A STUDY OF NOUN-DERIVING SUFFIXES IN COMPETITION IN MIDDLE ENGLISH

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Abstract

This paper presents a corpus-driven analysis of the Germanic suffixes -dom, -hood, -lac, -ness, -rede(n), and -ship in Middle English. The main objective is to assess the occurrence and use of synonymous derivations in the corpora examined, namely the Middle English Grammar Corpus (MEG-C) (Stenroos et al. 2014) and the Middle English Local Documents Corpus (MELD) (Stenroos and Thengs 2014). The six suffixes could be attached to the same base with no apparent distinction in meaning, giving way to competing abstract formations. The analysis can shed light and offer fresh insight into the co-occurrence of these contending formations in different Middle English text types, including specialised and more general texts, and help explain their survival or demise.

Keywords: derivational morphology, synonymous derivations, Middle English, *MEG-C*, *MELD*.

Resumen

Este artículo presenta un análisis basado en corpus de los sufijos germánicos -*dom*, -*hood*, -*lac*, -*ness*, -*rede(n)* y -*ship* en inglés medio. El objetivo principal es evaluar la aparición y uso de derivaciones sinónimas en los corpus examinados, a saber, el *Middle English Grammar Corpus (MEG-C)* (Stenroos et al. 2014) y el *Middle English Local Documents Corpus (MELD)* (Stenroos y Thengs 2014). Los seis sufijos en cuestión pueden aparecer unidos a la misma base sin distinción semántica aparente, dando lugar a sustantivos abstractos en competición. El análisis puede arrojar luz y proporcionar nuevos datos sobre la coexistencia de estas formaciones rivales en distintos tipos de texto en inglés medio, entre los que se incluyen textos especializados y más generales, así como ayudar a explicar su supervivencia o desaparición.

Palabras clave: morfología derivativa, derivaciones sinónimas, inglés medio, *MEG-C*, *MELD*.

1. Introduction

Inflectional and derivational morphology have been traditionally considered the two domains of morphology; the former is concerned with the "derivation of word-forms from uninflected simple or complex bases", whereas the latter involves the "creation of new lexemes" (Kastovsky 2009: 151). The present study delves into historical derivational morphology and, more specifically, into suffixation, which is understood as the process by means of which a bound morpheme is added to a base, in Middle English. This is an area which has attracted increasing scholarly attention with a wealth of studies in the last decades (Zbierska-Sawala 1993; Dalton-Puffer 1996; Miller 1997; Ciszek 2008; Trips 2009, to name but a few).¹ Within this area the focus of the paper is on derivational suffixes building abstract nouns. The main aim is to carry out a corpus-driven analysis of the Germanic suffixes -NESS,² -SHIP, -DOM, -HOOD, -LAC and -REDE(N) in Middle English in order to describe them and to assess the occurrence and use of suffixal doublets in the corpora examined. The six above-mentioned suffixes have been selected because they could be attached to the same base with no evident distinction in meaning, vielding rival abstract formations or suffixal doublets.³

Recent studies on the topic of Middle English derivational suffixes include those by Ciszek (2008), who analyses seven Early Middle English suffixes (amongst which -DOM, -HED, -SHIP and -NESS are included), taking into account semantics, productivity and dialect distribution, and Trips (2009), who traces the development of -HOOD, -DOM and -SHIP through the history of English and also deals with the rivalry between suffixes.⁴ Synonymous derivations in different historical corpora have also been recently investigated by Esteban-Segura (2011) and Gardner (2011). Lindsay and Aronoff (2013) tackle the issue of competing suffixes from a diachronic perspective by paying attention to the productivity of certain suffixes. Despite this and previous work (Aronoff 1980; Riddle 1985; Romaine 1985; Plag 1999; Bauer 2009; Hegedüs 2014), the study of synonymous derivations in English is "still in need of more thorough investigation" (Kastovsky 2009: 169).

2. Methodology

The investigation is corpus-based, which allows for both quantitative and qualitative analysis. The body of texts transcribed within the Middle English Scribal Texts Programme at the University of Stavanger, 345 of which are to date unpublished,⁵ have been examined in order to retrieve and assess data. The texts date from the late mediaeval period (ca. 1200-1500) and are divided into two main corpora: the Middle English Grammar Corpus (MEG-C) (Stenroos et al. 2014) and the Middle English Local Documents Corpus (MELD) (Stenroos and Thengs 2014). MEG-C 2014.0, an 'in between', unpublished version of MEG-C containing 482 texts and 791,689 words, has been the one employed for the present study. The latest published version is MEG-C 2011.1 with 410 texts, and the team aims to publish a new one with at least 500 texts. MEG-C 2014, hereafter simply referred to as MEG-C, contains 256 documentary texts (155,448 words) and 226 non-documentary texts (636,241 words). For the analysis, only the nondocumentary texts have been taken into consideration to avoid any kind of overlap with the texts in MELD 2014, which is the other corpus that has been examined. Non-documentary texts in MEG-C include religious prose, alliterative verse, medical and cookery recipes, etc.6

MELD 2014, henceforth *MELD*, contains 518 documentary texts (legal, administrative and business documents and letters) and the overall word count is 283,922. The texts are dated and connected to specific places. Approximately half of the texts are also in *MEG-C*, which explains why the documentary texts in *MEG-C* have been left out. This division allows studying the suffixes in different text types: on the one hand, those texts in *MEG-C*, which are religious, medical, literary, etc., and, on the other hand, those in *MELD*, which are only documentary. Thus, the results can provide valuable insights into the development and usage of suffixes and words in certain text types in the history of English.⁷

The corpora have been constructed so that they are suited for use with concordance programmes such as *AntConc* (Anthony 2011), which has been in fact the one employed to retrieve data. In order to get all the instances of each of the suffixes under consideration, all the forms of the suffix in Middle English as provided by the *Middle English Dictionary* (*MED*) and the *Oxford English Dictionary* (*OED*) were taken into account and wild-card searches were made to cater for all possible

spelling variants.⁸ The data were then copied into Excel spreadsheets. The results had to be culled manually, which proved to be a time-consuming task. After the irrelevant data had been weeded out,⁹ the information in the Excel spreadsheets was distributed into six columns: context, word, the lemma taken from the *MED* (so as to unify all the different spelling variants of the same word), the reference, the meaning from the *MED*, and the word in the *OED*. The *OED* online was taken as a reference to check whether the word has survived into Present-Day English and, if so, whether it is obsolete or archaic. The following have been registered: the root or base in Present-Day English,¹⁰ the corpus (*MEG-C* or *MELD*), the suffix in question, and whether the word appears as a main entry or as an alternative form within that entry.

The different sheets containing the individual suffixes were then combined in a master file and an Access database was created. The only difference is that the Reference column in Excel was replaced with the Corpus code in Access (see Figures 1 and 2). With the Access database, the possibilities for research are plentiful. We can, for instance, look for the forms with the suffix -HOOD in the Northern half of the country in the 15th century, to find out, for example, that they only occur in the genres "Document" and "Religious prose". We can compare them with those found in the South or in different centuries.

CONTEXT	WORD	LEMMA (MED)	REFERENCE	MEANING (MED)) OED	ROOT	CORPUS	SUFFL
242 L OF GOSTELY DEVE FOR SINNE IF VEN WILL AND BY CLENLYNES OF SAULE COM TO 1				K1 NOT IN MED		CLEANLY	MEGC	ness
409 LDES yAT NON VNEUENNES MAY BE IN HYM . WHOM SO HE DAMPNES & WHOM SO HE	DAMPNES	*dampness	Derbys_L0188_	OK NOT IN MED	dampness	DAMP	MEGC	ness
822 ME ALSO VIT A MAN LYE NOT FOR YE MOUTHE VIT LYES DAMPNES YE SOVLE FOR NO LE				K1_NOT IN MED		DAMP	MEGC	ness
311 WIC=[KID FENDE WIT-OUTYN LIGHT ; :CRIST CROSE YE DAmP=[NYS & AL YI MYGHT .: I	DAmPNYS	*dampness	Lincs_L0213_0	K1, NOT IN MED	dampness	DAMP	MEGC	ness
258 RO COURT ALE HER FOR TO PLAY & THEN VENUS WAS SET DEFINES TO DELE & GAR10	DEFTNES	*definesse	Ches_L0104_0	K1 NOT IN MED	definess	DEFT	MEGC	ness
240 CHAUNGEABLE AND ALSO DEDLY :THUS FEL MANKIND INTO MYSCHEUESNES AFTER 1	IYSCHEUESNES	*mischévõusnesse	Leics_L0299_O	K1 NOT IN MED	mischievousness	MISCHIEVOUS	MEGC	ness
506 F HOLYNESSE ; WHI MAKEST YOU YIN-SELF A VESSEL OF PYNEFULNESSE . : A LADY WIF	PYNEFULNESSE	*pinefulnesse	Norfolk_L0424	OK NOT IN MED; pain	NOT IN OED	PINEFUL	MEGC	ness
162 AT SOUPER~ . AND NO THYNG THE KYNG WYSTE OF HER TRAYTORSNESSE :AND WHI	RAYTORSNESSE	*traitõumesse	Herefs_L7481_	OK NOT IN MED; traitu	ourhi traitorousness	TRAITOR	MEGC	ness
655 BUT IF YIU WILT . & YAT SCHAL NOT BEN IN DEWER NE ANGRYNESSE AND HEUYNESS A	NGRYNESSE	angrines(se	Norfolk L4252	OK anger	angriness (rare)	ANGRY	MEGC	ness
94 YE FIFT IS LYTHERNES OF HERT WIT-IN .: YE SEXT IS ARGHNES TO BE-GYN .: OTHER SA	RGHNES	arghnes(se	YWR_L0410_0	<2_cowardice	arghness (obsolete	ARGH	MEGC	ness
158 NNES HATHE FORSAKYN THE & NOT THOW THY SYNNES . : ARGHNES OF DREDE IS WA	RGHNES	arghnes(se	YWR_L0597_0	K1_ cowardice	arghness (obsolete	ARGH	MEGC	ness
245 OUn yY HEDE TO LAW WHIL ANY MANN SPEKES WIT GRETE BESENES HERKEN HIS WOR	BESENES	bisinesse	Ches_L0043_0	K1 occupation, busine	ess; d business (obsolete	BUSY	MEGC	ness
932 E BRERES MAY BETOKYN YE PRIK=[KYNGS OF VICYS & YE BESENES OF YIS LIFE // AND B	BESENES	bisīnesse	Notts L0164 O	K2 occupation, busing	ss; d business (obsolete	BUSY	MEGC	ness
028 WONDRE THING IT WERE YAT MAN YAT GYFE HYM TO YE BESENES OF YE WERLDE N	BESENES	bisinesse	YWR_L0454_0	K1_ occupation, busine	ess; d business (obsolete	BUSY	MEGC	ness
58 F GOD ALLE WORD[LI RICHES, WURCHIPES AND OUTWARD BESENESSES, AND HOLE	BESENESSES	bisInesse	Berks_L6770_C	K1 occupation, busine	ss; d business (obsolete	BUSY	MEGC	ness
267 AYNE VEN IN VE MANER BE REPENTAUNT AND DO YOURE BESINES TO DO VERY PENE	BESINES	bisinesse	Leics L0299 O	K1 occupation, busine	ss: dbusiness (obsolete	BUSY	MEGC	ness

Figure 1. Arrangement of data in Excel

CONTEXT •	WORD •	Lemma (MED) +	Corpus code 🔹	Meaning (MED) ·	OED •	ROOT •	CORPUS -	SUFFIX
L OF GOSTELY DEY\E FOR SINNE IF Y\E\I WILL AND BY CLENLYNES OF SAULE	CLENLYNES	*clenlinesse	L0299	NOT IN MED	cleanliness	CLEANLY	MEGC	ness
LDES YAT NON VNEUENNES MAY BE IN HYM . WHOM SO HE DAMPNES & W	DAMPNES	*dampness	L0188	NOT IN MED	dampness	DAMP	MEGC	ness
ME ALSO y\T A MAN LYE NOT :FOR YE MOUTHE y\T LYES DAMPNES YE SOVE	DAMPNES	*dampness	L0217	NOT IN MED	dampness	DAMP	MEGC	ness
WIC=[KID FENDE W\T-OUTYN LIGHT ; :CRIST CROSE YE DAmP=[NYS & AL YI	DAmPNYS	*dampness	L0213	NOT IN MED	dampness	DAMP	MEGC	ness
RO COURT ALE HER FOR TO PLAY & THEN VENUS WAS SET DEFTNES TO DELE	DEFTNES	*deftnesse	L0104	NOT IN MED	deftness	DEFT	MEGC	ness
CHAUNGEABLE AND ALSO DEDLY :THUS FEL MANKIND INTO MYSCHEUESNE	MYSCHEUESNE	*mischevousnes	L0299	NOT IN MED	mischievousne	MISCHIEVOUS	MEGC	ness
F HOLYNESSE ; WHI MAKEST YOU YIN-SELF A VESSEL OF PYNEFULNESSE . : A	PYNEFULNESSE	*pinefulnesse	L0424	NOT IN MED; pain	NOT IN OED	PINEFUL	MEGC	ness
AT SOUPER" . AND NO THYNG THE KYNG WYSTE OF HER TRAYTORSNESSE	TRAYTORSNES:	*traitournesse	L7481	NOT IN MED; traitu	traitorousness	TRAITOR	MEGC	ness
BUT IF Y\U WILT . & YAT SCHAL NOT BEN IN DEWER NE ANGRYNESSE AND H	ANGRYNESSE	angrines(se	L4252	anger	angriness (rare	ANGRY	MEGC	ness
YE FIFT IS LYTHERNES OF HERT W\T-IN . :YE SEXT IS ARGHNES TO BE-GYN . :	ARGHNES	arghnes(se	L0410	cowardice	arghness (obso	ARGH	MEGC	ness
NNES HATHE FORSAKYN THE & NOT THOW THY SYNNES . :: ARGHNES OF DR	ARGHNES	arghnes(se	L0597	cowardice	arghness (obso	ARGH	MEGC	ness
OUN YY HEDE TO LAW WHIL ANY MANN SPEKES W\T GRETE BESENES HERKE	BESENES	bisinesse	L0043	occupation, busine	business (obsc	BUSY	MEGC	ness
E BRERES MAY BETOKYN YE PRIK= KYNGS OF VICYS & YE BESENES OF YIS LIF	BESENES	bisinesse	L0164	occupation, busine	business (obsc	BUSY	MEGC	ness
WONDRE THING IT WERE YAT MAN YAT GYFE HYM TO Y\E BESENES OF Y\E	BESENES	bisinesse	L0454	occupation, busine	business (obsc	BUSY	MEGC	ness
F GOD ALLE WORD[LI RICHES . WURCHIPES AND OUTWARD BESENESSES . A	BESENESSES	bisinesse	L6770	occupation, busine	business (obsc	BUSY	MEGC	ness
AYNE y\EN IN y\E MANER BE REPENTAUNT AND DO YOURE BESINES TO DO	BESINES	bisinesse	L0299	occupation, busine	business (obsc	BUSY	MEGC	ness

Figure 2. Arrangement of data in Access

Several modifications with regard to how the data appear in the corpora have been made. Letters, for instance, are transcribed as capitals, whereas lower-case letters

are employed for Middle English graphs (thorn, yogh, ash, eth), abbreviations and comments. The words have been changed to lower-case and the graphs have been replaced with the actual symbols for which they stand (e.g. FORyERHED > forþerhed 'further'; KNYzTHOD > knyʒthod 'knighthood'); for abbreviations italics have been used (e.g. BUXUmNES > buxumnes 'buxomness'; LOurDSCHYP > lourdschyp 'lordship'). Curly brackets ('{ }') that indicate insertions (in the corpora words are bracketed individually) have been deleted. Likewise, codes for word division across the line ('[') and ('=') have also been removed for the sake of clarity. Nonetheless, tildes which stand for squiggles ('~')—a type of flourish which may indicate an <e> or be otiose (e.g. towneshyp~ 'township')— have been kept. Hyphens ('-') joining two elements of what would correspond to a single word in Present-Day English have also been maintained (e.g. falsse-hed 'falsehead').

The study focuses on derived lexical categories, which can be inflected (as is the case of *kyngdomes* 'kingdoms', which is in the plural), and more specifically on nouns. It should be pointed out that *-ing* forms (such as *worschypyng* 'worshipping') have been excluded as they could be derived from verbs. Forms such as *hoggeshede* (*MED hogges-hēd* 'hogshead') and *merehed* (*MED mor* + *hēd* 'top of the moor') have not been considered either since these are compounds, with hed(e) being a noun rather than a suffix.

3. Analysis

3.1. Frequency of the suffixes

An overview of all the abstract noun derivation occurrences including the Germanic suffixes under study¹¹ and their overall frequencies, both absolute and normalised, is presented in Tables 1 and 2.

	MEG-C	MELD
-DOM	386	30
-HOOD	305	16
-NESS	2,454	541
-SHIP	349	321
-LAC	3	0
-REDE(N)	36	1

Table 1. Suffixes (tokens) attested in the corpora analysed (absolute frequencies)

	MEG-C	MELD
-DOM	6.06	1.05
-HOOD	4.79	0.56
-NESS	38.57	19.05
-SHIP	5.48	11.3
-LAC	0.04	0
-REDE(N)	0.56	0.03

Table 2. Suffixes (tokens) attested in the corpora analysed (normalised frequencies per 10,000 words)

In general, as can be more clearly seen in Figure 3, the frequency of all the derivative suffixes is higher in *MEG-C* than in *MELD*, except for the suffix -sHIP, which occurs more frequently in *MELD*. This can be explained by the presence of certain recurring words containing the suffix -sHIP in documentary texts, such as *lordship* or *worship*, as these were common forms of address in administrative correspondence and legal documents.

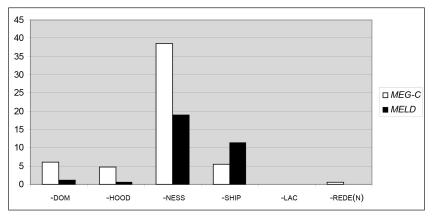


Figure 3. Suffixes (tokens) attested in the corpora analysed (normalised frequencies per 10,000 words)

3.2. Productivity of the suffixes

Productivity is a contentious issue in historical word-formation (Ciszek 2008: 21-31). According to Cowie and Dalton-Puffer (2002: 432), morphological

productivity is "not only a theoretical concept but a measurable property of wordformation rules". In order to measure the productivity of the suffixes,¹² attention has been paid to token and type frequency. Token frequency alone is not helpful as an indicator of the productivity of a given suffix, since "the token count is often inflated by a small number of very common types" (Cowie and Dalton-Puffer 2002: 426). On the other hand, the higher the number of different types, the more productive a suffix is. If suffix A has produced a greater number of new types than suffix B, it can be argued that suffix A is more productive than suffix B. Type figures have not been normalised because, following Cowie and Dalton-Puffer, normalising with tokens would be counting "types out of tokens (i.e. words in the text), which is not counting like out of like" (2002: 427). This makes it unfeasible to compare the two corpora in terms of types and therefore each corpus will be dealt with individually.

As can be seen in Table 3, the suffix with most types is -NESS in both corpora. The number of tokens is higher for -SHIP than for -NESS in *MELD*, but if we take into account types, -NESS is more productive.

	MEG-C	MELD
-DOM	14	4
-HOOD	43	5
-NESS	199	24
-SHIP	19	14
-LAC	2	0
-REDE(N)	6	1

Table 3. Suffixes (types) attested in the corpora analysed

3.3. Synonymous derivations

Synonymous derivations can be defined as rivalling forms from the same base with different suffixes with no apparent distinction in meaning that coexisted for a certain time in the language. Eventually one of the forms survived and the other or others (if more than two) were discarded or ousted, e.g. *smallness* and *smallship* (both forms are found in Middle English, but *smallship* has not survived into Present-Day English and is not even recorded in the *OED*; see Esteban-Segura 2011). The other possibility was that some semantic differentiation took place. Continuing with the -NESS and -SHIP dichotomy, both *hardness* and *hardship* have remained in Present-Day English, but with a clear difference in meaning. The fact that, at one point, they ceased to be synonymous enabled them to survive autonomously. Hegedüs (2014: 314-315) discusses another case of this semantic

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divergence: the free variants -ic / -ical in the example *economic crisis* vs. *economical person*. In this connection, Bauer argues that "where we have several forms, there is a tendency to try to distinguish them semantically, and where we have a single meaning, there is a tendency to try to express that consistently with a single form" (2009: 183). Lindsay (2012: 192), however, contends that while one affix will normally dominate, the less competitive affixes could still be productive if they "find a niche: a clearly defined subdomain within its potential domain —a subsystem that is therefore distinct and predictable to a speaker in spite of a general trend towards another affix". An instance of this is the suffix *-ical*, which has carved out a morphological productive niche for itself: this suffix became dominant when combined with stems that ended in *-olog* (Lindsay 2012: 201).

A remarkable number of synonymous derivations¹³ have been found, but with a different distribution among text types: all of the constructions occur in *MEG-C* and not a single one has been retrieved from *MELD*. This difference may be explained by the types of texts contained in *MELD*: legalese and administrative language, as happens with the terminology of other scientific disciplines, tends to avoid meaning identity so that ambiguity is reduced. As far as suffixal doublets are concerned, there is a total of 25 (which make up 50 types of suffixes), including -NESS and -HOOD $(12\times)1$,¹⁴ -NESS and -SHIP (7×), -NESS and -DOM (2×), -DOM and -HOOD (1×), -DOM and -REDE(N) (1×), -SHIP and -REDE(N) (1×), and -HOOD and -LAC (1×).

The most frequent doublet is the one consisting of -NESS and -HOOD.¹⁵ As can be seen in Table 4, the number of occurrences with -NESS is higher in eight of the doublets. In three of them, it is the same for -NESS and -HOOD; and on one occasion the number of constructions with -HOOD is higher.

-NESS > -HOOD	-NESS = -HOOD	-HOOD > -NESS
wikkednes(se (125×) / wikkedhēd(e (1×)	muchelnes(se (3×) / muchelhēd(e (3×)	lustīhēd(e (2×) / lustīnes(se (1×)
derknes(se (28×) / derkhēde (1×)	gōstlīnes(se (1×) / gōstlīhēde (1×)	
fulnes(se (14×) / fulhēd(e (7×)	neuenesse (1×) / neuehēde (1×)	
kīndenes(se (12×) / kīndehēde (1×)		
nōblenes(se (9×) / nōblehēd(e (1×)		
ēvennesse (8×) / ēvenhēde (2×)		
unkīndenes(se (4×) / unkīndehēde (2×)		
blessednesse (3×) / blessedhēde (2×)		
gōstlīnes(se (1×) / gōstlīhēde (1×)		
neuenesse (1×) / neuehēde (1×)		

Table 4. Occurrences of -NESS and -HOOD

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With regard to their continuity in Present-Day English, all the forms are collected in the OED, but those with -HOOD are now obsolete (blessedness / †blessedhead; darkness / †darkhead; evenness / †evenhead; fullness / †fullhead; ghostliness / †ghostlihead; kindness / †kindhead; lustiness / †lustihead; mickleness / †micklehead-†micklehood; newness / †newhead; nobleness / †noblehead; unkindness / †unkindhead; wickedness / †wickedhead). In the case of this suffixal doublet, it can be safely said that the formations with -NESS have been the successful ones.

Both -NESS and -HOOD attach primarily to adjectives; we also find instances of some of them being attached to past participles. It is interesting to note that *derknes(se* and *ēvennesse* were already present in Old English and both forms have been the ones that have remained in the language.¹⁶ This may indicate that the longer a form has existed, the more chances it has of surviving when competing with another.

The second most frequent doublet is that containing -NESS and -SHIP with seven different pairs.¹⁷ This was somehow expected, since -SHIP was the third most frequent type of suffix. In five of the seven doublets, formations with -NESS are more common, whereas in two of them, the number of occurrences for each pair is the same, as shown in Table 5.

-NESS > -SHIP	-NESS = -SHIP
wōdnes(se (26×) / wōdship(e (1×)	treunesse (1×) / treushipe (1×)
gladnes(se (22×) / gladshipe (3×)	wīldnes(se (1×) / wīldeship (1×)
īdelnes(se (20×) /īdelship(e (3×)	
drŏnkenes(se (6×) / drŏnkeshipe (2×)	
clērnesse (4×) ~ clērshipe (1×)	

Table 5. Occurrences of -NESS and -SHIP

Concerning their permanence in Present-Day English, all the forms are collected in the OED except for *clearship*; those forms with -sHIP are now obsolete (*clearness*; *drunkenness-†drunkness / †drunkship*; *gladness / †gladship*; *idleness / †idleship*; *trueness / †trueship*; *wildness / †wildship*; *woodness / †woodship*.

The suffixes attach mainly to adjectives and also to past participles. Likewise, there are forms inherited from Old English: $dr \check{o}nkenes(se > OE druncen(n)es / dr \check{o}nkeshipe > OE druncenscipe; gladnes(se > OE gladnes / gladshipe > OE gladscipe; woādnes(se > OE woādscipe; īdelnes(se > OE voādscipe; īdelnes(se > OE īdelnes, treunesse > OE trēowness, trēwnes.$

Another doublet is the one formed by -NESS and -DOM, which includes frenes(se and fredom, and holines(se and hali-dom.¹⁸ Halidom is now obsolete, whereas both freeness and freedom are collected in the OED with no indication of obsolescence.

As for the base to which the suffixes attach, this is an adjective in all cases. Most of the forms have been in the language before Middle English: $fr\bar{e}d\bar{o}m > OE fr\bar{e}od\bar{o}m$; $h\bar{o}l\bar{n}nes(se > OE h\bar{a}lignes / h\bar{a}l\bar{u}-d\bar{o}m > OE h\bar{a}lig-d\bar{o}m$.

Competition between the suffixes -DOM and -HOOD and -DOM and -REDE(N) is also found in the doublets *thraldom* and *thralhod(e*, and *martirdom* and *martirrode.*¹⁹ -DOM was the fourth most common type and -REDE(N) the fifth. In both doublets, the forms with -DOM are the most frequent ones and also the ones that have survived into Present-Day English (*thraldom / †thrallhead; martyrdom*²⁰). The base to which both suffixes attach are nouns.

Moreover, with one suffixal doublet, there is competition between the suffixes -SHIP and -REDE(N) in the words $f\bar{e}lauship(e \text{ and } f\bar{e}lau-r\bar{e}de^{21}$ The formation with -SHIP is by far the more frequent and the one that has won out in Present-Day English (*fellowship* / †*fellowred*). Both suffixes are attached to a noun.

Finally, and also with one suffixal doublet, there is rivalry between -HOOD and -LAC in the pair *wedhode* (*wedhode* $[1\times]$) and *wedlok* (*wedlac* $[1\times]$, *wedloc* $[1\times]$). *Wedlock* has been the formation surviving into Present-Day English (*†wedhood*). Both suffixes attach to a past participle. *Wedlok* already existed in Old English (OE *wedloc*), which is another example of an older form surviving its rival.

Although we initially set out to assess suffixal doublets, two suffixal 'triplets' have also been found; the suffixes competing are -NESS, -HOOD and -DOM, on the one hand, and -NESS, -HOOD and -SHIP, on the other. As for the first triplet, there are two different ones in *MEG-C: falsnesse, falshēde* and *falsdōm*, and *wrecchenes(se, wrecchehēde* and *wrecchedōm.*²² Formations with -NESS have once again been the most successful ones (*falseness / †falsehead / †falsedom*; *wretchedness / †wretchedhead / †wretcheddom*), although *falsehood* has also made it to Present-Day English. All suffixes are attached to adjectives.

For -NESS, -HOOD and -SHIP, there is only one triplet: $r\bar{e}chel\bar{e}snes(se, r\bar{e}chel\bar{e}shead(e)$ and $r\bar{e}chel\bar{e}sship(e.^{23}$ Even though the number of words carrying each suffix is similar, the formation with -NESS is again the strongest one. The three suffixes attach to an adjective. $R\bar{e}chel\bar{e}snes(se)$ was already available in Old English (OE $r\bar{e}cel\bar{e}asnes)$, proving once again that the oldest form is the one that has survived into Present-Day English.

Apart from doublets and triplets, there is one suffixal 'quadruplet', involving the suffixes -NESS, -HOOD, -LAC and -SHIP in the words *fairnes(se, fairhēde, fair-lēk* and *fairshipe.*²⁴ All the words are registered in the *OED*, but as expected in line with the evolution of the doublets and triplets, the only one which is not obsolete in Present-Day English is the one with the suffix -NESS (*fairness* / \dagger *fairhead* / \dagger *fairlec* / \dagger *fairship*). The suffixes coalesce with an adjective and the form with -NESS, the successful one, dates from Old English. It is worth mentioning that Old Icelandic

has the word *fagrleik-r*, which could explain the origin of *fair-lek* as a borrowing. This needs further investigation but, if such were the case, the borrowing was not successful.

In order to explain the existence of the synonymous derivations presented so far, attention has been paid to other variables made available for investigation by the corpus, such as geographical localisation, date and genre of the texts in which the synonymous derivations appear, but they do not seem to supply any relevant information. Thus, the forms for *fulnes(se* and *fulhēd(e* appear both in the North and South of the country, in the 15th century, in religious prose and verse.

4. Conclusions

This study has presented a new account of the use of the suffixes under study by examining their occurrence in recently compiled corpora. The value of corpus work for the study of historical word formation is more than evident and the availability of fresh material offers the possibility of revisiting and enhancing previous knowledge as well as of opening new avenues of research.

Why does a certain suffix in rival patterns win over another one? Lindsay and Aronoff (2013) regard languages as "self-organizing in a manner similar to biological systems; languages are complex, continuous systems that change through numerous smaller interactions" (Aronoff and Lindsay 2014: 80). If the derivational suffix system is viewed as a continuous, living system, we could say that a process similar to that of natural selection (Lindsay and Aronoff 2013) takes place and this can help to answer the question. When there is synonymy, productive derivation, as is the case of the suffix -NESS, ensures a successful pattern which is more likely to remain, whereas the forms with the less productive suffix will be eventually eliminated from the system and become extinct (following the natural selection metaphor). Therefore, we think that productivity has a great say when it comes to successful suffixes in synonymous derivations: the higher the productivity of a suffix, the more chances it has of surviving and this is corroborated by the data obtained. More common or token-frequent forms are the ones which continue in the language, whereas lower frequency forms are less likely to be picked up by the speakers. This involves their not becoming fixed and disappearing as a result. Some suffixes had a short life, while others seem to have been widely employed. On the other hand, older forms appear to have more chances of surviving, since they have been established for longer in the language.

Not a single instance of synonymous derivations has been found in *MELD*, which points to the fact that legal and administrative language favours fixedness of forms and univocity.

The co-occurrence of the same base with different suffixes could have been due to stylistic factors, for instance, an alternative form may have been created with the intention of contrasting it with the established form. Another explanation could be scribal preference of one form over another.

As can be seen from what has been discussed so far, noun formation in Middle English was a much freer process than it is in Present-Day English. The changing and heterogeneous nature of the language at this period is especially reflected in derivational patterns.

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Notes

⁶ See <http://www.uis.no/getfile. php/1339078/Forskning/Kultur/MEG/ Catalogue_2011_Master_3.pdf> for further information.

⁷ Esteban-Segura found suffixal doublets in Middle English medical prose and examined other registers to determine whether this variation occurred elsewhere. She concluded that alternation took place "in a restricted number of words (all of them with a specialized medical sense)" (2011: 191).

⁸ The search elements included the following: *dom*, *dam*, *doom*, *daam*; *hod*, *hood*, *had*, *head*, *heed*, *hat*, *hied*, *hed, *hede, *hedd, *heid, *hyd, *heuede; *lac*, *lec*, *leac*,

¹ For previous research on Middle English derivation see Ciszek (2008: 16-17).

² Due to the different spelling variants of the suffixes, reference to them is made from now on in terms of prototypes and indicated by means of small capitals.

³ Szymanek employs the label 'rival forms' (2005: 441).

⁴ Ciszek succinctly deals with synonymous derivations, referring to them as "structurally and semantically parallel derivatives" (2008: 51).

⁵ The author is grateful to Prof. Merja Stenroos (University of Stavanger) for kindly granting access to use the corpora.

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lez, *lack*, *loc*; *nes*, *nys*, *nis*, *nus*, *nas*, *naes*, *nec*; *red, *rede, *redd, *redde, *raed, *raede, *raedd, *raedde, *reden, *raeden, *raedede; *ship*, *chip*, *scip*, *sipe*, *sip, *sippe, *shyp*, *chyp*, *scyp*, *sype*, *syp, *sypp, *syppe, *shep*, *chep*, *scep*, *sepe*, *sep, *sepp, *chup*, *sup*, *shup*, *chop*, *scap.

⁹ Many of the instances retrieved were not suffixes and, as a consequence, they were not pertinent: *nes*, for example, returned words such as *persones, townes* or *nescessary*.

¹⁰ 'Root' and 'base' are taken as synonyms (see Blake 1992: 624).

¹¹ In the OED, -HEAD and -HOOD are listed as two different suffixes, although there seems to be some controversy because, as explained, ultimately -HEAD comes from the same Germanic base as the suffix -HOOD, although the details are not clear. Marchand (1969: 293) points out that -HEAD is "an unexplained by-form" of -HOOD. In the MED. the main entry for the suffix is -*hed(e* and -*hod* is provided as an alternative form. Taking this into account and for the purposes of the present research. -hed and -hood are treated as forms of the same suffix, -HOOD, Therefore, in words such as childhood (childehede. childehode. childhede. child-hood) or manhood (manhede, manhed, manhode, manheed, manhod, monhed, manhood, manheede, manhoode, monhede), in which both suffixes are found, they have not been considered a suffixal doublet.

¹² Since only two Late Middle English corpora have been used, it is beyond the scope of this paper to assess productivity diachronically in a comprehensive way; our intention is to compare it in two different corpora from a synchronic perspective.

¹³ Synonymous derivations include suffixal doublets (the same base with two different suffixes), suffixal triplets (the same base with three different suffixes) and suffixal quadruplets (the same base with four different suffixes).

¹⁴ Although the forms 'godnes' and 'godhede' (with different spelling realisations) occur, they have not been included since there is a semantic differentiation —the latter refers to divinity and therefore the pair cannot be considered a suffixal doublet.

¹⁵ Appendix I lists the items found in the corpus: firstly, the lemma taken from the *MED* in bold; secondly, the different spelling realisations; and finally, the number of occurrences in decreasing frequency.

¹⁶ If not stated, the forms date from the Middle English period.

¹⁷ Appendix II includes the items found in the corpus: firstly, the lemma taken from the *MED* in bold; secondly, the different spelling realisations; and finally, the number of occurrences in decreasing frequency.

¹⁸ See Appendix III for the different spelling realisations.

¹⁹ See Appendix IV for the different spelling realisations.

²⁰ The formation of *martyr* + the suffix -REDE(N) is not attested either in the *MED* or the *OED*, nor is it found in Bosworth-Toller's *Anglo-Saxon Dictionary*. There is only one instance of it in the corpus ('martirred'), in a text from the West Midlands.

²¹ See Appendix V for the different spelling realisations.

²² See Appendix VI for the different spelling realisations.

²³ See Appendix VII for the different spelling realisations.

²⁴ See Appendix VIII for the different spelling realisations.

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Appendix I: Occurrences of -NESS and -HOOD

-NESS	-HOOD
blessednesse: blessydnesse (2x), blessidnes (1x)	blessedhēde: blissedhede (1×), blyssedhede (1×)
derknes(se : derkenesse (9x), derkenes (7x), derknesse (5x), derknes (4x), derkenusse (1x), derknessis (1x), derknysse (1x)	derkhēde: derkhede (1×)
ēvennesse : euenesse (3x), eue <i>n</i> nes (3x), euenesses (1x), euennesse (1x)	ēvenhēde: euenhed (2×)
fulnes(se: fulnes (6x), volnesse (5x), fullenesse (1x), fulness (1x), volnes (1x)	fulhēd(e: fulhede (4×), fulhed (2×), fulthede (1×)
gōstlīnes(se : gostlynes (1×)	gōstlīhēde: gostlyhed (1×)
kīndenes(se: kyndenes (5×), kyndnes (4×), kendenes (1×), kyndnesse (1×), kyndnesse (1×)	kīndehēde : kyndehede (1×)
lustīnes(se: lustenes (1x)	lustīhēd(e : lustihede (1×), lustyhed (1×)
muchelnes(se: mykelnes (2x), mochelnesse (1x)	muchelhēd(e : mikelhed (1×), mikelhode (1×), mykelhed (1×)
neuenesse: newnes (1x)	neuehēde: newe-hed (1×)
nöblenes(se: nobylnesse (4x), nobelnes (1x), nobilnes (1x), noblenes (1x), nobulnes (1x), nobylnes (1x)	nöblehēd(e: nobel-hede (1×)
unkīndenes(se: vnkyndenes (2x), vnkyndenesse (1x), vnkyndnes (1x)	unkīndehēde: vnkyndehede (1×), vnkyndhede (1×)
wikkednes(se: wickednes (22×), wickidnes (11×), wykkednes (9×), wickednesse (8×), wickidnesse (5×), wikkenesse (5×), wyckednesse (3×), wyckydnes (5×), wikkednes (4×), wikkednesse (2×), wyckydnes (3×), wiccutnes (2×), wickenesse (2×), wyckydnesse (2×), wikednes (2×), wikkidnesse (2×), wyckydnesse (2×), wykednesse (2×), wckednes (1×), wekydnes (1×), wiccodnes (1×), wiccudnisse (1×), wickedenesse (1×), wikidnesse (1×), wicodnes (1×), wikkednesse (1×), wikidnesse (1×), wickednesse (1×), wikkednesse (1×), wikidnessis (1×), wikkenes (1×), wikkednesse (1×), wikidnes (1×), wikydnesse (1×), wikkednesse (1×), wikkednessis (1×), wikkenes (1×), wikkednesse (1×), wikkednessis (1×), wikkenesse (1×), wikkednesse (1×), wikkednessis (1×), wykkednesse (1×), wyckydnesses (1×), wyckydnesses (1×), wykkednisse (1×), wykkenes (1×), wykkednesse (1×), wykkidnes (1×), wykkenes (1×), wykkednesse (1×), wykkidnes (1×), wykkydnes (1×), wykkydnesse (1×), wykydnesse (1×)	wikkedhēd(e: wickedhede (1×)

Appendix II: Occurrences of -NESS and -SHIP

-NESS	-SHIP
clērnesse : clerenes (2×), clernes (2×)	clērshipe: clerchippe (1×)
drŏnkenes(se : dru <i>n</i> kenesse (2×), dronkenes (1×), dronke <i>n</i> nesse (1×), drounknes (1×), dru <i>n</i> knes (1×)	drŏnkeshipe : dronkeschype (1×), dronkschep (1×)
gladnes(se : gladnes (12×), gladnesse (8×), gladdenes (2×)	gladshipe: gladship (3×)
īdelnes(se : ydelnesse (4×), jdelnes (3×), ydelnes (3×), idelnes (2×), idelnesse (1×), jdilnesse (1×), jdylnes (1×), ydelnese (1×), ydelnessys (1×), ydelnys (1×), ydulnes (1×), yldelnesses (1×)	ī delship(e: jdelschippe (1×), ydellschyp (1×), ydelship (1×)
treunesse: triwenesse (1×)	treushipe: truship (1×)
wīldnes(se: wildenesse (1×)	wīldeship: wildeschepe (1×)
wödnes(se: wodnes (5x), woodnesse (5x), wodenes (4x), wodnesse (3x), wodenesse (2x), woodenesse (2x), woddenes (1x), wodenys (1x), wodnisse (1x), woidenes (1x), woodenes (1x)	wōdship(e: widship (1×)

Appendix III: Occurrences of -NESS and -DOM

-NESS	-DOM
frēnes(se : freenesse (2×)	frēdōm: fredom (12×), fredam (3×), fredome (2×), fredomes (2×), fredom~ (1×)
hōlīnes(se: holynesse (13x), holynes (12x), halynes (9x), holines (2x), halynese (1x), helynes (1x), holenes (1x), holinesse (1x), holynusse (1x)	hālī-dōm: halydom (1×), halydome (1×), holydome (1×)

Appendix IV: Occurrences of -dom and -нооd / -dom and -rede(N)

-DOM	-ноор
thraldōm : þraldome (9x), thraldam~ (2x), thraldom (2x), thraldom~ (2x), thraldome (2x), þraldom (2x), thraldame (1x), þraldam (1x), þraldom~ (1x)	thralhēd(e: þralhede (3x)
-DOM	-REDE(N)
martirdōm : marterdom (3×), martirdome (3×), martyrdome (3×), martirdam (1×), m <i>ar</i> tirdom (1×), martirdom (1×), martirdom~ (1×), m <i>a</i> rt <i>ur</i> da <i>m</i> (1×), marturdomys (1×), m <i>a</i> rtyrda <i>m</i> (1×)	martirrēde : m <i>ar</i> rtir <i>re</i> d (1×)

Appendix V: Occurrences of -ship and -rede(N)

-SHIP	-REDE(N)
fēlauship(e: felawschyp (2x), felawshipp (2x), feleschip (2x), feleschype (2x), felischip (2x), felaschep (1x), felaschip (1x), felaschup (1x), felauship (1x), felaweschup (1x), felawschepe (1x), felawschip (1x), felawship (1x), felawschype (1x), felawship (1x), felawshipe (1x), felechip (1x), feleschipe (1x), feleshyp (1x), feleschipe (1x), felischippe (1x), feliship (1x), felowschipe (1x), felowshipe (1x), felyschip (1x)	fēlau-rēde: felaghrede (1x)

Appendix VI: Occurrences of -NESS, -HOOD and -DOM

-NESS	-HOOD	-DOM	
falsnesse: falsnes (15×), falsnesse (7×), falsenes (3×), falnesse (1×), falsenesse (1×), falnysse (1×)	falshēde: falshede (12x), falshed (7x), falsehed (1x), falshode (1x), falsse-hed (1x)	falsdōm: falsedom (1×)	
wrecchenes(se: wrichenes (1×)	wrecchehēde: wrecchede (1×)	wrecchedōm: wrecchedome (1×)	

Appendix VII: Occurrences of -NESS, -HOOD and -SHIP

-NESS	-HOOD	-SHIP	
rēchelēsnes(se: reklesnes	rēchelēshēd(e: rechleshede	rēchelēsship(e:	
(1×)	(1×), reklesheed (1×)	rechelaschepe (1×)	

Appendix VIII: Occurrences of -NESS, -HOOD, -LAC and -SHIP

-NESS	-HOOD	-LAC	-SHIP
fairnes(se: fayrnesse (8x), fairnenes (3x), fayrenes (3x), fayrnes(2x), fayrnusse (2x), fairenesse (1x), fayrenesse (1x), fayr~nesse (1x), fayr~nesse (1x), fayrmysse (1x), feirnes (1x), feyrenes (1x), feyrenes (1x)	fairhēde: fairehede (3x), fairhed (3x), fayrehed (1x)	fair-lēk: feyrelac (1×)	fairshipe: feyrship (1x)

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