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Affix doublets and affix rivalry in the history of English

Abstract

The study investigates affix doublets in English with the aim of highlighting the historical background of their emergence. Just like in the case of lexical doublets, it is necessary to distinguish between true etymological doublets and quasi-doublets among affixes. Quasi-doublets can develop in various circumstances, e.g. due to the coexistence of alternative spellings, the use of free affix variants in derivation, or the rivalry between native and foreign affixes. Etymological duplication of affixes occurs, when English borrows a bound morpheme, and the loan affix coexists with a native affix, which descends from the same archaic etymon as the borrowed affix.

Keywords: etymological doublets, quasi-doublets, spelling doublets, affix rivalry

1 Introduction

In an earlier publication discussing types of lexical doublets in English (Hegedűs 2010) I already pointed out that the term *doublet* lacks a precise definition, and therefore I attempted to formulate some criteria for distinguishing between etymological doublets and what I call ‘quasi-doublets’. I consider words to be true etymological doublets if they have different sound shapes and meanings though they descend from the same etymon, and if they conform to the derivational constraint, i.e. they contain the same derivational affixes, if any (see Hegedűs 2010: 143). The mechanism of etymological duplication has two major types:

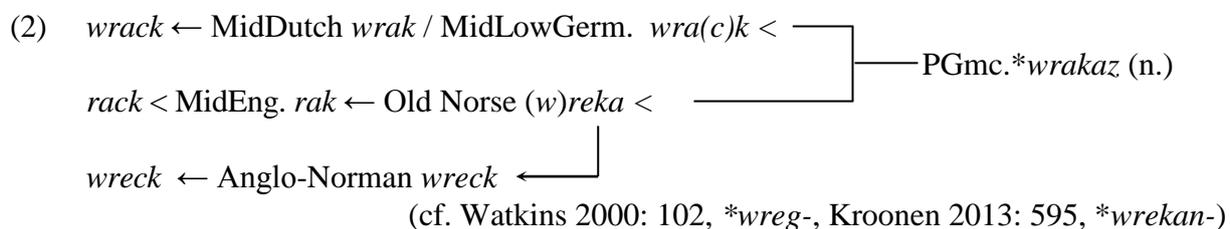
- a) doublets resulting from borrowing a foreign element that descends from the same ancient (Proto-Germanic or Proto-Indo-European) etymon which survives in English as a genetically inherited element of the vocabulary, as illustrated by the doublet *cow* ~ *beef* in (1)¹.

- (1) *cow* < Old Eng. *cū* < PGmc. **kōu-z* < PIE **g^wōu-s* ‘ox, cow’
beef ← OFrench *boef* < Latin *bōs, bovis*² <
- (cf. Watkins 2000: 35, *g^wou-*)

¹ Borrowing is marked by arrows: ← and → (showing the direction of borrowing), genetic descent is indicated by the symbols > and < .

² The change of PIE **g^w-* to *b-* is a typical, regular feature of the Osco-Umbrian dialect development of Vulgar Latin (see Sihler 1995:156, §155, Fortson 2004: 264, §13.58).

b) doublets that result from the borrowing of two (or more) foreign elements that can ultimately be traced back to the same ancient etymon, e.g. *wrack* ‘wreck(age)’ ~ *rack* ‘driven clouds’ ~ *wreck* ‘ruin’, as shown in (2).



Both in Type a) and in Type b) it is possible that one and the same foreign lexeme is repeatedly borrowed at various times, and this way a language can obtain etymological triplets or even multi-plets.

Quasi-doublets, as opposed to etymological doublets, tend to coexist in a complementary distribution (semantically and/or paradigmatically), and they emerge from processes of different nature, such as

- i. alternative derivational processes producing synonymous lexemes derived by different affixes from the same base, e.g.: *accurateness* ~ *accuracy*, or Old English *leorness* ~ *leorendness* ~ *leoredness* ‘departure, passing away’ (Kastovsky 1992: 387). Such pairs of synonymous complex words derived from one and the same base by different formatives are called morphological doublets (see Szymanek 2005: 441).
- ii. spelling variations, which produced spelling doublets that used to be originally interchangeable but the spelling variants gradually obtained different meanings and became dissociated, as shown by the Modern English word pair *metal* and *mettle* ‘courage’ from the alternating Middle English variation *mettal(l)*, *mettel*³ borrowed from Old French *meta(i)l* < descending from Latin *metallum* ‘(substance) mine(d).
- iii. analogical restoration leading to the levelling of allomorphic alternations brought about by regular sound changes, e.g. Old English *ald* ‘old’ / (*i*)*eldra* ‘older’ (< Pre-Old English **ald-ira*)⁴. Due to analogy, the quasi-doublet pair *older* ~ *elder* emerged, and – facilitated by the semantic differentiation – the “irregular” form (*elder*) survives in Modern English next to the analogically introduced, “regularized” form.

These ideas concerning the distinction between etymological doublets and quasi-doublets were formulated on the basis of lexical duplication but they are also applicable in analyzing doublet formation in the sphere of bound morphemes. This is what I intend to show in the discussion below.

³ Shakespeare still used the forms *mettal* or *mettle* indiscriminately either in the literal or in the figurative sense ‘vigour, courage (< temperament strong like metal)’, and the full formal and semantic split became established completely only by the early 18th century.

⁴ The root vowel [a] in Pre-Old English **ald-ira* becomes [e] in Modern English due to a series of vocalic changes: [a] > [æ] (Anglo-Frisian Brightening), then [æ] > [æu] (Breaking) and [æu] > [ey] (*i*-mutation triggered by the suffix), for more details see Lass 1994: 69.

2 Quasi-doublets and morphological rivalry in the history of English

The historical evolution of interchangeable derivational or spelling variants, manifest in quasi-doublets of affixes, often involved a period of hesitation in the choice of affixes. This situation was resolved when the frequency of use began to favour one form, which then became more productive. Such changes in the frequency of affix occurrence in the competition between quasi-doublets can be conceived of as a rivalry between the members of affix doublets. The rivalry observable in the Old and Middle English periods was usually resolved either by one variant ousting the other (e.g. Old English *sam-* ‘half-’ was replaced by Latin *sēmi-*, see below in 3.2.3) or by changing the originally free alternation of variants into a complementary distribution (as in the case of the negative adjectival prefixes *in-* and *un-*, discussed in 2.2 and then in 3.2.1).

2.1 ‘Rival forms’ in the history of derivational affixes

Describing suffix variants in the history of English, Szymanek (2005: 441) uses the term ‘rival forms’ as a synonym for ‘morphological doublets’. Rival forms would indeed be a truly apt label because there was a competition between derivational variants in the history of English, and the rivalry often ended up in one variant becoming the only productive and thus prevalent form. Derivational variants may, however, persist. This can happen especially if the rival forms cease to be synonymous because they obtain specialized meanings, and thus enter a semantically complementary distribution enabling them to survive independently. The originally free variants *-ic* ~ *-ical* – as in *economic crisis* vs. *economical person* – provide an example of a relatively recent case of such semantic divergence. The form *economic* in the late 18th and early 19th century – unlike in Present-Day English – was still used in the sense ‘thrifty, sparing’ (cf. examples in (3) quoted from *OED* s.v. *-ical*):

(3) a *We should be economic.*

[1755, H. Walpole *Mem. Geo. II*, II, 96]

b *I never saw any one so economic of her smiles.*

[1801, M. Edgeworth *Belinda* vi. I., 112]

c *The migrations of the Economic Rats⁵, are not less extraordinary.*

[1802, W. Bingley *Animal Biography* (1813) I., 378]

In the 16th century *economical* was used referring to household management, as it is illustrated by the examples in (4), and in the 17th century an expression such as *economical administration* (1612) was still used in contrast to *legal administration*, or *economical power* (1680) as opposed to *political power*.

(4) a *The other æconomical matter you wrote of.*

[1579, G. Harvey *Letts.*-bk 61]

⁵ *Economic rat* is a calque of the Latin taxonomic name, *Mus æconomicus*, used by Carl Linnaeus for the *root vole*, a burrowing rodent of the Palaeoartic zone.

b *Oeconomical science, that is..the art of ruling a house well.*

[1586, T.B. *La Primaud. Fr. Acad.* 1. 493]

Furthermore, *-ic* and *-ical* have also developed a complementary distribution with respect to what stems they would combine with. In a corpus-based study by Lindsay it was shown that the reason why both *-ic* and *-ical* are productive is that “*-ical* has carved out a morphologically constrained productive niche” (Lindsay 2012: 201) when it became dominant in combining with stems ending in *-olog*.

Parallel derivations, e.g. *kingdom*, *kinship*, *kinghood* are often considered synonymous and thus suspect of acting as rivals. But surmising semantic relatedness⁶ in these derived words lacks any foundation whatsoever. The semantic distinctness of these abstract suffixes is argued for in a historical and theoretical analysis by Tips (2008). These words were originally compounds in which the second constituent was a noun with a distinct meaning (see the respective entries in *OED*): *-dom* < OE *dōm* ‘statute, ordinance’, *-hood* < OE *hād* ‘person(ality), sex, condition, quality, rank’, *-ship* < OE (*ʒe*)*sceape* ‘creature, form, figure’. With the relatively recent grammaticalization of the second elements into suffixes, the semantic distinction may have reduced between them but not to such an extent as to allow a rivalry between them.

2.2 *Spelling variation leading to quasi-doublets*

Spelling doublets also occur among affixes. One of the better known examples is *-ize/-ise*. The primary, archaic form is *-ize* from Latin *-izāre*, while the secondary form *-ise* (still frequently used in British English) is based on the French spelling: *-iser* < Latin *-izāre*. The Latin suffix underlying both spelling versions ultimately derives from the Greek suffix *-ίζειν*, and the frequent hesitation in the spelling can be solved relying on the instruction formulated by the *OED* (s.v. *-ize*): “there is no reason why in English the French spelling should be followed, in opposition to that which is at once etymological and phonetic”.

Although the foreign prefix *in-* and its native counterpart *un-* make up a true etymological doublet pair (to be analyzed in 3.2.1), they could also occur as interchangeable variants, therefore they were labelled ‘multiple negative derivatives’ by Kwon, who used this label as a synonym for ‘doublets’ in a case study of the prefix variants *in-/un-* (Kwon 1997: 32). The alternate use of these prefixes in one and the same text was sometimes motivated – quite surprisingly – by a mere “stylistic tactic to avoid repetition of the same word in close proximity” (ibid. p. 29). In the 16th–17th centuries there was a preference for using the prefix *in-* but later an inclination to a complementary distribution developed, and the prefix *in-* (and its allomorphic variants *il-*, *im-*, *ir-*) started to occur primarily with words of Latin origin, while *un-* became restricted to other Romance (dominantly French) adjectives or to native (Germanic) adjectives (cf. *OED* s.v. *in-*³).

Phonetic motivation provided yet another type of alternation in the use of the negative prefix *in-*: it could occur with or without assimilation, as in the spelling doublets: *impossible* vs. *inpossible*, which were almost equally frequent in the 14th century but by the 16th century the unassimilated variety had totally disappeared (for details see Kwon 1997: 26).

⁶ Consider e.g. the statement that the “native suffix *-dom* is semantically closely related to *-hood* and *-ship*, which express similar concepts” (Plag 2003: 88).

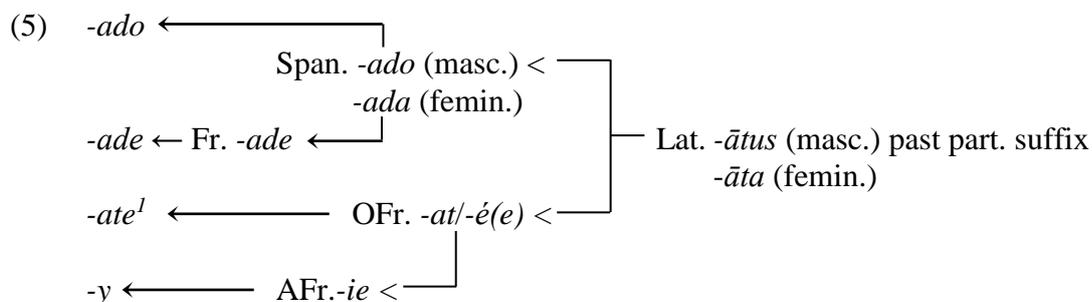
3 Etymological duplication of affixes

As opposed to the types of ‘quasi-doublets’ discussed above, true etymological duplication can also be found to operate in the history of prefixes and suffixes. The mechanisms of evolution in the case of affix duplication are similar to those observable in free morphemes: some doublets result from internal processes of phonological splits, others may emerge in processes of repeated borrowing, and – as a third possibility – the combination of internal and external reasons can also lead to the emergence of affix doublets when loan elements participate in the native phonological changes that operate after the time of borrowing. In this section I will illustrate various trajectories of etymological duplication in the history of derivational affixes. The examples were selected to represent several parts of speech: verbs, nouns, adjectives and numerals (ordinals). Suffix doublets will be analyzed in 3.1, and cases of prefix duplication will be discussed in 3.2.

3.1 Suffix doublets

3.1.1 A case of parallel borrowing: the nominal suffix quadruplet *-y* ~ *-ate* ~ *-ade* ~ *-ado*

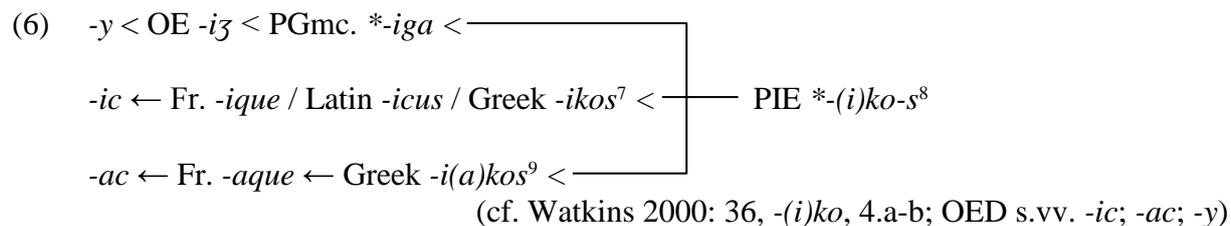
The nominal suffix *-y* and its doublet *-ate* represent parallel borrowing, a type of doublet formation mechanism frequently observable in the case of free morphemes as well. Parallel borrowing in the case of this suffix doublet pair means borrowing from two dialects of Old French. The Latin passive participial suffix *-ātus* developed dialect variants in Old French. Since English borrowed lexical elements extensively both from Old French and from Norman French (Anglo-French, AFr.), it also adopted two different variants of the suffix in substantivized passive participles. This is how parallel borrowing led to the duplication of one and the same Latin suffix *-ātus*, e.g. Lat. *senātus* > OFr. *senat* → Eng. *senate*, as opposed to Lat. *comitātus* > AF *counté / counte(e)* → Eng. *county*. The final <e> in *-ate* was added only after 1400 as a spelling device to mark the length of the vowel in the last syllable in English (e.g. Lat. *stātus* > OFr. *estat* → Eng. *estate*). The nativized form of the suffix, *-y* has variants as *-ee* (e.g. *refugee* ← Fr. *refugié*) and *-ey* (e.g. *attorney* ← OFr. *atorné*), which more closely resemble the original French forms, and the words with these variants of the suffix are usually loans of a more recent date. The situation was further complicated when the Spanish or Portuguese reflexes of Latin *-ātus* appeared in English either directly in words like, *desperado*, *tornado* or transmitted via French as in *esplanade* (← Fr. *esplanade* ← Spanish *esplanada*). These trajectories of the etymological duplication of Latin *-ātus* are summarized in (5), based on data from OED s.vv. *-ate* suffix¹, *-y* suffix⁵ and Sihler 1995: 621-623, §564.



3.1.2 Adjectival suffix doublets and triplets

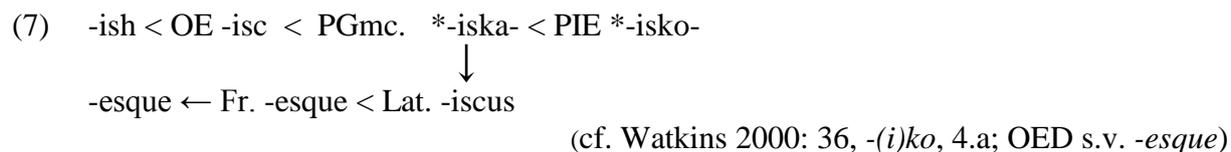
3.1.2.1 The suffix triplet -y ~ -ic ~ -ac

The adjectival suffixes -y ~ -ic ~ -ac make up a suffix triplet, of which -y is the native morpheme descending from Old English -iȝ inherited from Proto-Germanic *-iga. The loss of the final consonant element is due to the regular process of weakening in which [g] flanked by a primary front vowel was first palatalized and then deleted. The suffixes -ic and -ac are borrowed elements in English, but ultimately all three members of the triplet descend from the same Proto-Indo-European adjectival suffix *-(i)ko-s, see the diagram in (6):



3.1.2.2 The doublet pair -ish ~ -esque

The adjectival suffix doublet pair -ish ~ -esque¹⁰ represents the same type of etymological doublet as -y ~ -ic shown above in (7), i.e. the duplication happened because a foreign suffix (French -esque) was adopted when English had a native suffix (-ish) descending from the same Proto-Indo-European morpheme: *-isko-. This doublet pair, however, serves as an illustrative case of a different trajectory of evolution in the emergence of suffix doublets. The peculiarity of this case lies in the circumstance that the French loan item itself was a borrowing from Germanic into Vulgar Latin, as is shown in (7).



Of this doublet pair, the inherited morpheme -ish descends from the Germanic/Indo-European ancestral form via the regular sound change which unconditionally palatalized Pre-Old English [sk]-clusters to [ʃ] in all positions. In Old English -isc [iʃ] functioned as a gentle adjectival suffix used in nation names, and it was not frequently combined with nouns belonging to other semantic fields. The original semantic content of Old English -isc gradually acquired a depreciatory note: while in Old English an adjective such as *cildisc* had the neutral meaning ‘childlike, pertaining to childhood’, in Early Middle English it started to be used in the sense ‘infantile, silly’, cf. its occurrence as *chylдыssh* in (8):

⁷ The suffix -ic may have different sources, e.g. in words like *public*, *domestic* it is of Latin origin, while in *comic*, *poetic* and similar loanwords borrowed since the 16th century it comes directly from Greek (OED, s.v. -ic). Note also the partly synonymous alternative forms *demonic/demoniac*.

⁸ The vowel *i-* was originally not part of the PIE suffix but the root extension in *i-*stem nouns.

⁹ The Greek variant -i(a)kos usually occurs in English in words transmitted via French or medieval Latin.

¹⁰ Probably cognate with the English doublet -y ~ -ic because PIE *-isko- is most likely a compound suffix based on *-(i)ko- (see Watkins 2000: 36, -(i)ko).

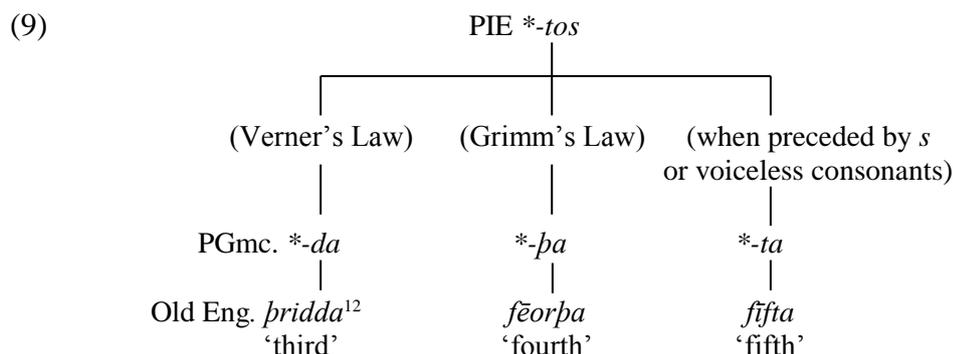
- (8) *O noble kyng, ar ye so moche chyldyssh that ye byleue this false and subtyl shrewe.*
 ‘Oh noble king, are you so much childish that you believe this false and subtle shrew?’
 [1481, Caxton: *Reynard the Fox*, Capit. xxxii]¹¹

The productivity of the Old English suffix *-isc* with the meaning ‘of origin’ had decreased by Early Middle English only to revive in a semantically different use in Late Middle English with the sense ‘somewhat’. On the basis of a corpus-study, Ciszek (2012) came to the conclusion that the reason for the retreat of *-ish* in deriving adjectives from nouns can be ascribed to two factors. First, it had more successful rivals such as *-(i)an*, *-ite*, *-in(e)* (see Ciszek 2012: 33-36). Second, the spread of the construction {*of* + Noun} provided an alternative for conveying the meaning ‘of origin’ (see *ibid.* 36-37), which reflects a tendency that also fits into the gradual typological shift from a synthetic morphological type to a more analytical type in the historical evolution from Old English to Middle English.

3.1.3 From allomorphic variants to suffix doublets: the ordinal suffixes *-d* and *-th*

The suffix pair *-d* ~ *-th* deriving ordinals (*third* vs. *fourth*) constitutes suffix doublets with an internal, morphological motivation. Both suffixes descend from the same Proto-Indo-European (PIE) adjectival suffix **-to-s* (cf. Lass 1994: 215, Fortson 2004: 121, §6.77; 132, §7.19, OED s.v. *-th* suffix²). The differentiation in the sound shape of the suffixes emerged from the historical (Pre-Germanic) allomorphic alternation brought about by the PIE mobile accent: it shifted from the root to the suffix in the ordinal ‘third’, and thus triggered the operation of Verner’s Law in Proto-Germanic.

What was originally a PIE allophonic variation of *t* (conditioned by accent or by phonotactic context) became an allomorphic variation in Germanic: **-þa* (due to Grimm’s Law) ~ **-da* (in a position before accent, Verner’s Law) ~ **-ta* (original *t* is preserved when preceded by a voiceless fricative) (cf. Lass 1994: 214-215, Mallory & Adams 1997: 401-402, Kroonen 2013: 547). The diagram in (9) gives an overview of the allomorphy emerging from allophonic variation.



¹¹ Quoted from <https://archive.org/details/historyreynardf01goldgoog> (p. 76) [translation mine, I.H.].

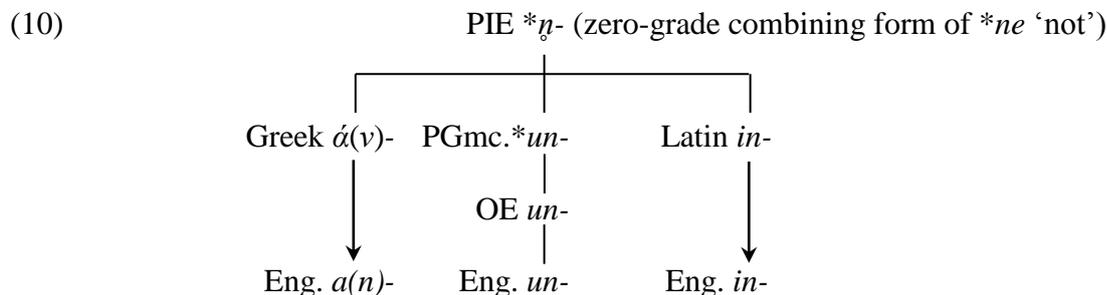
¹² The metathesis, which accounts for the modern form, must have occurred rather early because the text of the Lindisfarne Gospel (written in the Northumbrian dialect of Old English, ca. 950) already has *ðirdda*: (Luke XII. 38) *zif on ða ðirdda waca ze-cymeð* ‘if he shall come in the third watch’. Despite the early attestation of metathesis, the more archaic form *thrid* remained “the prevalent type down to the 16th c.” (OED s.v. *third*).

The later fate of this allomorphic variation was also shaped by analogical contamination, so e.g. Old English *fiftha* and *sixta* were adjusted to the neighbouring ordinals, which had the suffix *-th*, so Modern English has *fifth* and *sixth*, which are thus not direct reflexes of the OE forms. The ordinal *third*, however, was not affected by analogical change. This is just another fact that demonstrates the unpredictable nature and sporadic operation of analogical changes. Since the historical (etymological) connection between the modern ordinal suffixes *-th* and *-d* is no longer discernible, they can be interpreted as morphological doublets.

3.2 Prefix doublets

3.2.1 The prefix triplet *un-* ~ *in-* ~ *a(n)-*

The prefixes *in-*, *un-* and *an-* descend from the Proto-Indo-European combining form **n̥-* (the zero-grade grammaticalized form of the word ‘not’). This syllabic nasal vocalized differently in the Indo-European daughter languages: in Germanic it yielded **un-*, while Latin has *in-* and Greek has *á(n)-*. Germanic **un-* was preserved intact in Old English, and at the same time, both the Latin and the Greek privative prefixes were borrowed into English, creating the prefix triplet *un-* ~ *in-* ~ *an-*. Moreover, the Greek privative prefix has two allomorphs, and both forms are present in English, cf. *anarchy* ‘without leader’, *analphabetic* ‘without [knowing the] alphabet’, as opposed to *agnostic* ‘not knowing’, *amorphous* ‘shapeless’, etc. The emergence of the etymological triplet in English is summarized in (10), based on data from Mallory & Adams 1997: 395, s.v. *not*, Watkins 2000: 57, s.v. *ne*, *OED* s.v. *un-*, prefix¹).



3.2.2 Multiple reflexes of Proto-Germanic **ga-* in Modern English

The ancient Germanic collective–perfective prefix **ga-* used to be highly productive over a long period stretching from Proto-Indo-European via Proto-Germanic down to Old English, yet it had disappeared almost without a trace by the Early Modern English period. Its traces survive in some fossilized (lexicalized) forms, i.e. in words where the archaic prefix is morphologically no longer analyzable on the synchronic surface. The functional and semantic decline of the prefix in verbs started already in the Old English period (for details see Hiltunen 1983: 65). The original phonological CV-structure of the prefix is preserved in English only in loanwords, as opposed to the evolution of the native form, where the initial consonant was gradually weakened. The lenition process operating in early Old English was due to the palatalization caused by the following front vowel, and the weakening usually resulted in the

loss of the vocalic element, so the prefix was completely lost in most cases: [gE-¹³ > yE- > E- > Ø]. Although the prefix had been lost in English by the end of the 17th century, in a few cases the lenition may have become arrested: [gE- > yE- > E-]. Thus the vocalic element of the prefix is still preserved in some Modern English word forms, e.g. in the adverb *enough* < OE *ʒe-nōh* < PGmc. **ga-nōga-*, derived from the impersonal preterito-present verb **nugan-* ‘to suffice’ (cf. Watkins 2000: 57, s.v. **nek-*², Kroonen 2013: 391, s.v. **nōga-*, 392-393, s.v. **nugan-* < *h2nǵ-*).

The Modern English fossilized forms of the PGmc. prefix **ga-* are of various nature: some of them represent etymological duplication in the wake of borrowing from Old Norse, see the examples (11a) and (11b), while other cases result from native allomorphy, see the examples (11c–e), some of which are restricted to dialect or archaic usage:

- (11) a *ge-*: *gemot* ‘assembly (in England before the Norman Conquest)’¹⁴;
 b *g-*: *graith* ‘readiness, good order’ ← Old Norse *greiðr* = OE *ʒeræde* ‘ready’;
 c *y-/i-*: *y-* (now archaic or obsolete, but still used in the 17th century)
 ymong < OE *ʒemang* ‘company’, as in *among* < OE *on ʒemang*,
 yclept (archaic past participle) < OE *ʒeclypod* ‘called (so-and-so)’
 yean = *y-* + *ean* (dial., arch.) ‘to bring forth (a lamb)’, as in the following
 sentence: *The ewes yeane thrice within the full circle year* (1879, Butcher
 & Lang *Odyssey* 51 [OED s.v. *yeane*]);
 d *a-*¹⁵: *afford* < OE *ʒefordian* ‘accomplish, achieve’,
 aware < OE *ʒewære* ‘wary, cautious’,
 along (adjective archaic, dialect use¹⁶) < OE *ʒelang* ‘pertaining to’,
 alike < OE *ʒelīce*;
 e *e-*: *enough* < OE *ʒenōh*.

The use of the Germanic prefix **ga-* in past participles persisted in the southern dialects of Middle English, and survives in a reduced form as *a-* in the south-western dialects of Present-Day English. It is important to note here though that the prefix *a-* used with the present participle, e.g. *a-going* (in south-western dialects of British English, or in the Appalachian regional dialect of American English), is distinct from the *a-* prefix discussed here because the morpheme *a-* combined with the present participle derives from the particle *on*.

The native reflexes of PGmc. **ga-* in English obtained doublets not only by borrowing Old Norse words containing this prefix but also by borrowing such words from more distantly related languages, primarily from Latin. The Latin prefix *co-*, *com-* is a cognate of Germanic **ga-* because they both can be derived from the same Proto-Indo-European source: **kom* ‘beside, near, by, with’ (see Watkins 2000: 43).¹⁷

¹³ E = any front vowel, except secondary front vowels deriving from earlier back vowels (e.g. front vowels resulting from *i*-mutation).

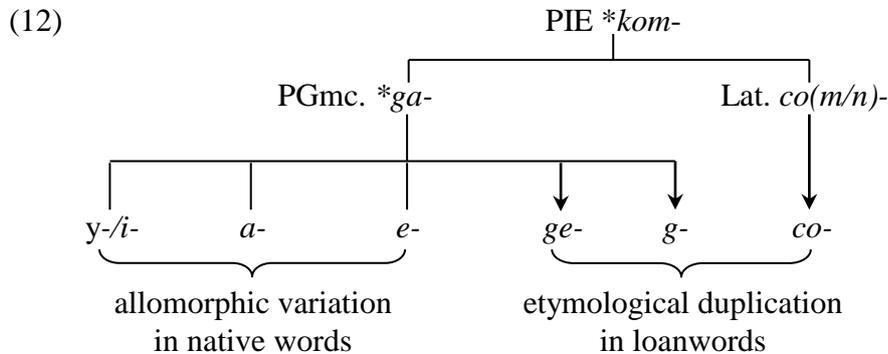
¹⁴ This is a technical term used by historians.

¹⁵ This *a-* prefix was obviously still analyzable for the speakers of Middle English because it often occurs in a hyphenated form in written documents, e.g.: *Al be that here stat be nat a-lyche* (c1385, Chaucer: *Legend of Good Women*, 389 [OED s.v. *alike*]).

¹⁶ As opposed to the preposition and adverb *along*, which goes back to OE *and-lang* (see OED s.v. *along* (adv. and prep.)).

¹⁷ The voicing of PIE **k-* to PGmc. **g* can be explained by Verner’s Law (VL), even if this law is usually not expected to operate in initial position. The reason why VL could have affected the evolution of this prefix is that this prefix was always unaccented, and this circumstance provided the necessary condition for the operation of VL, which was triggered in a position before an accented syllable (see e.g. Kroonen 2013: xxix-xxx).

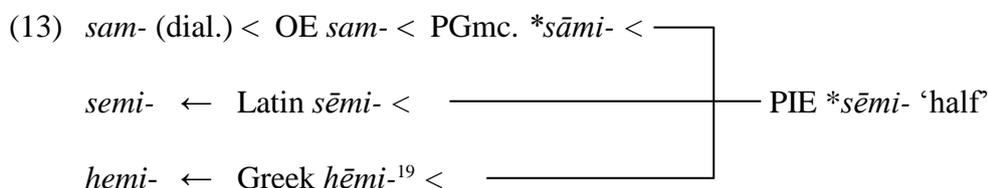
The evolutionary trajectories in the emergence of allomorphic variation and etymological duplication in the history of the Proto-Germanic prefix **ga-* are summarized in (12).



3.2.3 The prefix triplet *sam-* ~ *semi-* ~ *hemi-*

The history of this group of prefixes illustrates a case in which a native prefix becomes obscured by the Modern English period, while its foreign doublets gain increased productivity. The Middle English period was characterized by the retreat of prefixation as a word-formation device, and as a result of this process, several prefixes that used to be productive in Old English disappeared (see Burnley 1992: 446). The Old English prefix *sam-* ‘half’ is obsolete, and its occurrence in Modern English is limited to dialect usage. The retreat of this native (Germanic) prefix was probably influenced (if not induced) by the emergence of the concurrent native morpheme *half-*. The latter may have been more transparent because its grammaticalization was not as advanced as that of *sam-*. Both *sam-* and *half-* are attested in Old English, moreover, they occur in coeval manuscripts of the same text¹⁸: *sam-soden mete* ‘half-cooked food’ (in Manuscript S) as opposed to *half-sodden mete* (in Manuscripts X and Y) (cf. *OED* s.v. *sam-*, prefix). As a result of the competition between the two native morphemes, the productivity of Old English *sam-* ‘half’ gradually weakened until it became obsolete. Non-transparent morphemes tend to fall victim to sporadic analogical changes. In this vein, *sam-* was distorted by folk etymology, e.g. Old English *samblind* ‘half-blind’ survives reanalyzed as *sand-blind* ‘half-blind, dim-sighted’.

While the native morpheme *sam-* was ousted by its native rival *half-*, Latin and Greek loanwords introduced the prefixes *sēmi-* and *hēmi-* (respectively). The emergence of the English prefix triplet *sam-* ~ *semi-* ~ *hemi-* is summarized in (13).



¹⁸ The tenth-century *Scriftboc*, one of the four anonymous vernacular Anglo-Saxon penitentials known as *Confessionale Pseudo-Egberti* (§40). It survives in three manuscripts (scribal versions):

- i. MS S = Cambridge, Corpus Christi College, 190, Part B, s. XI^{med}, XI² Exeter (Ker 45B; Gneuss 59),
- ii. MS X = Oxford, Bodleian Library, Junius 121, s. XI^{3/4} Worcester (Ker 338; Gneuss 644),
- iii. MS Y = Oxford, Bodleian Library, Laud Misc. 482, s. xi^{med}, Worcester (Ker 343; Gneuss 656).

¹⁹ The change *s-* > *h-* is regular in initial position before vowels in Greek, but Latin preserves the PIE **s-* (see Sihler 1995: 170).

The foreign doublets, *semi-* and *hemi-*, have become relatively productive in English because of the influx of scholarly terms combined with these prefixes. While the prefix *hemi-* (of Greek origin but often transmitted via Latin) is used in rather specific contexts, such as the language of chemistry, crystallography or anatomy, the semantic development of *semi-* allows for its more widespread use. The original meaning of *semi-* ‘half’ became generalized, and started to refer to the idea ‘partly’ (as in *semitropical* ‘partly tropical, subtropical’), ‘incompletely’ (as in *semiblunt*, e.g. an instrument) or even ‘having some of the characteristics of’ (as in *semi-autobiographical*).

4 Summary

The historical development of bound morphemes displays the same types and mechanisms of doublet formation as those that can be observed in the emergence of lexical doublets. It is necessary to distinguish quasi-doublets from true etymological doublets among affix doublets as well. Quasi-doublets emerge from spelling variation (e.g. *-ize* ~ *-ise*), or from free affix variation (e.g. *economic* ~ *economical* could be interchangeable derivational variants until the early 19th century).

Affix doublets could exist in free alternation, but the interchangeable affixes often became rivals in different periods in the history of English. Affix rivalry was usually resolved either by one variant ousting the other (e.g. Latin *sēmi-* replacing Old English *sam-* ‘half’) or by changing the free alternation into a complementary distribution (either semantically, as seen in *economic* ~ *economical*, or morphologically, as shown by the combinability of *in-* with words of Latin origin versus *un-* with French or native English adjectives).

In this study I argued that etymological duplication of affixes in English – just like in the case of lexical doublets – most frequently occurs as the result of two main types of mechanisms:

- 1 borrowing a foreign affix descending from the same ancient (Proto-Germanic or Proto-Indo-European) morpheme, which has a reflex, a native affix already available in English, e.g. the adjectival suffix doublet *-ish* ~ *-esque*, the adjectival suffix triplet *-y* ~ *-ic* ~ *-ac*, or the adjectival prefix triplet *un-* ~ *in-* ~ *a(n-)*;
- 2 parallel borrowing of ultimately cognate affixes from different languages, e.g. *semi-* ~ *hemi-* (both from PIE **sēmi-* ‘half’).

Given enough time, the etymological relationship between allomorphic variants of an affix may become obscured, and the allomorphs get fossilized (their occurrence becomes limited to specific lexemes) when the condition triggering the allomorphy is no longer provided. This is what happened in the evolution of the ordinal suffix, where the original triple allomorphy of Germanic *-da* ~ *-þa* ~ *-ta* became lexicalized in Old English *þridda* ~ *fēorþa* ~ *fifða* giving Modern English *third*, *fourth* and the analogically ‘repaired’ form *fifth*.

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