FACTA UNIVERSITATIS Series: Linguistics and Literature Vol. 3, N° 2, 2005, pp. 227 - 232

# **I-MUTATION IN OLD ENGLISH**

# UDC 811.111'366

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Abstract. The paper deals with the process of I-mutation in Old English and is based on the analysis of a corpus consisting of original Old English texts. The words from the corpus that underwent the process of I-mutation were analyzed and grouped according to the morphological criteria, taking into consideration the phonological properties of the bases and suffixes, as well as some roots from other Germanic languages. There are several morphological categories that can be distinguished in the analysis: the derivation of weak verbs, the inflection of weak and anomalous verbs, the derivation of abstract nouns, the nominal paradigm, the derivation and comparison of adjectives, compounding and nasal narrowing, as a borderline case of IM. All the categories are exemplified by the words from the corpus and compared to the state of affairs in Modern English. The paper concludes with some general remarks on the conditions under which I-mutation occurred and on the consequences it has in Modern English.

Key words: I-mutation, front vowels, morphological process, Old English, derivation, inflection

## 1. INTRODUCTION

I-mutation (henceforth IM) is one of the most important vowel changes of lexical words in the Germanic languages, which occurred in the period between Proto-Germanic and Old English. IM is also referred to as I-umlaut and it belongs to the group of vowel harmony processes. Its importance can be seen though the following aspects: (a) it produced two entirely new vowels in the Germanic languages,  $[\ddot{u}]$  and  $[\ddot{o}]$ ; (b) it affected a large number of vowels; (c) its morphological effects were very profound (Lass 1994: 60).

IM is a phonological change under the influence of certain grammatical morphemes. Its essence is achieving the ease of articulation. Namely, the vowels of a syllable preceding a suffix containing [i] or [j] moved towards the front upper corner of the vowel space. IM is reflected both in inflectional and derivational morpho-phonological processes. The triggers of IM were, as it was already noted, suffixal [i] and [j] when they followed back or low front vowels of accented syllables. All back vowels were affected and through this

Received August 19, 2005

process they were fronted, and in a few cases this was followed by the raising of the mutated vowels. Low front vowels were not always subject to IM. However, when they were, they became high front vowels.

As far as the diphthongs are concerned, it is difficult to make simple statements about the changes they underwent because of their complex origin (e.g. [ea] originated by breaking before [I], [r] or [x], by palatal influence, etc; [io] originated by breaking before [r] and [x], from PrimGmc [iu]). Apart from that, different dialects treated diphthongs differently, which made the situation even more complicated. The general rule, however, is that the first element of the diphthong was raised where possible, which was followed by the fronting and raising of the second element (Table 1):

Table 1. Vowel changes in diphthongs (after Lass 1994: 67-68)

West Saxon	North West Saxon
ea, io > ie (ie > i, $\ddot{u}$ )	ea > e
iu > ie	io > io
eo > io (rarely)	

The precise cause of IM is also difficult to determine. It is claimed that [i] and [j] palatalized the consonant or the consonant cluster they followed. The next step in the process would be the assimilation of the vowel preceding the consonant cluster. However, it is obvious that not all consonant groups were palatalized (e.g. nasals + [c]), while, on the other hand, IM occurred regardless of those consonants (Campbell 1959: 72). Therefore, it can be concluded that IM was a vowel harmony process and that the palatalization of consonants was an additional consequence.

This regressive morpho-phonological process was already inactive in OE. The only vowels that continued changing in the same direction were those whose phonological values were "unstable". These are  $[\ddot{u}]$ ,  $[\ddot{o}]$  and even  $[\alpha]$ , with the final mutated forms [i], [e] and [e], respectively. By the end of the OE period, IM was unproductive. As a consequence, many word forms that underwent IM abandoned the umlaut pattern and accepted the "regular" paradigms of the respective word classes, due to analogy (e.g. OE *boc* sg – *bec* pl; IME *bok* sg – *bokes* pl). That is why today there are only few words called "irregular", which are, in fact, relicts of the once active process of IM<sup>1</sup> (e.g. *foot* – *feet, man* – *men, louse* – *lice, long* – *length, far* – *further*).

The word forms examined in this paper were excerpted from the following OE texts: *Orosius* (Early West Saxon), *Riddle 30/b* (Early West Saxon), Aelfric's translation of *Genesis* (Incipt prefatio Genesis Anglice, Late West Saxon) and *The Dream of the Rood* (Late West Saxon). The percentage of I-mutated forms is rather low in the corpus (around 5%). The research shows that the usage and distribution of I-mutated words was not wide (this occurrence is similar to the one of the number of words of the French origin in the English lexicon).

Although a phonological approach to the topic was necessary to highlight the main aspects of IM, this paper will take a morphological approach as well, that proving to be more useful for grasping the entire mechanism of IM. In other words, the paper will be

<sup>&</sup>lt;sup>1</sup> It is interesting to note that the IM of inflectional and derivational processes had different developments: the words which had I-mutated forms as a part of their paradigm were subject to analogy and most of these I-mutated forms were lost. On the other hand, relicts of derivational processes represent a larger group. Today, most of the I-mutated forms belong here. This means that they were not substituted by other derivations.

dealing with word formation and paradigmatic processes which initiated IM, namely the derivation of weak verbs, the inflection of weak and anomalous verbs, the derivation of abstract nouns, the nominal paradigm, the derivation and comparison of adjectives and compounding.

## 2. DERIVATION OF WEAK VERBS

Weak verbs were derived by adding the suffixes *-ian* or *-jan* to adjectives, nouns or preterite forms of strong verbs. [i] and [j] in most cases disappeared after IM had been carried out, i.e. the vowel of the root was changed.

The following verbs that illustrate the process were found:

1) change of [u] to  $[\ddot{u}]$ : OE full (adj.) + -jan =  $[u] > [\ddot{u}] > OE$  fyllan (MnE to fill); a + OTeut \*sturjan =  $[u] > [\ddot{u}] = OE$  astyrjan (MnE to stir); OE lust (n.) + -ian =  $[u] > [\ddot{u}] = OE$  lystan (MnE to lust).

2) change of [o] to [e]: OE mot (n.) +  $-jan = [o] > *[\alpha] > [e] > OE$  mettan (MnE to meet); Gmc grot (base) +  $-ian = [o] > *[\alpha] > [e] > OE$  gretan (MnE to greet).

3) change of [a] to [e]: Goth satjan =  $[a] > [\alpha] > [e] > OE$  settan (MnE to set); ON scaðe (N) + -ian =  $[a] > *[\alpha] > [e] > OE$  sceððan (MnE to injure); OE ras (preterite of risan) + -ian =  $[a] > [\alpha]$ , rhotacism [s] > [r] > OE ræran (MnE to rear).

4) change of [e] to [i]: OE segel (n.) + -ian = [e] > [i] > OE siglan (MnE to sail).

## 3. INFLECTION OF WEAK AND ANOMALOUS VERBS

In OE verbs had distinctive suffixes for all persons singular and plural, for both present and preterite tenses. The suffixes for the second and the third persons singular in present indicative were *-est* (\**izi*) for  $2^{nd}$  person sg and *-eP* (\**iPi*) for  $3^{rd}$  person sg. When added to weak or anomalous verbs, these suffixes caused IM in the root vowel. The examples for this IM process are:

1) OE don + -est = [o] > [e] = dest; don + -eP = [o] > [e] = deP (MnE to do, make, take).

2) OE habban + -est =  $[a] > [\alpha]$  + fricativisation of [b] into  $[f] = h\alpha fst$ ; habban + -e $\delta$  =  $[a] > [\alpha]$  + fricativisation of [b] into  $[f] = h\alpha fb$  (MnE to have).

3) OE cweðan + -eð = cwyð (MnE to say, quote).

#### 4. DERIVATION OF ABSTRACT NOUNS

One of the word formation processes in the preOE period was the derivation of abstract nouns, which also triggered IM. The characteristic suffixes added to adjectives were  $-i\delta$  or  $-i\delta u$ . The meaning of those nouns described the quality, state or fact denoted by the adjective in question. The only two words found in the analyzed eOE and IOE texts were *miht* (whose derivation through this process is questionable) and *gesih* $\delta$ . This word formation process obviously died completely during the OE period, and was substituted with the following suffixes: *-dom*, *-ship*, *-ness*, *-hood*, *-ity*.

1) OE  $geseg(en) + -i\delta > medial [e] > [i] + fricativisation of [g] into [h] = <math>gesih\delta$  (MnE *sight*).

2) OE \**mag* + -*i* $\delta$  = [*a*] > [*e*] > [*i*] + fricativisation of [*g*] into [*h*] + defricativisation of [ $\delta$ ] to [*t*] = *miht* (MnE *might*).

The following words also belong to this class of nouns:  $ful - fyl\delta u$ ;  $lang - leng\delta$ ;  $strang - streng\delta$ . In MnE, there are only a few words remaining which show this mechanism of abstract noun formation (*filth*, strength, length).

## 5. NOMINAL PARADIGM

OE nouns had distinctive inflections for four cases, both in singular and in plural. According to Jones (1989: 82), reconstructed paradigmatic inflections for the nominal declension, which could have caused IM, were:

CASES	SINGULAR	PLURAL
Nominative	*[book + -s]	*[book + -iz]
Accusative	*[book + -un]	*[book + -unz]
Genitive	*[book + -iz]	*[book + -oon/-een]
Dative	*[book + -i]	*[book + -umiz]

The following four words that belong to this IM process have been found in the analyzed texts: *dehter* (Nom Sg dohtor), *men* (Nom Sg man), *lifte* (Nom Sg lyft), *bec* (Nom Sg boc). *Man* and *boc* follow one paradigmatic pattern, while *dohtor* and *lyft* show different characteristics:

[a] > *[a] > [e]	singular	plural
Nom	man	men I-mutation
Acc	man	men I-mutation
Gen	man	man
Dat	men I-mutation	man
[y] > [i]	singular	plural
Nom	lyft	lyft
Acc	lyft	lyft
Gen	lyft	lyft
Dat	lifte I-mutation	lyft

In MnE there are very few words that have kept the mutated plural form, while the nominal case paradigm was completely lost: *foot* – *feet, tooth* – *teeth, man* – *men*, etc.

## 6. DERIVATION OF ADJECTIVES

There are several suffixes used for the derivation of adjectives in the OE (and preOE) period which caused IM: *-iġ*, *-lic*, *-en*, *-el*, *-isc*. It can be noted that all these suffixes have a front vowel which was the cause of IM in the root vowel. The examples are:

1) OHG tusig > OE dysig (MnE dizzy).

2) OE  $Angel + -isc = [a] > *[\alpha] > [e] = OE Englisc (MnE English).$ 

3) OE  $age + -lic = [a] > *[\alpha] > [e] = OE egeslic (MnE awesome, fearful)$ 

4) OE yfel (cf. Goth ubils, OHG ubil, upil) > MnE evil; Ger \*gulþjan > OE gyldan (MnE gilded).

#### I-Mutation in Old English

## 7. COMPARISON OF ADJECTIVES

The inflections for the comparison of adjectives in OE were -(e)ra for comparative and -(e)st for superlative. The phoneme [e] is not high enough to cause IM, so it is necessary to go back to Goth. suffixes -iza and -ist (cf. Goth. comp. *batiza*), which are the predecessors of OE -era (in this case [r] is a consequence of the rhotacism of [z]) and -est, and which caused IM. A number of common adjectives show IM in their comparison paradigms (*strang* - *strengra* - *strengest*; *geong* - *gingra* - *gingest*; *lang* - *lengra lengest*). The paradigms of these adjectives have their respective vowel changes: [a] >[e], [eo] > \*[ie] > [i], [a] > [e].

#### 8. COMPOUNDING

It has been noted that IM can occur during compounding, if the following conditions are fulfilled: (a) the root vowel of the first element of the compound is a back or low front vowel; (b) the root vowel of the second element is high and front. In this case, the latter vowel influences the former one and initiates the IM process. This is a random occurrence, since compounding is not a systematic derivation like, for instance, the formation of weak verbs. In the source texts only one word has been found: OE  $al + mihtig = [a] > [\alpha] = \alpha lmihtig$  (MnE almighty).

## 9. CONCLUSION

IM was a process that took place in the pre-OE times and it became unproductive in the eOE period. By the end of the IOE period, analogy was already a strong morphological process and dominated over English morphology. In this respect, I-mutated forms became rare, because analogy erased its products and introduced new ones instead. A few questions remained unanswered, though. How and why did some of the IM forms remain until today? What was the criterion for preserving one or the other word, or was it an entirely random process? Why did the *mouse* – *mice* and *foot* – *feet* distinction survive, while *book* – *books* and *goat* – *goats* did not?

Although IM became unproductive very early and was productive only during a short period, it was quite an obvious and predictable mechanism. Its predictability lies in the fact that if the following conditions were fulfilled: (a) in the root syllable there is a front vowel; (b) there is a suffix containing [i] or [j]; (c) the vowel ancestor was low front or back, IM was bound to happen.

As far as the morphological processes that initiated IM are concerned, it can be concluded that the most productive among them was the derivation of weak verbs. This can be seen from the corpus, and it is also confirmed by Mitchell and Robinson (1992: 159). Other productive processes were the derivation of abstract nouns, and nominal and verbal inflection. The least productive were the IM processes of adjectival derivation and inflection.

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### REFERENCES

- 1. Campbell, (1959) Old English Grammar, Clarendon Press, Oxford.
- 2. R. M. Hogg, ed., (1992) *The Cambridge History of The English Language, vol.2*, Cambridge University Press, Cambridge.
- 3. Jones, (1989) A History of English Phonology, Longman, London and New York.
- 4. R. Lass, (1994) Old English A Historical Linguistic Companion, Cambridge University Press, Cambridge.
- J. L. McKechnie, ed., (1983) Webster's New Twentieth Century Dictionary of the English Language, Prentice Hall Press, New York.
- Mitchell & F. C. Robinson, (1992) A Guide to Old English, Basil Blackwell Ltd, Oxford, UK and Cambridge, USA.
- 7. C.T. Onions, ed., (1966) The Oxford Dictionary of English Etymology, Oxford University Press, London.
- 8. Oxford English Dictionary on CDROM
- 9. H. Sweet, ed., (1896, 1973) The Student's Dictionary of Anglo-Saxon, Oxford University Press, London.

# I-MUTACIJA U STAROENGLESKOM

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Rad se bavi procesom I-mutacije u staroengleskom i zasniva se na analizi korpusa koji se sastoji od originalnih staroengleskih tekstova. Reči iz korpusa koje su prošle proces I-mutacije analizirane su i grupisane po morfološkim kriterijumima, istovremeno uzimajući u obzir fonološke osobine osnova i sufiksa, kao i nekih korenova iz drugih germanskih jezika. Nekoliko morfoloških kategorija može da se razluči u analizi: derivacija slabih glagola, fleksija slabih i nepravilnih glagola, derivacija apstraktnih imenica, imenička paradigma, derivacija i komparacija prideva, tvorba složenica i nazalno sužavanje, kao granični slučaj I-mutacije. Sve kategorije su potkrepljene primerima iz korpusa i porede se sa stanjem leksikona u modernom engleskom jeziku. Rad se završava navođenjem uslova pod kojima se odvijala I-mutacija i posledicama koje su danas vidljive u modernom engleskom.

Ključne reči: I-mutacija, prednji vokali, morfološki procesi, staroengleski, derivacija, fleksija.