Some remarks on West Saxon back umlaut

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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* (< **hefun*) 'heaven', and *liofa*ð (< **lifa*ð) '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),¹ 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).² The back umlaut of /i/ and /e/ is to /io/ and /eo/, respectively. For $\langle io \rangle$ we regularly find $\langle eo \rangle$ (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*

		/i/	/e/	/æ/
<i>u</i> –umlaut	-/f/	seofon	heofon	
	-/p/	(clypode)		
	-/w/		streowedon	
	-/r/		geteorion	
	-/1/	seolfor		
	-/s/	sandceosel		
<i>a</i> –umlaut	-/f/	<i>leofa</i> ð		
	-/p/	cleopað		
	-/r/	heora		
	-/n/	heonon		

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

before a back vowel.³ It is also to be noted that analogical *clypode* 'he called⁴⁴ 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).⁵ With regard to the nature of the intervening consonant, most favorable must be labials (/f, p, w/) and liquids (/r, l/).⁶

2.2. West Saxon simple back umlaut with labials and liquids

Apart from 5 occurrences of *weo*- resulting from back umlaut (e.g. *sweotola*ð, *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. 2. Simple back umlaut with labials, liquids and dentals

	-/f/	-/p/	-/w/	-/r/	-/1/	-/s/	-/n/
u- umlaut of /i/	12 x				$2\mathbf{x}$	1x	
a– umlaut of /i/	3 x	1 x		85 x			4 x -
u– umlaut of /e/	85 x		$1\mathbf{x}$	1x			

Fig. 3. [+back umlaut] and [-back umlaut] with labials and liquids	Fig. 3.	[+back umlaut]	and [-back umlau	It] with labials and liquids
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	[+back umlaut]	[-back umlaut]
u–umlaut of /i/	14 x	2 x
<i>a</i> –umlaut of /i/	86 x	20 x
<i>u</i> –umlaut of /e/	85 x	0 x
Total	185 x (89%)	22 x (11%)

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

	[+back umlaut]	[-back umlaut]
u–umlaut of /i/	$0\mathbf{x}$	26 x
<i>a</i> –umlaut of /i/	Зх	$4\mathbf{x}$
u–umlaut of /e/	2 x	0 x
Total	5x (14%)	30x (86%)

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*, *-a*ð) 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 *eor* δby *fung* 'earthquake' 2x:

(1) -/f/ seofon 'seven' 9x, seofena 1x, hundseofentygon 'seventy' 1x, seofeðan 'seventh' 1x; -/1/ seolfor (< siolufr) 'silver' 1x, seolfre 1x

In inflection, however, we find no examples of the *u*-umlaut 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 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. *genypon* (for -um) 'cloud' dat.pl.1x fail to occur with *u*-umlaut. The former could be taken as due to the morphological analogy of the other pret. plural forms, 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) -/f/ endleofen 'eleven' 1x, leofað 'he lives' 2x; -/p/ cleopað 'he calls' 1x; -/r/ heora 'their' 85x

Again, we find a tendency for the umlaut to be leveled out, as in *clypa*ð 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*ð pres.pl. 2x, and *clipiende* pres.part. 1x, but not **cleopia*ð 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. $-\bar{o}j- > -oj- > -ej- > -ij- > -i-$ (Hogg 1992b : 160).⁷ 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 (<eo> 1x, <y, i> 27 x). Clearly, leveling of back umlaut has reduced allomorphic variation and therefore simplified the paradigm, where only one instance of phonological *cleopa*ð occurs (Fig. 5). As for the weak class III *libban* 'live', we find *leofa*ð 3sg.pres. 2x instead of analogical *lifa*ð. This would be because of

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

	[+back umlaut]	L−back umlaut]
3sg.pres.	cleopað 1x	<i>clypa</i> ð 3x
pres.pl.	(<i>clypia</i> ð 2x)	
imp.sg.		clypa 1x
pret.sg.		clipode $1x/(\dot{g}e)$ clypode $13x$
pret.pl.		clypedon 7x
pres.part.	$(clipiende \ 1x)$	
past part.		ġeclypodum 1x/ġeclypedum 1x

the alternation [bb] - [v] (*libban* - *leofa* δ); for the form with $\langle i \rangle$ see Holthausen (1974).

No instances of back umlaut are found before the labial /m/: the *a*-decl. neut. *lima/lymena* 'limb'gen.pl.,⁸ in addition to *niman* 'take', *nima*ð 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 /e/ 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 /e/

The frequent occurrence of forms and derivatives of *heofon*⁹ is responsible for the higher incidence of the *u*-umlaut of /e/:

(3) -/f/ heofon (-) 'heaven' 79x, heofenlica (n) 'heavenly' 6x; -/w/ streowedon 'they strewed' 1 x; -/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 off 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 -ia-/-ie-; thus we do not find such forms as **cleopia*ð, **cleopiende* for *clypia*ð 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' *forstela*ð 'they steal', etc. This would be true of the present tense forms of strong verb class V. Back umlaut is also absent in *weras*, 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*, *woruld*. Combinative *a*-umlaut never occurs, thus *swica* 'deceiver.'

Alongside combinative back umlaut, there occur such forms as *sweotolað*, *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/:

(4) -/g/ ġesuwode¹⁰ 'be silent' pret.sg. 1x; -/t/ ġeswutelian (< swutol-) 'declare' 1x, swutelode pret.sg. 1x, ġeswutelod past part. 1x, uton (< wuton) 'let us' 4x; -/d/ wudu 'wood' 1x; -/st/ swuster 'sister' 1x, swustra 2x

The diphthongized form also occurs, hence *gesweotola* δ 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/ 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 $(wi^{-}) wi^{-} > wu^{-}$, $(we^{-}) we^{-} > wo^{-}$ is phonetically odd; the reality of diphthongization of back vowels would not be accepted, i.e. $(wi^{-}) wu^{-} > wi^{-}$, $(we^{-}) wo^{-} > we^{-}$. 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 *gesweotola*ð, 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*, *seofon*, *seofor*. The umlauted *heora* outnumbers *hyra* in the approximate ratio 4:1. Back umlaut is absent in eorobyfung and bedclyfan. In inflectional morphology 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 *clypa*ð 3sg.pres., *clypa* imp.sg., *clipode*/ (ge) clypode pret.sg., clypedon pret.pl. and geclypodum/geclypedum infl.past part. commonly occur. We have only one instance of *cleopa*ð alongside usual *clypa*ð. 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 allomorphic variation between -bb- and -f- (*libban* - *leofa* \eth). 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 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 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. $gesweotola\delta$, weoruld. It is then reasonable to assume that the normal development was retraction to wu-/wo- rather than diphthongization to wio-/weo-. It appears 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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- Press.
- 1 This is often designated as o/a- umlaut, since /a/ was a result of /o/(</o:/).
- 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 /ac/.
- 4 In WS, /i/i is commonly spelled $\langle y \rangle$, see Gradon (1962: 63–76).
- 5 Thus *giftum* 'gifts' fails to show back umlaut.
- 6 See Davidsen–Nielsen and Ørum (1978: 206–207) for an acoustic explanation. For dialectal variation see Luick (1914–40 [1964: 214], Quirk and Wrenn (1957: 156), Campbell (1959: 85).
- 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 [Y], 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).