Some remarks on West Saxon back umlaut

Hirokazu Noguchi

The present study describes the way in which short front vowels behave in back umlaut conditions in the West Saxon version of the Gospel of St. Matthew. We will mainly show that the phonological rule of West Saxon back umlaut does not apply to the phonology of the a-declension neuter noun and strong class I verb, but is barely retained for the phonology of the weak class II and III verbs. As for the development of original wi-/we- in back umlaut conditions, we most commonly find the form with combinative back umlaut, followed by the form which never shows either combinative back umlaut or simple back umlaut, and finally the form with simple back umlaut.

1. Introduction

Old English back umlaut is a sound change whereby the short front vowels /i/, /e/ and /æ/ diphthongized when a back vowel was present in the following syllable, see Luick (1914–40 [1964: 202–203]), Campbell (1959: 85), Hogg (1992a, 1: 152–153). Take heofon (< *hefōn) ‘heaven’, and liofað (< *lifað) ‘he lives’ for instance. The diphthongs in these words can be assumed to have resulted from the influence of the following back vowels /u/ (u-umlaut), and /a/ (a-umlaut), respectively. However, back umlaut is much more restricted in its operation in West Saxon (WS), where this sound change is also usually leveled out in inflectional morphology, as stated by Campbell (1959: 88, 90) and Hogg (1992a, 1: 165). In Section 2 we deal with WS back umlaut in connection with its morphological context, to see how far leveling has occurred in inflection.

In addition to ‘simple’ back umlaut, we find combinative back umlaut (wi- > wu-, we- > wo-), or retracted forms, alongside diphthongized (wi- > wio-, we- > weo-) and undiphthongized forms (wi-, we-). Our concern is with the frequency of occurrences of combinative back umlaut relative to the other forms, which is discussed separately in Section 3.

2. Simple back umlaut

2.1. An overview

At first let us roughly tabulate occurrences of back umlaut in the text used (Fig. 1). The back umlaut of /i/ and /e/ is to /io/ and /eo/, respectively. For <io> we regularly find <eo> (e.g. seofon ‘seven’), as a result of earlier phonemic merger of /io/ and /eo/ in WS (Kuhn 1961: 529–530). The high vowel /i/ is both u-umlauted and a-umlauted, while the mid vowel /e/ is u-umlauted, but not a-umlauted. This absence of the a-umlaut of /e/ is almost restricted to WS dialects, where the high vowel /i/ is most subject to diphthongization, see Campbell (1959: 88–90). Note that the back umlaut of /æ/ is entirely lacking. This is because of earlier restoration of a
before a back vowel. It is also to be noted that analogical clypode 'he called' occurs instead of phonological cleopode. Conversely, we find geteorion 'they may faint', where e would be expected.

As a rule back umlaut occurs with a single intervening consonant. Thus we find no examples of the umlaut with a consonant cluster or a geminate. With regard to the nature of the intervening consonant, most favorable must be labials f, p, w and liquids r, l. West Saxon simple back umlaut with labials and liquids

Apart from occurrences of weo resulting from back umlaut e.g. sweotola, weoruld, see Sections 3.1–3.2), the total number of occurrences of back umlaut amounts to 195, of which 190 (97%) occur with labials (/f, p, w/) and liquids (/r, 1/), and the remaining five (3%) with dentals (/s, n/) (Fig. 2).

It would appear that our examples support the claim of Hogg (1992a, 1: 153), following Campbell (1959: 85), that back umlaut is regular in WS if the intervening consonant is a labial or liquid; for the labial /m/ see Sections 2.5–2.6. We also find examples of back umlaut with other consonants than these, as in sandceosel (OHG -kisil) 'sand' 1x, heonon 'hence' 4x, both of which are probably due to the influence of the other dialects. The former was subject to u–umlaut because of suffix substitution (Campbell 1959: 158); for the latter with a–umlaut see Wright and Wright (1914: 54). But these would form no more than a minority of cases. Thus our examina-

Fig. 1. Examples of simple back umlaut of /i/ and /e/

<table>
<thead>
<tr>
<th></th>
<th>/i/</th>
<th>/e/</th>
<th>/æ/</th>
</tr>
</thead>
<tbody>
<tr>
<td>u–umlaut</td>
<td>−/i/</td>
<td>seofon</td>
<td>heofon</td>
</tr>
<tr>
<td></td>
<td>−/p/</td>
<td>(clypode)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>−/w/</td>
<td>streowedon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>−/r/</td>
<td>geteorion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>−/l/</td>
<td>seolf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>−/s/</td>
<td>sandceosel</td>
<td></td>
</tr>
<tr>
<td>a–umlaut</td>
<td>−/i/</td>
<td>leofaδ</td>
<td></td>
</tr>
<tr>
<td></td>
<td>−/p/</td>
<td>cleopaδ</td>
<td></td>
</tr>
<tr>
<td></td>
<td>−/r/</td>
<td>heora</td>
<td></td>
</tr>
<tr>
<td></td>
<td>−/n/</td>
<td>heonon</td>
<td></td>
</tr>
</tbody>
</table>

2.2. West Saxon simple back umlaut with labials and liquids

Apart from 5 occurrences of weo– resulting from back umlaut (e.g. sweotolaδ, weoruld, see Sections 3.1–3.2), the total number of occurrences of back umlaut amounts to 195, of which 190 (97%) occur with labials (/f, p, w/) and liquids (/r, 1/), and the remaining five (3%) with dentals (/s, n/) (Fig. 2).

It would appear that our examples support the claim of Hogg (1992a, 1: 153), following Campbell (1959: 85), that back umlaut is regular in WS if the intervening consonant is a labial or liquid; for the labial /m/ see Sections 2.5–2.6. We also find examples of back umlaut with other consonants than these, as in sandceosel (OHG -kisil) 'sand' 1x, heonon 'hence' 4x, both of which are probably due to the influence of the other dialects. The former was subject to u–umlaut because of suffix substitution (Campbell 1959: 158); for the latter with a–umlaut see Wright and Wright (1914: 54). But these would form no more than a minority of cases. Thus our examina-
Fig. 3. [+back umlaut] and [-back umlaut] with labials and liquids

<table>
<thead>
<tr>
<th></th>
<th>[+back umlaut]</th>
<th>[-back umlaut]</th>
</tr>
</thead>
<tbody>
<tr>
<td>u-umlaut of /i/</td>
<td>14x</td>
<td>2x</td>
</tr>
<tr>
<td>a-umlaut of /i/</td>
<td>86x</td>
<td>20x</td>
</tr>
<tr>
<td>u-umlaut of /e/</td>
<td>85x</td>
<td>0x</td>
</tr>
<tr>
<td>Total</td>
<td>185x (89%)</td>
<td>22x (11%)</td>
</tr>
</tbody>
</table>

tion will be confined to back umlaut with labials and liquids, where the ratio of [+back umlaut] (diphthongized forms) to [-back umlaut] (undiphthongized forms), except in inflection, is approximately 9 to 1 (Fig. 3).

2.3. In inflection

Conversely, the ratio of [+back umlaut] to [-back umlaut] is about 1 to 9 in inflection. This would easily lead us to assume that back umlaut is much less likely to be retained in inflectional morphology:

Fig. 4. [+back umlaut] and [-back umlaut] in inflection

<table>
<thead>
<tr>
<th></th>
<th>[+back umlaut]</th>
<th>[-back umlaut]</th>
</tr>
</thead>
<tbody>
<tr>
<td>u-umlaut of /i/</td>
<td>0x</td>
<td>26x</td>
</tr>
<tr>
<td>a-umlaut of /i/</td>
<td>3x</td>
<td>4x</td>
</tr>
<tr>
<td>u-umlaut of /e/</td>
<td>2x</td>
<td>0x</td>
</tr>
<tr>
<td>Total</td>
<td>5x (14%)</td>
<td>30x (86%)</td>
</tr>
</tbody>
</table>

In this connection, let us briefly discuss the morphological context of WS back umlaut, see Hogg (1992a: 1: 165–166). In inflectional morphology, the u-umlaut of /i/ should mainly appear in the preterites (–ode) and past participle (–od) of weak class II verbs, the preterite plural (–on) of strong class I verbs, and the nominative plural (–u) and dative plural (–um) of a-declension neuter nouns; for the dative plural of the a-declension masculine wer ‘man’ see Bosworth and Toller (1898), while the a-umlaut of /i/ should mainly appear in the second and third singular present indicative (–as, –að) and imperative singular (–a) of weak class II verbs and the class III libban, and the genitive plural (–a) of a-declension neuter nouns. In all these cases, according to Campbell (1959: 88–90) and Hogg (1992a: 1: 165), the umlaut is usually leveled out or absent in WS.

In what follows, we will deal with occurrences of both [+back umlaut] and [-back umlaut] mainly to describe how far back umlaut has left its traces in inflection.

2.4. u-umlaut of /i/

The u-umlaut of /i/ commonly occurs with labials and liquids, with the exception of eorðbyfing ‘earthquake’ 2x:
In inflection, however, we find no examples of the uumlaut of /i/, which is mainly due to leveling. Let us look at the paradigm of the weak class II verb *clipian* ‘call’, in which the unumlauted *ɾ* forms occur in the preterites and past part.: *clipode* pret.sg. 1x beside *(ge)*_clypode_ 13x, _clypedon_ pret. pl. 7x, _geclypodum_ infl.past part. 1x beside _geclypedum_ 1x. This is true of other words, too, e.g. *byfode* ‘tremble’ pret.sg. 1x. Furthermore, the strong class I verb *adryfon* ‘drive’ pret.pl. 1x, and the a−decl. neut. _genypenn_ (for −um) ‘cloud’ dat.pl.1x fail to occur with uumlaut. The former could be taken as due to the morphological analogy of the other pret. plurals, such as *arison* ‘they arose’. We could refer to the latter as due to the analogy of the uninflected _genip._

2.5. a−umlaut of /i/

The higher incidence of the a−umlaut of /i/ is due to the frequent occurrence of _heora_ as against the unumlauted _hyra_ 19x. Back umlaut is absent in _bedclyfan_ ‘closet’ 1x:

(2) −/i/ _endleofen_ ‘eleven’ 1x, _leofa_ ‘he lives’ 2x; −/p/ _cleopa_ ‘he calls’ 1x; −/r/ _heora_ ‘their’ 85x

Again, we find a tendency for the umlaut to be leveled out, as in _clypia_ 3sg.pres. 3x, _clypa_ imp.sg. 1x. In contrast, there are no cases in which analogical extension of back umlaut takes place; thus we find _clypia_ pres.pl. 2x, and _clipiende_ pres.part. 1x, but not *cleopia_ etc. In these cases no occurrences of back umlaut would be expected because of the suffix containing −ia−−ie−, where −i− is due to i−umlaut, i.e. −ōj− > −oj− > −eij− > −i− > −i− (Hogg 1992b: 160). Consequently we get the following paradigm of *clipian*, where the morphological alternation between [+back umlaut] and [−back umlaut] is leveled out in favour of the latter (<ee> 1x, <y, i> 27x). Clearly, leveling of back umlaut has reduced allomorphic variation and therefore simplified the paradigm, where only one instance of phonological _cleopa_ occurs (Fig. 5). As for the weak class III *libban_ ‘live’, we find _leofa_ 3sg.pres. 2x instead of analogical _lifad_. This would be because of

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Fig. 5. [+back umlaut] and [−back umlaut] in the paradigm of *clipian*

<table>
<thead>
<tr>
<th></th>
<th>[+back umlaut]</th>
<th>[−back umlaut]</th>
</tr>
</thead>
<tbody>
<tr>
<td>3sg.pres.</td>
<td><em>cleopa</em> 1x</td>
<td><em>clypa</em> 3x</td>
</tr>
<tr>
<td>pres.pl.</td>
<td>(clypia 2x)</td>
<td></td>
</tr>
<tr>
<td>imp.sg.</td>
<td></td>
<td><em>clypa</em> 1x</td>
</tr>
<tr>
<td>pret.sg.</td>
<td><em>clipode</em> 1x/(ge)<em>clypode</em> 13x</td>
<td></td>
</tr>
<tr>
<td>pret.pl.</td>
<td><em>clypedon</em> 7x</td>
<td></td>
</tr>
<tr>
<td>pres.part.</td>
<td>(clipiende 1x)</td>
<td></td>
</tr>
<tr>
<td>past part.</td>
<td><em>geclypodum</em> 1x/<em>geclypedum</em> 1x</td>
<td></td>
</tr>
</tbody>
</table>
the alternation [bb] – [v] (libban – leofað); for the form with <i> see Holthausen (1974).

No instances of back umlaut are found before the labial /m/ : the a-decl. neut. lima/lymena ‘limb’gen.pl., in addition to niman ‘take’, nimað pres.pl., nymanne infl.inf. It is unclear whether back umlaut occurred with /m/ in WS, see Davidsen–Nielsen and Ørum (1978: 207). If back umlaut is triggered by /m/, then lima simply shows leveling (Hogg 1992a, 1: 156-157). On the other hand, in view of the complete absence of the a-umlaut of /ε/ in WS, as in the strong class IV verb beran, see below, it could be supposed that back umlaut never occurred in niman, belonging to the same class.

2.6. u-umlaut of /ε/

The frequent occurrence of forms and derivatives of heofon is responsible for the higher incidence of the u-umlaut of /ε/:

(3) –/i/ heofon (–) ‘heaven’ 79x, heofenlica (n) ‘heavenly’ 6x; –/w/ streowedon ‘they strewed’ 1x; –/r/ geteorion (for –ien) ‘they may faint’ 1x

Note streowedon, where /e/ resulting from the i-umlaut of /æ/ was subject to u-umlaut because of morphological transfer of verbs from weak class I to II. The absence of back umlaut in fremode ‘he performed’, which also shows transfer to weak class II, would lead us to assume that /m/ is less likely to trigger the change than the other labials, see above. Analogical extension of back umlaut occurs in geteorion pres.pl.subj., which transferred to class II. This suggests that there is, in back umlaut, extension as well as leveling. In the preceding section, we have observed that back umlaut is not extended to forms in –/iæ–/–ie–; thus we do not find such forms as *cleopiað, *cleopiende for clypiæð etc. We could then argue that analogical extension of back umlaut is much less likely to occur in inflection.

As mentioned earlier, no evidence for the a-umlaut of /e/ is observed. Thus /e/ remains unaffected even before liquids: fela ‘many’, welan ‘wealth’, etc. Hence we never find back umlaut in the present tense forms of strong verb class IV: beran ‘bear’ forstelað ‘they steal’, etc. This would be true of the present tense forms of strong verb class V. Back umlaut is also absent in weoras, nom.pl. of the a-decl. masc. wer ‘man’.

3. Combinative back umlaut

3.1. Combinative back umlaut alongside diphthongized and undiphthongized forms

In addition to the diphthongization discussed above, we find the development of wi– > wu–, and we– > wo–, when followed by a back vowel in the next syllable. This process of retraction of /i/ to /u/ and /e/ to /o/ after /w/, in back umlaut conditions, is called combinative back umlaut (Campbell 1959: 86), which is restricted to examples of u-umlaut, as in wudu, wouruld. Combinative a-umlaut never occurs, thus swica ‘deceiver.’

Alongside combinative back umlaut, there occur such forms as sweotolæð, weoruld as a result of simple back umlaut. We also find forms which show neither retraction nor diphthongization, as in witon, welerum. With regard to dialectal variation, Hogg (1992a, 1: 163) states that combinative
back umlaut is extremely widespread in WS. Our attention will be given to the frequency of occurrences of combinative back umlaut relative to the other forms.

3.2. **Combinative back umlaut of /i/ and /e/**

Our examples of combinative back umlaut of /i/ show that combinative back umlaut may occur regardless of the nature of the intervening consonant. There are examples of the umlaut with the consonant cluster /st/:

\[
\begin{align*}
(4) & -/g/ \text{ gesuwode}^{10} \text{ 'be silent' pret.sg. 1x; } -/t/ \text{ geswutelian } (< \text{ swutol} -) \text{ 'declare' 1x, swutelode pret.sg. 1x, geswutelod past part. 1x, uton } (< \text{ wuton} ) \text{ 'let us' 4x; } -/d/ \text{ wudu 'wood' 1x; } \\
& -/st/ \text{ swuster 'sister' 1x, swustra 2x}
\end{align*}
\]

The diphthongized form also occurs, hence gesweotolað 3sg.pres. 1x, weolcen-rēadum (< wioloc-) 'scarlet' 1x. Examples with wi- are cwydum ‘saying’ dat.pl. 2x, swigade pret.sg. 1x, swigedon pret.pl.subj. 1x, and witon ‘they know’ 4x. As for witodlice ‘indeed’ 102x, which we have excluded from the count, it never shows either retraction or diphthongization.

Our examples of combinative back umlaut of /e/ are restricted to the word for ‘world’:

\[
(5) -/r/ \text{ woruld 2x, worulde 4x}
\]

We also find weoruld 1x, weorulde 1x beside weorlde 1x as a result of simple back umlaut. Examples with we- are welerum (< *welurum) ‘lips’ 1x, and weredum (< *werudum) ‘troops’ 1x, for which see Campbell (1959: 88).

3.3. **Phonological developments of wi- / we- in back umlaut conditions**

The number of occurrences of combinative back umlaut amounts to 18 (55%) (wu-/wo-), followed by 10 (30%) occurrences of the form which shows neither combinative back umlaut nor simple back umlaut (wi-/we-), and finally 5 (15%) occurrences of the form with simple back umlaut (weo-).

With regard to the development of original wi- / we- in u-umlaut conditions, we could assume that they developed directly toward either retraction or diphthongization, since the monophthongization of (wi- >) wio- > wu-11 (we- >) weo- > wo- is phonetically odd; the reality of diphthongization of back vowels would not be accepted, i.e. (wi- >) wu- > wio-, (we- >) wo- > weo-. Note that the retracted form occurs much more frequently than the diphthongized form, which would suggest that the usual development was retraction to wu-/wo-. The form gesweotolād, see above, is then taken to have escaped combinative back umlaut, indicating that the preceding /w/ might allow simple back umlaut to occur even before other consonants than labials and liquids; for the relative chronology of combinative back umlaut and simple back umlaut see Luick (1914–40 [1964: 213]), Campbell (1959: 92). Such inflected forms as swigade, witon could be explained as examples of analogical leveling of combinative back umlaut (thus swigian – swigade, witan – witon); the same is true of cwydum.
4. Summary

In the West Saxon version of the Gospel of St. Matthew back umlaut is common when a labial
or liquid intervenes, as in *heofon*, *sefon*, *seolf*. The umlauted *heora* outnumbers *hyra* in the
approximate ratio 4:1. Back umlaut is absent in *eorðbyfung* and *bedclyfan*. In inflectional morphol-
ogy back umlaut tends to be leveled out. This is clearly to be observed in the paradigm of the
weak verb class II *clipian*, where analogical forms such as *clypað* 3sg.pres., *clypa* imp.sg., *clipode/
(ge)*clipode pret.sg., *clypedon* pret.pl. and *geclypodum* /geclypedum* infl.past part. commonly occur.
We have only one instance of *cleopa* alongside usual *clypað*. The class II *byfode* pret.sg. can also
be regarded as due to leveling. There are some verbs which transferred from weak class I to II,
such as *geteorion* pres.pl.subj., *streowedon* pret.pl., but we find the unumlauted *fremode* pret.sg.,
which would suggest that /m/ is less likely to trigger off back umlaut than the other labials. The
occurrence of the class III *leofað* 3sg.pres., instead of analogical *lifað* would be because of allo-
morphic variation between –*bb*– and –*f*– (*libban* – *leofað*). The pret.pl. of strong verbs of class I
never occurs with *u*–umlaut, thus *adryfon*. Let us then move on to the inflected forms of the *a*–
declension neuter noun, where back umlaut has left no traces of its own, as in *genypon* dat.pl. If
the phonological change is carried out before /m/, then *lima*/*lymena* gen.pl. can be taken as due
to leveling. From the above it follows that the phonological rule of WS back umlaut does not ap-
ply to the phonology of the *a*–declension neuter noun and strong class I verb, but is barely re-
tained for the phonology of the weak class II and III verbs.

As for the phonological behavior of original *wi*–*we*– in *u*–umlaut conditions, combinative back
umlaut is most commonly found, e.g. *wudu*, *woruld*. After this, comes the form showing neither
combinative back umlaut nor simple back umlaut, e.g. *swigedon*, *welerum*. Last comes the form
with simple back umlaut, e.g. *gesweotolað*, *weoruld*. It is then reasonable to assume that the nor-
mal development was retraction to *wu*–*/wo*– rather than diphthongization to *wio*–*/weo*–. It ap-
ppears that combinative back umlaut tends to be leveled out in inflection, as in *swigade* pret.sg.,
which occurs alongside phonological *gesuwode*.

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Gradon, Pamela. 1962. “Studies in Late West Saxon labialization and delabialization”. *English and Medieval
This is often designated as o/a− umlaut, since /a/ was a result of /o/ (< /ɒ:/).
2 The data are taken from the West Saxon version of the Gospel of St. Matthew. The edition we have used is that of Grünberg (1967).
3 Hence we find restored a before an original back vowel, as in cafertune ‘hall’, stala ‘thefts’. However, in Mercian, where second fronting affected a, there occurred back umlaut of /æ/.
4 In WS, /i/ is commonly spelled <y>, see Gradon (1962: 63–76).
5 Thus giftum ‘gifts’ fails to show back umlaut.
7 Back umlaut is dated later than i−umlaut, see Campbell (1959: 109).
8 The gen.pl. inflection –ena came from the n−declension (Hogg 1992b: 133).
9 There occurs one instance of hefena gen.pl., which might represent the monophthongization of /eo/ (Sisam and Sisam 1959: 29).
10 In gesuwode (< –swuwode < –swugode), combinative u−umlaut of /i/ took place when the stem vowel was followed by g representing the velar fricative [ɣ], see Kuhn (1970: 28). See also Davidsen–Nielsen and Ørum (1978: 207) for the phonetic value of g at the time of back umlaut.
11 The change of /eo/ to /u/ is limited to the position between /w/ and /r/, as in wurðan (< weorðan) ‘become’, see Campbell (1959: 133).