)herenes</i>	<i>herung</i>	‘praise’
<i>hrohian</i>	<i>horines</i>	<i>hrohung</i>	‘spitting’
<i>hyspan</i>	<i>hyspnes</i>	<i>hyspung</i>	‘contumely; reproach’
<i>lēas 1</i>	<i>lēasnes</i>	<i>lēasung</i>	‘leasing, deceit’
<i>līðian</i>	<i>līðnes</i>	<i>līðung</i>	‘alleviation, relief’
<i>nīwe 1</i>	<i>nīwnes</i>	<i>nīwung</i>	‘rudiment’
<i>nīder 1</i>	<i>nīðernes</i>	<i>nīðerung</i>	‘humiliation’
<i>oferswīðan</i>	<i>oferswīðnes</i>	<i>oferswīðung</i>	‘pressure, distress’
<i>oncīgan</i>	<i>oncīgnes</i>	<i>oncīgung</i>	‘invocation’
<i>oncnāwan</i>	<i>oncnāwennes</i>	<i>oncnāwung</i>	‘acknowledgement’
<i>onsāegan</i>	<i>onsāegednes</i>	<i>onsāegung</i>	‘sacrifice’
<i>onsittan 1</i>	<i>onsetenes</i>	<i>onsetnung</i>	‘plot, wile’
<i>onsittan 2</i>	<i>onsāetnes</i>	<i>onsāetnung</i>	‘snare’
<i>ortrūwian</i>	<i>ortrēownes</i>	<i>ortrūwung</i>	‘despair’

Base	-nes	-ung	Translation
<i>ðrēat</i>	<i>ðrēatnes</i>	<i>ðrēatung</i>	‘threatening; correction’
<i>rīpian</i>	<i>rīpnes</i>	<i>rīpung 1</i>	‘ripening, maturity’
<i>scyldigian</i>	<i>scyldignes</i>	<i>scyldigung</i>	‘guilt’
<i>staðolfæst</i>	<i>staðolfæstnes</i>	<i>staðolfæstnung</i>	‘foundation’
<i>strēowen</i>	<i>strēownes</i>	<i>strēwung</i>	‘what one lies on’
<i>swært</i>	<i>swærtnes</i>	<i>swærtung</i>	‘darkness’
<i>swīge 2</i>	<i>swīgnes</i>	<i>swīglung</i>	‘silence’
<i>tōberstan</i>	<i>tōborstennes</i>	<i>tōberstung</i>	‘bursting, inflation’
<i>ðurhwunian</i>	<i>ðurhwunenes</i>	<i>ðurhwunung</i>	‘perseverance’
<i>wæt 1</i>	<i>wætnes</i>	<i>wætung</i>	‘wetting, moisture’
<i>wearg 2</i>	<i>weargnes</i>	<i>weargung</i>	‘misery’
<i>wīdercweðan</i>	<i>wīdercweðidnes</i>	<i>wīdercweðung</i>	‘contradiction’
<i>wiergan</i>	<i>wyrignes 1</i>	<i>wyrigung</i>	‘cursing’
<i>wiernan</i>	<i>wirgednes</i>	<i>wiernung</i>	‘refusal’

Figure 15: The competition of the suffixes *-nes* and *-ung*.

Figure 16 provides the semantic analysis of the bases of derivation of *-nes* and *-ung*.

Base	Inflectional morphology	Semantic analysis	Predicate translation
<i>āblācan</i>	v. w 1	Causative	‘bleach, whiten’
<i>āðenian</i>	v. w 1	Causative	‘stretch by force’
<i>āðindan</i>	v. w 1	Stative	‘swell; melt’
<i>āblāwan</i>	v. w 1	Active	‘blow (away), puff up’
<i>ārweorð</i>	adj.	Abstract	‘honourable’
<i>āswindan</i>	v. w 1	Stative	‘become weak, shrink; perish’
<i>bebyrgan 1</i>	v. w 1	Active	‘bury’
<i>beswīcan</i>	v. w 1	Active	‘deceive, seduce, betray’
<i>cwīðan</i>	v. w 1	Active	‘bewail; accuse’
<i>deorcian</i>	v. w 1	Stative	‘grow dim’
<i>forsacan</i>	v. w 1	Active	‘deny’
<i>(ge)ðræstan</i>	v. w 1	Active	‘writhe, twist, press; force; oppress’
<i>(ge)ðrīstlācan</i>	v. w 1	Stative	‘presume’
<i>(ge)ðwærian</i>	v. w 1	Active	‘consent’
<i>(ge)æfestian</i>	v. w 1	Stative	‘be or become envious’
<i>(ge)andettan</i>	v. w 1	Active	‘confess, acknowledge’
<i>(ge)blāwan</i>	v. w 1	Stative	‘blow, breathe, be blown’
<i>(ge)cīegan</i>	v. w 1	Active	‘call, summon’
<i>(ge)costian</i>	v. w 1	Active	‘tempt, try, prove’
<i>(ge)drēfan</i>	v. w 1	Active	‘stir up, excite, disturb; trouble, vex’
<i>(ge)dreccan</i>	v. w 1	Active	‘vex, irritate, oppress, afflict’
<i>(ge)dysgian</i>	v. w 1	Active	‘act, foolishly, blaspheme’
<i>(ge)ēhtan</i>	v. w 1	Active	‘attack, persecute, pursue, harass’
<i>(ge)ealdian</i>	v. w 1	Stative	‘grow old’
<i>(ge)fāgian</i>	v. w 1	Stative	‘change in colour, vary’
<i>(ge)feorrian</i>	v. w 1	Active	‘depart’
<i>(ge)forhtian</i>	v. w 1	Stative	‘be afraid, fear, dread’
<i>(ge)frætwan</i>	v. w 1	Active	‘adorn, decorate’
<i>(ge)frēfran</i>	v. w 1	Active	‘console’
<i>(ge)frignan</i>	v. w 1	Active	‘interrogate’
<i>(ge)heardian</i>	v. w 1	Active	‘harden’
<i>(ge)hīwian i</i>	v. w	Active	‘form, fashion; colour’
<i>(ge)hlēowan</i>	v. w	Causative	‘warm, make warm, cherish’
<i>(ge)leornian</i>	v. w	Active	‘learn, read, study, think about’
<i>(ge)lustfullian</i>	v. w II	Stative	‘rejoice, enjoy; desire’
<i>(ge)lȳtan</i>	v. w	Active	‘bend, stoop, decline’
<i>(ge)māene</i>	adj.	Abstract	‘common, public, general, universal’
<i>(ge)māensumian</i>	v. w 2	Active	‘impart; partake of, participate’
<i>(ge)medemian</i>	v. w	Active	‘mete out, allot, assign’

Base	Inflectional morphology	Semantic analysis	Predicate translation
<i>(ge)merian</i>	v. w 1	Active	‘save, rescue, liberate’
<i>(ge)openian</i>	v. w 2	Active	‘open, open up, disclose’
<i>(ge)pīnian</i>	v. w.	Active	‘torture, torment’
<i>(ge)reordian</i>	v. w	Causative	‘feed’
<i>(ge)scendan</i>	v. w	Causative	‘put to shame, confound, discomfit’
<i>(ge)sēðan</i>	v. w 1	Active	‘affirm, testify; prove’
<i>(ge)styrian</i>	v. w 1 and 2	Active	‘stir, move, rouse, agitate’
<i>(ge)swāes</i>	adj.	Abstract	‘intimate, special, favourite, dear’
<i>(ge)weaxan</i>	v. st VIIc	Stative	‘grow, be fruitful’
<i>(ge)wīsian</i>	v. w	Active	‘direct, instruct, guide, lead’
<i>(ge)wrēgan</i>	v. w	Causative	‘excite, stir up’
<i>(ge)wyrčan</i>	v. w 1	Active	‘prepare, perform, do, make, work’
<i>gefægñian</i>	v. w 2	Stative	‘rejoice, be glad, exult’
<i>genyhsumian</i>	v. w 2	Stative	‘suffice, abound’
<i>geornan</i>	v. w 1	Stative	‘strive, be eager, desire’
<i>gūtsian</i>	v. w	Stative	‘be greedy, long for, covet’
<i>gif 2</i>	N. n	Concrete	‘gift, grace’
<i>hār</i>	adj.	Concrete	‘hoar, hoary, grey, old’
<i>hātian</i>	v. w 2	Stative	‘be or get hot’
<i>habban</i>	v. irr.	Stative	‘have; possess, own, hold’
<i>heord 1</i>	N. f.	Abstract	‘herd, flock; keeping, care’
<i>herian 1</i>	v. w 1	Active	‘extol, praise, commend’
<i>hrohian</i>	v. w.	Active	‘cough’
<i>hyspan</i>	v. w	Active	‘mock, scorn, deride, revile’
<i>lēas 1</i>	adj.	Abstract	‘without, free from, devoid of’
<i>līðian</i>	v. w	Stative	‘be bereft of’
<i>nīwe 1</i>	adj.	Abstract	‘new, fresh, recent, novel’
<i>nīðer 1</i>	adv.		‘below, beneath, down, downwards’
<i>oferswīðan</i>	v. w and st	Active	‘overpower, overcome’
<i>oncīgan</i>	v. w 1	Active	‘call upon, invoke’
<i>oncnāwan</i>	v. st VIIe	Stative	‘understand, know, perceive’
<i>onsāgan</i>	v. w 1	Causative	‘prostrate’
<i>onsittan 1</i>	v. st V	Active	‘seat oneself in, occupy; oppress’
<i>onsittan 2</i>	v. st. V	Stative	‘fear, dread’
<i>ortrūwian</i>	v. w 2	stative	‘despair, doubt’
<i>ðrēat</i>	N. m	Concrete	‘press, crowd, throng, host, troop’
<i>rīpian</i>	v. w	Stative	‘become ripe, ripen’
<i>scyldigian</i>	v. w 2	Active	‘sin’
<i>staðolfæst</i>	adj.	Concrete	‘fixed, firm, steadfast’
<i>strēowen</i>	N. f.	Concrete	‘resting-place, couch, bed’
<i>sweart</i>	v. st V	Abstract	‘swarthy, black, dark’
<i>swīge 2</i>	Adj.	Abstract	‘still, quiet, silent, taciturn’
<i>tōberstan</i>	v. st IIIc	Causative	‘cause to burst’
<i>ðurhwunian</i>	v. w 2	Active	‘settle down’
<i>wæt 1</i>	adj.	Concrete	‘wet, moist, rainy’
<i>wearg 2</i>	adj.	Abstract	‘wicked, cursed, wretched’
<i>wīðercweðan</i>	v. st V	Stative	‘withstand’
<i>wiergan</i>	v. w 1	Active	‘abuse, outlaw, condemn, curse’
<i>wiernan</i>	v. w 1	Active	‘withhold, be sparing of, deny’

Figure 16: Analysis of the bases of derivation of *-nes* and *-ung*.

As can be seen in figure 16, there are not clearcut differences regarding the bases of derivation of the suffixes *-nes* and *-ung*. A tendency towards weak verbs and another one towards active verbs can be identified, but many exceptions arise in these respects.

To recapitulate, the analysis of the bases of the derivatives with affixes in competition has shown, in general, tendencies and only exceptionally has it turned out a clearcut distinction between one suffix and its counterpart. To close this analysis, the textual occurrences of the

derivatives with the suffixes under analysis are brought into the discussion. The instances of competition listed above have been quantified in *The Dictionary of Old English Corpus* (Healey et al 2004) in the segment A-G, which is the one covered by *The Dictionary of Old English* as published so far (Healey 2008). The results follow in table 2.

Affixes in competition	Textual occurrences
<i>-end</i>	104
<i>-ere</i>	461
<i>-inced</i>	4
<i>-ling</i>	3
<i>-nes</i>	646
<i>-dōm</i>	210
<i>-hād</i>	75
<i>-rāden</i>	49
<i>-scipe</i>	179
<i>-ere</i>	7
<i>-estre</i>	6
<i>-ð</i>	303
<i>-nes</i>	279
<i>-nes</i>	322
<i>-ling</i>	95
<i>-nes</i>	539
<i>-ung</i>	447

Table 2: Occurrences of the suffixes in competition A-G.

As can be seen in table 2, affix competition in nominal suffixation is mainly about the suffix *-nes*. The previous analysis has shown that this suffix enters the highest number of patterns of competition (4), while table 2 demonstrates that, from a purely quantitative point of view, *-nes* is the winner of all the patterns of rivalry, except the one that also involves *-ð*. Two reasons can be given for this exception. One has to do with the representativeness of the data. The letters A-G represent more than one half of *The Dictionary of Old English* and therefore a conclusion based on this amount of information can be extrapolated to the whole dictionary, but still the results have to be taken with caution. The other reason is the effect of the patterns of competition on the quantification. That is, the suffix *-nes* is second to *-ð* but if all its occurrences of the affix, which are split in table 2, are gathered, this suffix outnumbers any other affix in the set. Apart from these remarks on *-nes*, other conclusions can be drawn from table 2. In table 2 the affixes in bold face are the winners of each competition. In general, they are the ones that have survived into Present-day English, but two precisions have to be made in this respect. The affixes in bold face can also coincide with purely derivational as opposed to originally inflectional affixes (as is the case with *-ere* vs. *-end*, which had been used for the inflection of the present participle before becoming derivative). The affixes in bold also represent those that have been productive for a longer time throughout the history of English, according to Marchand (1969). This is the case with *-rāden*, which did not survive into Middle English, as opposed to *-scip*, which is found in many Middle English examples and even has one recent formation, *internship* (from 1924, according to Marchand 1969: 245).

3. Conclusions

This journal article has offered a study in the instances of suffix competition that arise in Old English. The analysis was aimed at answering the following research questions:

(i) What are the instances of affix competition in the formation of Old English nouns? In the lexical database of Old English *Nerthus* there are 4,571 suffixed nouns, out of which

3,456 have been found that enter a pattern of affix competition, including: *-ð* (168 instances), *-dōm* (52 instances), *-end* (311 instances), *-ere* (258 instances), *-estre* 52 instances), *-hād* (44 instances), *-incel* (14 instances), *-ing* (305 instances), *-lāc* (31 instances), *-ling*, (46 instances), *-nes* (1,249 instances), *-rāden* (46 instances), *-scipe* (102 instances) and *-ung* (778 instances). All instances of competition comprise three derivatives. The only case of three-suffix competition is *cynelicnes-cynedōm-cynehād*. The main patterns of competition reflect either the agent nominalization (*drive-driver*) or the result nominalization (*drive-driving*). This means that the bases of derivation are in most cases nouns. The result nominalization turns out more patterns of competition and more derivatives involved than the agent nominalization. Other important patterns of competition include quality nominalizations (*bold-boldness*) and possession (*king-kingdom*). The bases of derivation of quality nominalization are adjectival while possession requires a nominal base.

(ii) Can affix competition be explained exclusively on morphological grounds? The competition cannot be explained on morphological grounds only. There are, however, directions of explanation that deserve mention. There is a tendency for *-end* and *-ere* to attach to weak verbs from class 1, although there are also many derivatives from class 2 weak verbs and several classes of strong verbs. Regarding the suffixes *-ere* and *-estre*, the competition can be explained on the basis of the gender of the derivative, so that *-ere* is usually attached to masculines while *-estre* is found in feminines. As for the suffixes *-incel*, *-ing* and *-ling*, a morphological difference holds among the three suffixes. Whereas the suffix *-incel* is found in neuter nouns both *-ing* and *-ling* form masculine nouns, mainly from other nouns or adjectives. The suffixes *-dōm* and *-hād* are added to nouns and adjectives to form mainly masculine nouns while the suffix *-nes* is attached only to adjectives in order to form mainly feminine nouns. The suffix *-lāc* is added mainly to nouns in order to form neuter and masculine nouns. As for *-rāden*, it is a suffix added to nouns in order to form other nouns from the feminine gender. Finally, *-scipe* is attached to both nouns and adjectives to form masculine nouns. Regarding *-nes*, *-ing* and *-ung*, the three suffixes form abstract feminine nouns, although the suffix *-nes* forms such nouns from adjectives while the suffixes *-ing* and *-ung* are found in deverbal nouns.

(iii) Can affix competition be accounted for in terms of the semantics of the base of derivation exclusively? Again, tendencies rather than strict rules can be found on the semantic side. Although complementary criteria of analysis are required, the following points can be made. The competition between the suffixes *-end* and *-ere* only arises when there is an active verb that functions as base of derivation with both affixes. The suffixes *-ere* and *-estre* usually attach to active verbs and concrete nouns. The nominal bases of derivation that partake in the competition of the suffixes *-dōm*, *-nes* and *-hād* are as a general rule concrete and reflect social status whereas the basic adjectives are in general abstract and refer to social or moral qualities. The bases that turn up in the competition of the suffixes *-ð* and *-nes* are morphologically heterogeneous, but from the semantic point of view they represent abstract nouns. In the competition of the suffixes *-nes* and *-ing*, the bases are often active weak verbs, most of them from class 1, and concrete nouns. Finally, there are no clear tendencies regarding the bases of derivation of the suffixes *-nes* and *-ung*, although active verbs from the weak classes seem to be favoured.

(iv) What is the role of diachronic evolution in the competition that arises among the affixes that attach to Old English derived nouns? The quantification of the textual occurrences of the suffixes in competition has shown that a clear winner arises in most pattern of competition. Such a winner is the affix that has survived for a longer time throughout the diachronic evolution of the language. Some precisions have been made in this respect, though. As regards the suffixes *-end* and *-ere*, the purely derivational suffix *-ere* has been kept whereas the originally inflectional *-end* (present participle) has got lost. In other

cases, neither affix has survived into Present-day English, but one of them has been productive for a longer time. For instance, *-ræden* did not survive into Middle English whereas *-scip*, which is found in many Middle English derivatives, has one recent formation, *internship* (Marchand 1969: 245).

References

- Bauer, L. 2006. Competition in English Word Formation. In A. van Kemenade and B. Los (eds.), *The Handbook of the History of English*. Oxford: Blackwell. 177-197.
- Giegerich, H. 1999. *Lexical Strata in English*. Cambridge: Cambridge University Press.
- Haselow, A. 2011. *Typological Changes in the Lexicon*. Berlin: Mouton de Gruyter.
- Hay, J. 2003. *Causes and Consequences of Word Structure*. New York: Routledge.
- Healey, A. diPaolo (ed.) with J. Price Wilkin and X. Xiang 2004. *The Dictionary of Old English Web Corpus*. Toronto: Dictionary of Old English Project, Centre for Medieval Studies, University of Toronto.
- Healey, A. diPaolo ed. 2008. *The Dictionary of Old English in Electronic Form A-G*. Toronto: Dictionary of Old English Project, Centre for Medieval Studies, University of Toronto.
- Lieber, R. 2004. *Morphology and Lexical Semantics*. Cambridge: Cambridge University Press.
- Kastovsky, D. 2006. Typological Changes in Derivational Morphology. In A. van Kemenade and B. Los (eds.), *The Handbook of The History of English*. Oxford: Blackwell. 151-177.
- Marchand, H. 1969. *The Categories and Types of Present-Day English Word-Formation*. München: C.H. Beck'sche Verlagsbuchhandlung.
- Martín Arista, J. 2010a. Lexical negation in Old English. *NOWELE-North-Western European Language Evolution* 60/61: 89-108.
- Martín Arista, J. 2010b. OE strong verbs derived from strong verbs. *SKASE Journal of Theoretical Linguistics* 7: 36-56.
- Martín Arista, J. 2011a. Projections and Constructions in Functional Morphology. The Case of Old English HRĒOW. *Language and Linguistics* 12/2: 393-425.
- Martín Arista, J. 2011b. Adjective formation and lexical layers in Old English. *English Studies* 92/3: 323-344.
- Martín Arista, J. 2011c. Morphological relatedness and zero alternation in Old English. In P. Guerrero Medina (ed.), *Morphosyntactic Alternations in English*. London: Equinox, 339-362.
- Martín Arista, J. 2012. The Old English Prefix Ge-: A Panchronic Reappraisal. *Australian Journal of Linguistics* 32/4: 411-433.
- Martín Arista, J. Forthcoming-a. Lexical database, derivational map and 3D representation. *Revista Española de Lingüística Aplicada*.
- Martín Arista, J. Forthcoming-b. Recursivity, derivational depth and the search for Old English lexical primes. *Studia Neophilologica*.
- Martín Arista, J. Forthcoming-c. Noun layers in Old English.
- Martín Arista, J. and F. Cortés Rodríguez. Forthcoming. From directionals to telics: meaning construction, word-formation and grammaticalization in Role and Reference Grammar. In M. A. Gómez González, F. Ruiz de Mendoza Ibáñez and F. González García (eds.), *Form and function in language: Functional, cognitive and applied perspectives*. Amsterdam: John Benjamins.