ALTERNATIONS *VS.* VARIATION IN OLD ENGLISH. METHODOLOGICAL AND DESCRIPTIVE ISSUES

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Abstract: *This paper addresses the phenomena of variation and alternation as reflected by the Old English version of* De Temporibus Anni *(Blake 2009). The analysis, which focuses on the stem vowels of verbs and is based on the diatopic and diachronic contrasts found by de la Cruz (1986) as well as the alternations identified by Kastovsky (1968), aims at deciding if a given equivalence is a product of variation or alternation. The results indicate that alternation is a more predictable and systematic phenomenon than variation. The conclusions stress the importance of the diphthong <ie> for distinguishing between Early and Late West-Saxon and as a point of contact between the phenomena of i-mutation, alternation and diachronic variation.*

Keywords: *Old English, alternation, dialectal variation, diachronic variation.*

1. INTRODUCCIÓN

The aim of this article is to draw a distinction between the concepts of *alternation* and *variation* in Old English.[1] These concepts are illustrated and discussed with reference to the Old English version of *De Temporibus Anni* (Blake 2009). The focus of the analysis is on vocalic alternations and variation in verbs. Throughout the discussion, some methodological and descriptive issues are raised that allow to reach the conclusion that variation is a less systematic phenomenon than alternation. Thus presented, this article can be seen as a contribution to the study of Old English morphology, which has pursued two main lines of research. In the first place, Kastovsky (1986, 1989, 1990, 1992, 2006) identifies a typological change in the morphology of Old English as a result of which invariable bases replace variable bases of inflection and derivation. According to Kastovsky (2006), this evolution takes place in two steps: from root-formation to stem-formation and, later on, from stem-formation to word-formation. In the same line, Haselow (2011) finds some analytic tendencies in the derivational morphology of English that originate in the change from variable to invariable base morphology. Secondly, Martín Arista (2008, 2009, 2010a, 2010b, 2011a, 2011b, 2011c, 2012a, 2012b, 2013, fc.-a, fc.-b) develops a functional theory of morphology focusing on some aspects of functional grammars like layering and projection and applies it to the inflection and derivation of Old English, as a result of which some lexical layers can be defined on the grounds of different morphological processes and different degrees of morphological productivity.

The outline of the article is as follows. Section 2 presents the framework of alternations, while section 3 presents the relevant patterns of variation of the diachronic and dialectal types. Section 4 discusses the instances of alternations and variation that arise in *De Temporibus Anni* and, to close this article, section 5 draws the main conclusions.

2. THE FRAMEWORK OF ALTERNATIONS

Ray (1996:13) remarks that the origin of Germanic strong verbs is to be found in primary Indo-European verbs, which, unlike other verbs like denominatives, causatives and iteratives, were not derived. Whereas Germanic strong verbs developed from primary verbs, weak verbs developed from derived Indo-European verbs. Rix *et al.*

(2001) provide the Indo-European reconstruction of Germanic strong verbs, which, for the letter B, includes the following verbal lexemes:

(1) *bacan* 'to bake' < *bheh3g-, *bēatan* 'to beat' < bheud-, *belgan* 'to be angry' < *bhelgh-, *bellan* 'to bellow' < *bhelH-, *bendan* 'to bend' < *bhendh-, *blīcan* 'to glitter' < *bhleig-, *blōwan* 'to blow' < *bhleh2g-, *brēowan* 'to brew' < *bhreuH-, *brūcan* 'to brook' < *bhreuHg-, *būgan* 'to bow' < *bheugh-.

Indo-European primary verbs can be divided into non-thematic, which did not insert a thematic vowel after the root, and thematic, which had stems ending in thematic vowels (e, o). Szemerényi (1996) notes that non-thematic verbs disappeared in Germanic and reduplication, which had been a central formative principle of the perfect stem in Indo-European, was dropped. As a result, gradation or ablaut becomes the only formative principle available after the Germanic simplification of the Indo-European verb system. In Ray's (1996:68) words:

> [gradation] became the chief means of expressing the temporal relations of the verb. This is not surprising, for the principles of ablaut (…) ran through the whole language and (...) it was rare to find vowels (…) playing part in important linguistic processes (…) which were not subject to it. (Ray 1996:68)

For Ringe (2006:10), the Indo-European patterns of alternation ē ~ e ~ Ø ~ o ~ ō and ā ~ a ~ Ø have the following reflexes in Germanic:

(2) Short series   Long series
    e ~ Ø ~ o   ē ~ a ~ ō
    a ~ Ø ~ o   ā ~ a ~ ō
    o ~ Ø ~ o   ō ~ a ~ ō

The Proto-Germanic strong verbs display the patterns in (2) as shown by (3), where C stands for consonant, R for resonant and N for nasal (Ringe 2006: 11):

(3) Class I   īC ~ aiC ~ iC
    Class II   euC ~ auC ~ uC
    Class III   eRC/iRC ~ aNC ~ uNC
    Class IV   eR/iR ~ aR ~ uR
    Class V   eC/iC ~ aC ~ēC
    Class VI   aC ~ ōC ~ ōC

As Ray (1996:97) points out, the correspondence between Proto-Germanic and Germanic strong verbs can be accounted for in the following terms. Germanic strong verbs can be classified into e-verbs, a-verbs, æ-verbs and ō-verbs, in such a way that e represents Proto-Germanic strong grade e, a corresponds to strong grade o or a, æ stands for strong grade ē and ō is the reflex of strong grade ō or ā. Such vocalic correspondences are reflected in the seven classes of strong verbs found in Old English and the other old Germanic languages. The basis of the classification is the vowel alternations holding among the infinitive, the preterite singular, the preterite plural and the past participle, as presented in (4):

(4)	**Infinitive**	**Preterite singular**	**Preterite plural**	**Past Participle**
I	*drifan* 'to drive'	*drāf*	*drifon*	*drifen*
II	*clēofan* 'to cleave'	*clēaf*	*clufon*	*clofen*
III	*drincan* 'to drink'	*dranc*	*druncon*	*druncen*
IV	*beran* 'to bear'	*bær*	*bǣron*	*geboren*
V	*gifan* 'to give'	*geaf*	*gēafon*	*gifen*
VI	*standan* 'to stand'	*stōd*	*stōdon*	*standen*
VII	*slǣpan* 'to sleep'	*slēp*	*slēpon*	*slǣpen*

As Hogg and Fulk (2011) explain, the infinitive of class I has ī followed by one consonant, as in *scīnan* 'to shine'. The infinitive of class II has either ēo or ū followed by one consonant as in, respectively, *crēopan* 'to creep' and *brūcan* 'to enjoy'. The infinitives of class III can be grouped under five sub-classes: e followed by two consonants (*bregdan* 'to move'), eo + r/h plus consonant (*beorgan* 'to protect'), I plus consonant (*helpan* 'to help'), palatal plus ie followed by two consonants (*gieldan* 'to pay') and i + nasal followed by consonant (*drincan* 'to drink'). The infinitive of class IV has e plus liquid, as in *beran* 'to bear'. The infinitive of class V has e plus plosive or fricative, as in *cweðan* 'to say'. Finally, the distinctive characteristic of class VII is that it has the same vowel either in the infinitive and the past participle (*dragan* 'to draw', past participle *dragen*) or in the preterite singular and the preterite plural (*hēold*, *hēoldon*, preterite of *healdan* 'to hold').

Hinderling (1967) and Kastovsky (1992, 2006) consider the strong verb the starting point of lexical derivation in Germanic. As can be seen in (5), all the major lexical categories (including the strong verb itself) have derivatives based on strong verbs in Old English:

(5) a. Strong verb-noun (Palmgren 1904; Kastovsky 1968)
   cweðan 'to say' ~ *cwiss* 'speech'
   fōn 'to take' ~ *feng* 'grasp'
   hweorfan 'to turn' ~ *hwearft* 'revolution'

  b. Strong verb-weak verb (Schuldt 1905; Bammesberger 1965)
   hwīnan 'to hiss' ~ *āhwǣnan* 'to afflict'
   belīfan 'to remain over' ~ *lǣfan* 'to leave'
   scīnan 'to shine' ~ *gescǣnan* 'to break'

  c. Strong verb-adjective (Schön 1905)
   biddan 'to ask' ~ *bedul* 'suppliant'
   magan 'to be able' ~ *meagol* 'mighty, strong'
   stīgan 'to move' ~ *stǣgel* 'steep'

  d. Strong verb-strong verb (Martín Arista 2010a, 2010b)
   faran 'to go, fare': *āfaran* 'to go out', *befaran* 'to go', *forfaran* 'to pass away', *forðfaran* 'to depart', *forðgefaran* 'to depart', *infaran* 'to enter', *misfaran* 'to go wrong', *offaran* 'to interpret', *oferfaran* 'to pass', *oðfaran* 'to free from', *tōfaran* 'to be scattered', *ðurhfaran* 'to pass through', *ūtfaran* 'to go out', *ūtāfaran* 'to come forth', *wiðfaran* 'to come off', *ymbfaran* 'to surround'.

The derivation of nouns from verbs has drawn more attention than other lexical categories. Palmgren (1904) classifies strong verb derivatives on the grounds on the part of the verb, that is, present tense formations, past formations and past participle formations. Present tense formations include neuters (*hlæd* 'mound, pile'~ *hladan* 'to lade'), strong masculines (*hrōp* 'clamour'~ *hrōpan* 'to shout'), weak masculines (*hweorfa* 'whorl of spindle' ~ *hweorfan* 'turn'), strong feminines (*span* 'span' ~ *spannan* 'clasp') and weak feminines (*dræge* 'drag-net'~ *dragan* 'to drag'). Past tense formations can be broken down into neuters (*mealt* 'malt'~ *meltan* 'to consume by fire'), strong masculines (including o- stems like *scēaf* 'bundle, sheaf'~ *scūfan* 'to shove'; and i- stems like *hlīet* 'lot'~ *hlēotan* 'to cast lots'), weak masculines (*wrēcca* 'exile, wretch'~ *wrecan* 'to drive'), feminines based on the vowel of the singular (including strong feminines with short stem-syllable like *cwalu* 'killing' ~ *cwelan* 'to kill'; strong feminines with long stem-syllable like *bād* 'pledge, impost; expectation'~ *bīdan* 'to stay'; and weak feminines like *scīete* 'sheet, cloth'~ *scēat* 'napkin'. Past tense formations based on the vowel of the plural comprise strong feminines (*scēara* 'shears'~ *scieran* 'to cleave') and weak feminines (*wæge* 'scales, balance'~ *wegan* 'to weigh'). Past participle formations can be of the neuter gender (*swol* 'burning'~ *swelan* 'to burn'); of the masculine gender, including strong nouns (with short stem-syllable, such as *bryne* 'burning'~ *biernan* 'to burn'; and long stem-syllable such as *swēg* 'noise, sound'~ *swōgan* 'to resound') and weak nouns (*unna* 'permission'~ *unnan* 'to grant'); and the feminine gender (both strong like *hulu* 'husk'~ *helan* 'to calumniate'; and weak like *storfe* 'flesh of animals that have died by disease'~ *steorfan* 'to die').

The instances of strong verb-noun derivation presented above show that, while some formations keep the vocalic grade of the strong verb base, thus *hrōp ~ hrōpan,* it is usually the case that there is a contrast between the vocalic grade of derived noun and the strong verb, as in *cwiss ~ cweðan*, *feng ~ fōn* and *hwearft ~ hweorfan*. Moreover, these vocalic contrasts tend to be recurrent, as can be seen in the following derivatives of the strong class III, all of which have a front vowel /e/ as opposed to the back vowel /a/ of the preterite form of the strong verb, on which they are based:

(6) *hlēmm* 'sound, noise' ~ *hlimman* 'to resound, roar'
   stēng 'pole, stake' ~ *stingan* 'to sting'
   swēnc 'tribulation' ~ *swincan* 'to toil'

The vocalic contrasts arising in (6) have been largely discussed in the literature as *ablaut* (or *apophony*) and the different vocalic values are usually referred to as *ablaut grades*. From the morphological point of view, recurrent contrasts between related forms that share a lexemic root have been dealt with in terms of *alternations*. Vocalic alternations in Old English are motivated by i-mutation, which is described by Hogg (1992:113) as follows: Old English vowels harmonised to an /i/ or /j/ following them in the same word. This caused all back vowels to front and all short vowels (except naturally /i/) and diphthongs to rise when /i/ or /j/ followed in the next syllable. The fronting of the back vowels /o/ and /u/ went through intermediate rounding, so that /o/ > /oe/ > /e/ and /u/ > /ue/ (<y>) > /i/. In general, previous research concurs that the phonological rules that produced ablaut were eventually morphologized (thus Lass 1994:108; Ringe 2006:10). In Kastovsky´s (1968:58) words:

> The alternations are in general only historically motivated, the motivation having disappeared on account of various sound changes long before the beginning of the literary period (...) The originally phonologically conditioned alternations thus became non-automatic, unpredictable, and must therefore be considered morphologically conditioned in OE, which permits us to conclude that they probably were no longer productive. (Kastovsky 1968:58)

Kastovsky (2006:171) dates the disappearance of alternations in the Middle English period, although he remarks that at the end of the Old Enlish period these alternations were already unpredictable. In spite of their morphological conditioning, Old English alternations hold between the strong verb on the one hand and the noun, the adjective and the weak verb on the other.

Figure 1 illustrates the alternations obtaining between nouns and strong verbs and figure 2 the alternations holding between nouns and weak verbs. In Kastovsky´s (1968) analysis of Old English alternations, direct alternations conform to i-mutation whereas reverse alternations do not. In figures 1 and 2, A indicates that the alternation is vocalic, while R marks a reverse alternation.

Direct	Noun	Verb	Reverse	Noun	Verb
A1	*fær*	*faran*	A1R	*stalu*	*stæl (stelan)*
A2	*ece*	*acan*	A2R	*swaru*	*swerian*
A3	*fiell*	*feallan*	A3R		
A4a	*cwide*	*cweðen (cweðan)*	A4aR		
A4b	*wierp*	*weorpan*	A4bR		
A5	*bryce*	*brocen (brecan)*	A5R		
A6	*byrst*	*burston (berstan)*	A6R		
A7	*dræf*	*drāf (drīfan)*	A7R		
A8	*swēg*	*swōgan*	A8R		
A9	*hlīet*	*hlēat (hlēotan)*	A9R		
A10	*flīeta*	*flēotan*	A10R		
A11					

Figure 1: Strong verb vocalic alternations.

Direct	Noun	Verb	Reverse	Noun	Verb
A1					
A2	*cempa*	*campian*		*sand*	*sendan*
A3			A3R	*gemearr*	*mierran*
A4a			A4aR		
A4b	*fyrm*	*feormian*	A4bR	*weorc*	*wyrcan*
A5			A5R	*spor*	*spyrian*
A6			A6R	*husc*	*hyscan*
A7	*æsce*	*āscian*	A7R	*lār*	*lǣran*
A8	*lēc*	*lōcian*	A8R	*fōda*	*fēdan*
A9			A9R	*ēaca*	*īecan*
A10	*frīg*	*frēogan*	A10R	*stēora*	*stīeran*
A11	*bȳ*	*būan*			

Figure 2: Weak verb vocalic alternations.

Figure 1 describes a situation in which the derivation of nouns from strong verbs mainly produces direct alternations, as in *ece* 'pain' ~ *acan* 'to ache', where the noun displays the predictable ablaut grade with respect to the verb on the basis of i-mutation. Figure 2, on the other hand, mainly contains reverse alternations, in such a way that the direction of i-mutation in pairs like *fōda* 'food' ~ *fēdan* 'to feed' clearly indicates that the derivation must have started in the noun, the weak verb representing the i-mutation of the noun. Two remarks must be made on this interpretation of Kastovksy´s (1968) alternations. The first has to do with the terms *direct* and *reverse*. The direction of i-mutation is constant. Both in *weorpan* ~ *wierp* and *būan* ~ *bȳ* a front vowel and a back vowel are related to each other by i-mutation. Considering the base category, however, it is the case that the noun *wierp* is the i-mutation of the strong verb *weorpan* while the weak verb *būan* represents the i-mutation of the noun *bȳ*. In other words, the category rather than the vocalic grade is reversed. Whereas the strong verb is the base of derivation with respect to the noun, the noun is basic with respect to the weak verb. This is in keeping with the status of starting point of lexical derivation enjoyed by the strong verb, but has two important consequences. Firstly, if *cempa* derives from *campian* it follows that not all weak verbs are derived. Secondly, if *swerian* is the base of derivation of *swaru* not all strong verbs are basic. With these premises, it must be noted that the reverse alternations A4aR and A11R are unattested in Kastovsky´s (1968) account.

3. THE FRAMEWORK OF VARIATION

This section presents the patterns diatopic (interdialectal) and diachronic (intradialectal) variation as rendered in previous research, mainly by de la Cruz (1986). The focus is on vocalic variation. In general, interdialectal contrasts are described with reference to West-Saxon while intradialectal contrasts refer to West-Saxon exclusively.

Beginning with interdialectal vocalic variation, the contrast <æ>/<e> distinguishes the West-Saxon dialect from the other Old English varieties. West-Saxon prefers the forms in <æ>, while <e> varieties are used in other dialects. This is the case with the preterite of the verb *beran* 'to bring', which is *bær* in West-Saxon but *ber* in Kentish and Southern Mercian; the infinitive *lætan* 'to leave' and *sætan*, the preterite form of *sittan* 'to sit', which are, respectively, *lētan* and *sēton* in Northumbrian, Kentish and Mercian. However, together with the West-Saxon variety, Northumbrian and Mercian also present some <æ> forms, as in *dǣlan* 'to divide; to distribute', *hǣlan* 'to heal' or *lǣdan* 'to lead'; while Kentish uses the <e> forms of these words: *dēlan*, *hēlan* and *lēdan*.

Another contrast holds between <ie> and <e, æ>. West-Saxon is the only variety of Old English which uses the <ie> forms for verbs such as *hliehhan* 'to laugh', *cierran* 'to turn', *hīeran*, *gelīefan* 'to believe' and *giefan* 'to give'; while the <e> or <æ> forms of these words are preferred in Northumbrian, Kentish and Mercian: *hlehhan/hlæhhan*, *cerran*, *hēran*, *gelēfan* and *gefan*.

West-Saxon also displays the diphthong <ea> where the other three varieties of Old English use <e> or <æ>. This is the case with *sceal* 'shall' in West-Saxon, but *scel* or *scæl* in Northumbrian, Kentish and Mercian.

The contrast <eo>/<e> distinguishes West-Saxon and Kentish from Northumbrian and Mercian. The West-Saxon and Kentish varieties prefer the <eo> forms; hence verbs such as *beorgan* 'to protect' and *flēogan* 'to fly', which are respectively *bergan* and *flēgan* in Northumbrian and Mercian.

<y> forms are used in all Old English dialects. However, in Kentish, the original <y> of these forms changes into <e>. In this way, verbs like *fyllan* 'to fill' and *ontynan* 'to open' become *fellan* and *ontenan* in Late Kentish, although the <y> forms continue to be used in the other dialects and Early Kentish texts.

The contrast <e>/<eo> distinguishes West-Saxon, which uses the <e> forms, from the rest of dialects, which prefer the <eo> forms. An example of this is the verb *beran* 'to bring', which is *beoran* in Northumbrian, Kentish and Mercian. Nevertheless, it should be noted that, together with West-Saxon, Northumbrian and Mercian also present some <e> forms where Kentish still prefers the <eo> forms. Thus, the verb *sprecan* 'to speak' is written in this way in all Old English dialects except Kentish, which favours *spreocan*.

Another contrast which characterizes the West-Saxon dialect of English is the <i>/<io> contrast. <i> forms are preferred only in West-Saxon, whereas Northumbrian, Kentish and Mercian adopt <io> spellings. Therefore, the West-Saxon forms *sidu* 'habit' and *wita* 'adviser' are *siodu* and *wiota* in the rest of the dialects.

The contrast <ea>/<a> also allows us to distinguish the West-Saxon variety, which presents <ea> forms, from the other three, which use <a> spellings. Nevertheless, it should be noted that, in Kentish, the <a> becomes <ea>, as in West-Saxon. Thus, *healdan* in West-Saxon and Late Kentish corresponds to *haldan* in Northumbrian, Mercian and Early Kentish texts.

Another contrast holds between <ie> and <io, eo>. West-Saxon is characterized by using <ie> spellings where the rest of dialects prefer the forms in <io> or <eo>. Hence, *hierde* 'shepherd' and *gestrīenan* 'to procreate' are found in West-Saxon texts, but *hiorde* or *heorde* and *gestrīona* or *gestrīonan* are used in Northumbrian, Kentish and Mercian.

Finally, another contrast obtains between <e> and <eo>. West-Saxon presents <e> forms where the rest of the dialects opt for <oe> spellings. However, in Kentish the original <oe> spelling gives <e> forms. Thus, we find *dēman* 'to judge' and *sēcan* 'to seek' in West-Saxon and late Kentish, but *dōēman* and *sōēcan* in Northumbrian, Mercian and early Kentish. Similarly, *ēþ* 'he does' is used in West-Saxon and Late Kentish where Mercian and Early Kentish use *dōēþ*. Nevertheless, this verbal form is *doēs* in Northumbrian.

Turning to intradialectal vocalic variation in West-Saxon, Early West-Saxon texts present <ie> forms, as in *hīeran* 'to hear'; *hierde*, the preterite form of *hīeran*; *begietst*, the third person singular indicative of the verb *begietan* 'to obtain'; *giefan* 'to give'; and *wierþ*, the third person singular indicative of the verb *weorþan* 'to become'. Nevertheless, this diphthong changes to <y> or <i>. Therefore, in Late West-Saxon texts, we find *hȳran* or *hīran*, *hȳrde* or *hīrde*, *begystst* or *begitst*, *gyfan* or *gifan* and *wyrþ* or *wirþ* instead of the spellings presented above.

The contrast <y>/<i> can been identified between some nouns. In Early West-Saxon we find spellings like *cyning* 'king', *cynn* 'race' and *dryhten* 'lord'. However, this <y> evolved into <i>. The corresponding forms in Late West-Saxon are, respectively, *cining*, *cinn* and *drihten*.

In addition, Early West-Saxon presents <ea> forms for verbs such as *reahte*, the preterite of *reccan* 'to narrate'; *seah*, the preterite of *sēon* 'to see'; *geaf*, the preterite of *giefan* 'to give'; and *sceal* 'shall'. This diphthong yields way to <e>. Thus, in Late West-Saxon we find *rehte*, *seh*, *gef* and *scel*.

Another contrast can be identified between <io> and <eo>. Early West-Saxon displays <io> forms such as *cliopode*, the preterite of the verb *clipian* 'to call'; and *liofast*, the second person singular present indicative of the verb *libban* 'to live'. In contrast, in Late West-Saxon, these forms are *cleopode* and *leofast* respectively.

Among vocalic contrasts we must also include some represented by consonants, like the one holding between <v[j]> and <v>. Thus, in Early West-Saxon we find forms like *frignan* 'to ask'; *ligeþ*, the third person singular present indicative of the verb *licgan* 'to lie'; and *sægde*, the preterite of *secgan* 'to say', which become *frīnan*, *līþ* and *sæde* in Late West-Saxon.

Finally, other diachronic verbal contrasts are a consequence of the gradual regularization that Old English verbs undergo throughout the process of simplification of inflections. In this way, some originally canonical forms of strong verbs like *sprecen*, the present subjunctive plural of the verb *sprecan* 'to speak'; and *sungon*, the preterite indicative plural of the verb *singan* 'to sing', adopted a weakened form, namely *sprecan* and *singan*.

4. ALTERNATION VS. VARIATION IN THE OLD ENGLISH *DE TEMPORIBUS ANNI*

This section shows the results evinced by the analysis of alternation and variation in *De Temporibus Anni*. Beginning with alternations, this part of the analysis is based on the proposal by Kastovsky (1968), as presented in section 3. The focus is on alternations, involving both short and long vowels, which hold between the strong verb and the morphologically related weak verb. The alternations involving short vowels with instances in *De Temporibus Anni* can be seen in (7):

(7) a.   <a> ~ <æ>
          habban [*habban* inf; *habbað* pr3p; *hæbbe* subj pr3s; *gehæfd* pp; *hæfð*
          pr3s with neg; *nabbað* pr1p pr3p; *næbbe* subj pr3s; *næfð* pr3s] wk. 3
          'have, possess, hold' (*habban* 'to have')

     b.   <ea> ~ <y> (=<ie>)
          āfyllan [*āfylled* pp; *āfyllede* pp npm] wk. 1 'fill' (*feallan* 'to fall')

     c.   <eo> ~ <ie>
          forbærnan (=*forbiernan*, Sweet) [*forbærn* sing imp; *forbærne* subj pr3s]
          wk. 1 'burn, consume by fire' (*beornan* 'to burn')

Likewise, (8) shows those alternations involving long vowels:

(8) a.   <ā> ~ <ǣ>
          geneālǣcan [*genealǣce* pr3s] wk. 1 'approach' (*lācan* 'to move up and down')
          geþwǣrlǣcan [*geðwǣrlācað* pr3p] wk. 1 'agree, be in harmony' (*lācan* 'to move up and down')
          winterlǣcan [*winterlǣcð* pr3s] wk. 1 'grow wintry' (*lācan* 'to move up and down')

     b.   <ī> ~ <ǣ, preterite ā>
          gelǣdan [*gelǣd* pp nsm] wk. 1 'lead, guide, conduct' (*(ge)līðan* 'go to')
          tōdrǣfan [*todrǣfð* pr3s] wk. 1 'scatter, disperse' (*drīfan* 'drive')

     c.   <ō> ~ <ē>
          oferflēdan [*oferflēt* pr3s] wk. 1 'overflow, flood' (*flōwan* 'to flow')

     d.   <ēo> ~ <īe>
          āflīegan [*āflīgð* pr3s] wk. 1 'drive away, put to flight' (*flēogan* 'to fly')

     e.   <ēo> ~ <ȳ> (=<īe>)
          ālȳsan [*ālȳsed* pp] wk. 1 'set free, release' (*lēosan*)

     f.   <ū> ~ <ī> (=<ȳ>)
          gebīgan [*gebīgedum* pp dpn] wk. 1 'bend' (*būgan* 'bow')

As shown in figures 1 and 2, Kastovsky (1968) does not distinguish the alternation A4AR, involving <e> and <i>, in his study of strong verb-noun alternations. However, in the analysis of *De Temporibus Anni*, this alternation holds between the strong and the weak verb, as is shown in (9):

(9)   <e> ~ <i>
    āwendan [*awend* pp; *awent* pr3s] wk. 1 'turn, turn aside, change' (*windan* 'to wind')
    (ge)settan [*geset* pp nsm; *gesett* pp nsm nsf; *gesette* pt3s; *setton* pt3p; *gesetton* pt3p] wk.1 'to establish, compile, allocate' (*sittan* 'to sit')
    wendan [*wendað* pr3p; *wende* subj pr3s; *went* pr3s] wk. 1 'turn, go, proceed' (*windan* 'to wind')
    gewendan [*gewent* pr3s] wk. 1 'return' (*windan* 'to wind')

Evidence of the type provided in (9) reinforces the systematic and predictable character of alternations, since, given a general framework mainly based on the evolution of i-mutation, it is possible to fill in its blanks in such a way that the main principles on which the classification is based are kept. In other words, by selecting the class of the weak verb, it is possible to find the reversal of the alternation in the direction of /i/, which obtains when the strong verb is the base of nominal derivation.

Turning to variation, the results thrown by the analysis have been classified by contrast. The classification of interdialectal contrasts is provided in (10). It should be noted that interdialectal contrasts are presented by taking the West-Saxon spellings as reference. Thus, in the description of the contrasts in (10), the form corresponding to the West-Saxon dialect appears in the first place. Verbal forms have been divided into predictable and unpredictable depending on the spelling they present in *De Temporibus Anni*. The first group of verbs of each contrast corresponds to those verbs with a form compatible with the West-Saxon dialect. Conversely, unpredictable contrasts refer to those verbs which do not present the West-Saxon form. The spellings appearing in *De Temporibus Anni* are shown at the left throughout the classification.

(10) a.   <æ>/<e>
         Predictable
         bedæled [**bedælan**] ~ *bedeled*
         betæhte [**betæcan**] ~ *betec*
         gefæstnod [**gefæstnian**] ~ *gefestnie*
         forbærn, forbærne [**forbærnan**] ~ *forbernan*

         Unpredictable
         acenð, acennedum [**acennan**] ~ *acænnan*
         asendan [**asendan**] ~ *asændan*
         aðenede [**aðennan**] ~ *aþænede*
         awend, awent [**awendan**] ~ *awændan*
         derað [**derian**] ~ *dærigen*
         geendað, geendod, geendode [**geendian**] ~ *geændian*
         fremað [**fremian**] ~ *fræmeð*

     b.   <ie>/<e, æ>
         Predictable
         afligð [**afliegan**] ~ *aflegedo*

         Unpredictable
         aberst [**aberstan**] ~ *abiersð*
         berð [**beran**] ~ *viere*

     c.   <ea>/<e, æ>
         Predictable
         afeallað [**afeallan**] ~ *afellan*
         aheawene [**aheawan**] ~ *ahewenne, ahæwenum*
         feallað, fealð, fylð [**feallan**] ~ *fellan*

         Unpredictable
         berð [**beran**] ~ *beara*
         betæhte [**betæcan**] ~ *beteahte*
         gefæstnod [**gefæstnian**] ~ *gefeastnadon*
         forbærn, forbærne [**forbærnan**] ~ *forbearnde*

d. <eo>/<e> (West-Saxon <eo> corresponds to Germanic [eu])
Predictable
aðeostrian, aðeostrað [**aðeostrian**] ~ *aðestred*
beboden [**bebeodan**] ~ *bebed*
bescyt [**besceotan**] ~ *bescet*
fleon, fleoð [**fleon**] ~ *flegan*

e. <y>/<e>
Predictable
adylegode [**adylegian**] ~ *adelegað*
afylled, afyllede [**afyllan**] ~ *afelle*
alysed [**alysan**] ~ *alesan*
astyrað, astyred [**astyrian**] ~ *astereð*
gebyrige [**gebyrian**] ~ *gebereð*
cyrð, gecyrð [**(ge)cyrran**] ~ *gecerran*
gefyllað [**gefyllan**] ~ *gefellan*

Unpredictable
aberan, aberð [**aberan**] ~ *abyrð*
aberst [**aberstan**] ~ *abyrst*
abrece [**abrecan**] ~ *abrycan*
acenð, acennedum [**acennan**] ~ *acynð*
berð [**beran**] ~ *byran*
derað [**derian**] ~ *dyrige*

f. <e>/<eo> (West-Saxon <e> corresponds to Germanic [e])
Predictable
aberan, aberð [**aberan**] ~ *abeoren*
atent [**atendan**] ~ *ateodon*
berð [**beran**] ~ *beoran*
derað [**derian**] ~ *deoriende*

Unpredictable
awyrpð [**aweorpan**] ~ *awerpan*

g. <i>/<io>
Predictable
arisan, arison, arist [**arisan**] ~ *arioson*
geedniwod [**edniwian**] ~ *edniowað*

h. <ea>/<a>
Predictable
afeallað [**afeallan**] ~ *afalle*
behealdan [**behealdan**] ~ *behaldan*
feallað, fealð, fylð [**feallan**] ~ *fallen*

Unpredictable
beheton [**behatan**] ~ *beheatenre*
gegaderað, gegaderode, gadrian [**(ge)gad(e)rian**] ~ *gegeadriga*

i. <ie>/<io, eo>
Predictable
aðeostrian, aðeostrað [**aðeostrian**] ~ *aðiestrige*

Unpredictable
æteowað, æteowiað [**æteowian**] ~ *ætiewan*
beboden [**bebeodan**] ~ *bebiet*
fleon, fleoð [**fleon**] ~ *fliehð*

j. <e>/<oe>
Predictable
awend, awent [**awendan**] ~ *awoendað*

Concerning intradialectal contrasts, it should be taken into account that its analysis is circumscribed to the West-Saxon dialect. In this way, in (11), intradialectal contrasts are identified between Early and Late West-Saxon forms. Early West-Saxon graphemes are presented in the first place in the description of each contrast. Under the category of predictable, (11) displays those verbs with Late West-Saxon forms in *De Temporibus Anni*, while Early West-Saxon spellings have been grouped under the category of unpredictable.

(11) a. <ie>/<y, i>
          Predictable
          afylled, *afyllede* [**afyllan**] ~ *afielde*
          alysed [**alysan**] ~ *aliesan*
          awrat, *awritenne*, *awriton* [**awritan**] ~ *awrieten*
          gebicniað [**bicnian**] ~ *biecne*
          gebigedum [**gebigan**] ~ *gebiegeð*
          cyrð, *gecyrð* [**(ge)cyrran**] ~ *gecierran*
          gefyllað [**gefyllan**] ~ *gefielde*

          Unpredictable
          afligð [**afliegan**] ~ *aflygan*, *afligan*

      b. <y>/<i>
          Predictable
          abæd, *abæde* [**abiddan**] ~ *abyddan*
          afindan [**afindan**] ~ *afynden*
          agifð [**agifan**] ~ *agyfan*
          arisan, *arison*, *arist* [**arisan**] ~ *arysan*
          astah, *astihð* [**astigan**] ~ *astygen*
          awrat, *awritenne*, *awriton* [**awritan**] ~ *awrytan*
          belicð [**belicgan**] ~ *bilyð*
          belimpað, *belimpð* [**belimpan**] ~ *belympð*
          gebicniað [**bicnian**] ~ *bycneþ*
          bæd [**biddan**] ~ *byddan*
          gebæd [**gebiddan**] ~ *gebyddan*
          gebigedum [**gebigan**] ~ *gebygan*
          gediht [**dihtan**] ~ *dyht*
          geedniwod [**edniwian**] ~ *ednywod*
          forgifan, *forgeaf* [**forgifan**] ~ *forgyfan*
          glit [**glidan**] ~ *glyt*

          Unpredictable
          adylegode [**adylegian**] ~ *adilegian*
          afylled, *afyllede* [**afyllan**] ~ *afillað*
          alysed [**alysan**] ~ *alisan*
          astyrað, *astyred* [**astyrian**] ~ *astirian*
          gebyrige [**gebyrian**] ~ *gebireþ*
          cyrð, *gecyrð* [**(ge)cyrran**] ~ *gecirran*
          fyligð [**fyligan**] ~ *fulfiligan*
          gefyllað [**gefyllan**] ~ *gefillan*

      c. <ea>/<e>
          Predictable
          berð [**beran**] ~ *beara*

          Unpredictable
          afeallað [**afeallan**] ~ *afellan*
          aheawene [**aheawan**] ~ *ahewenne*
          eardað [**eardian**] ~ *erddian*
          feallað, *fealð*, *fylð* [**feallan**] ~ *fellan*

      d. <io>/<eo>
          Predictable
          atihð [**ateon**] ~ *ation*
          aðeostrian, *aðeostrað* [**aðeostrian**] ~ *aþiostraþ*
          awyrpð [**aweorpan**] ~ *æwiorpen*
          æteowað, *æteowiað* [**æteowian**] ~ *atiowan*
          beboden [**bebeodan**] ~ *bebiode*
          fleon, *fleoð* [**fleon**] ~ *flion*

Table 1 and 2 provide the figure of instances of interdialectal and intradialectal contrasts respectively. The results of analysis are presented by contrast. The classification into predictable and unpredictable follows the same criteria as in the analysis above. In table 1, which is devoted to interdialectal contrasts, the column of predictable instances displays the figure of verbs with West-Saxon spellings in *De Temporibus Anni*, whereas the column of unpredictable instances provides the number of verbs which present a Kentish, Mercian or Northumbrian form.

Similarly, the column of predictable instances in table 2 shows the figure of verbs that present Late West-Saxon forms; whereas the column of unpredictable instances gives the number of verbs showing spellings identified as Early West-Saxon.

Table 1. Interdialectal contrasts.

Type of contrasts	Number of instances	
Interdialectal	Predictable	Unpredictable
<æ>/<e>	4	7
<ie>/<e, æ>	1	2
<ea>/<e, æ>	3	4
<eo>/<e>	4	0
<y>/<e>	7	6
<e>/<eo>	4	1
<i>/<io>	2	0
<ea>/<a>	3	2
<ie>/<io, eo>	1	3
<e>/<oe>	1	0
Total	30	25

Table 2. Intradialectal contrasts.

Type of contrasts	Number of instances	
Intradialectal	Predictable	Unpredictable
<ie>/<y, i>	7	1
<y>/<i>	16	8
<ea>/<e>	1	4
<io>/<eo>	6	0
Total	30	13

As can be seen in tables 1 and 2, the instances of interdialectal contrasts outnumber those of intradialectal ones. To be more precise, a total of 55 interdialectal and 43 intradialectal contrasts have been identified in *De Temporibus Anni*. Moreover, the figures of instances of interdialectal and intradialectal contrast vary considerably. With regard to interdialectal contrasts, the contrasts which present the highest number of instances are <y>/<e>, <æ>/<e> and <ea>/<e, æ>, with 13, 11 and 7 instances respectively. Conversely, the least frequent interdialectal contrasts are <e>/<oe>, <i>/<io> and <ie>/<e, æ>, which present 1, 2 and 3 instances respectively. Similarly, there is a high degree of variation regarding the number of instances of the different intradialectal contrasts, <y>/<i> being the one which presents the highest number of instances – 24 – and <ea>/<e> the least frequent with 5 instances. Furthermore, out of the 50 verbs which present at least one contrast, 28 have instances of two or more different contrasts. In interdialectal analysis, it turns out that the contrasts <æ>/<e>, <ie>/<e, æ>, <ea>/<e, æ> and <ie>/<io, eo> show more unpredictable instances than predictable ones. In intradialectal analysis, the contrast <ea>/<e> has more unpredictable than predictable analysis. Overall, there are more instances of predictability than of unpredictability, although the degree of unpredictability is very high, considering that the analysis is restricted to one text. The data, therefore, clearly indicate that variation, unlike alternation, is a relatively unsystematic and unpredictable phenomenon.

5. CONCLUSION

This article has analyzed morphophonological alternations as well as diatopic and diachronic variation as shown in the Old English version of *De Temporibus Anni*. The analysis has stressed the importance of the diphthong <ie> not only as a criterion for identifying early West-Saxon but also as a point of contact with the phenomenon of i-mutation, which constitutes the diachronic motivation of the direct and reverse vocalic alternations proposed by Kastovsky. Regarding the aim of drawing a distinction between the concepts of alternation and variation, the

analysis that has been carried out indicates that the phenomenon of alternation is relatively predictable, relatively systematic and has a tendency to be generalized, in contradistinction to variation, which is relatively unpredictable and unsystematic and tends to be local. On the descriptive side, the alternation A4aR <e> ~ <i> holds between the strong verb and the weak verb. The alternation A11R <ū> ~ <ȳ> has not been found in the text under analysis, thus representing a pending task for future research.

REFERENCES

Bammesberger, A. (1965). *Deverbative jan-Verba des Altenglischen, vergleichend mit den übrigen altgermanischen Sprachen dargestellt*. München: Ludwig-Maximilians Universität.

Blake, M. (2009). *Ælfric's de Temporibus Anni*. Cambridge: D. S. Brewer.

Hinderling, R. (1967). *Studien zu den starken Verbalabstrakten des Germanischen.* Berlin: Walter de Gruyter. doi:10.1515/9783110822663

Hogg, R. M. (1992). "Phonology and Morphology". *The Cambridge History of the English Language. Volume I: The Beginnings to 1066.* R. M. Hogg (ed.). Cambridge: Cambridge University Press. pp. 67-167.

Hogg, R. M. and R. D. Fulk. (2011). *A Grammar of Old English. Volume 2: Morphology.* Oxford: Blackwell.

Kastovsky, D. (1968). *Old English Deverbal Substantives Derived by means of a Zero Morpheme*. PhD Dissertation. Tübingen: Eberhard-Karls-Universität.

Kastovsky, D. (1986). "Deverbal nouns in Old and Modern English: from stem-formation to word-formation". In J. Fisiak (ed.), *Historical Semantics-Historical Word Formation*. Berlin: Mouton de Gruyter. pp. 221-261.

Kastovsky, D. (1989). "Morphophonemic alternations and the history of English: Examples from Old English". In Manfred Markus (ed.), *Historical English. On the occasion of Karl Brunner's 100th birthday*. Innsbruck: Universität. pp. 112-123.

Kastovsky, D. (1990). "The typological status of Old English Word Formation". In S. M. Adamson, V. A. Law, N. Vincent and S. Wright (eds.), *Papers from the 5th International Conference on English Historical Linguistics*. Amsterdam: John Benjamins. pp. 205-224. doi:10.1075/cilt.65.14kas

Kastovsky, D. (1992). "Semantics and vocabulary". In R. M. Hogg (ed.), *The Cambridge History of the English Language I: The Beginnings to 1066*. Cambridge: Cambridge University Press. pp. 290-408. doi:10.1017/CHOL9780521264747.006

Kastovsky, D. (2006). "Typological Changes in Derivational Morphology". In A. van Kemenade and B. Los (eds.), *The Handbook of the History of English.* Oxford: Blackwell publishing. pp. 151-177. doi:10.1002/9780470757048.ch7

Lass, R. and J. Anderson. (1975). *Old English Phonology*. Cambridge: Cambridge University Press

Martín Arista, J. (2008). "Unification and separation in a functional theory of morphology". In R. D. Van Valin, Jr. (ed.), *Investigations of the Syntax-Semantics-Pragmatics Interface*. Amsterdam: John Benjamins. pp. 119-145. doi:10.1075/slcs.105.12mar

Martín Arista, J. (2009). "A Typology of Morphological Constructions". In C. Butler and J. Martín Arista (eds.), *Deconstructing Constructions.* Amsterdam: John Benjamins. pp. 85-115. doi:10.1075/slcs.107.06aty

Martín Arista, J. (2010a). "OE strong verbs derived from strong verbs". *SKASE Journal of Theoretical Linguistics,* 7: 36-56.

Martín Arista, J. (2010b). "Lexical negation in Old English". *NOWELE (North-Western European Language Evolution)*, 60/61: 89-108.

Martín Arista, J. (2011a). "Morphological relatedness and zero alternation in Old English". In P. Guerrero Medina (ed.) *Morphosyntactic Alternations in English. Functional and Cognitive Perspectives*. Sheffield: Equinox. pp. 339-362.

Martín Arista, J. (2011b). "Adjective formation and lexical layers in Old English". *English Studies,* 92/3: 323-334. doi:10.1080/0013838X.2011.564776

Martín Arista, J. (2011c). "Projections and constructions in functional morphology: the case of HRĒOW". *Language and Linguistics* 12/2: 393-425.

Martín Arista, J. (2012a). "The Old English Prefix *ge-*: A Panchronic Reappraisal". *Australian Journal of Linguistics,* 32/4: 411-433. doi:10.1080/07268602.2012.744264

Martín Arista, J. (2012b). "Morfología flexiva en RRG". In R. Mairal, L. Guerrero and C. González (eds.), *El funcionalismo en la teoría lingüística*. Madrid: Akal Universitaria. pp. 43-58.

Martín Arista, J. (2013). "Recursivity, derivational depth and the search for Old English lexical primes". *Studia Neophilologica,* 85/1: 1-21.

Martín Arista, J. "*Noun layers in Old English. Inheritance and mismatches in lexical derivation*". Forthcoming-a.

Martín Arista, J. "*El paradigma derivativo del inglés antiguo*". Forthcoming-b.

Palmgren, C. (1904). *English Gradation-Nouns in Their Relation to Strong Verbs*. Uppsala: University of Uppsala.

Ray, B. K. (1996). *Old English Morphology and Indo-European*. Delhi: Sharada Publishing House.

Ringe, D. (2006). *From Proto-Indo-European to Proto-Germanic. A Linguistic History of English. Volume I.* Oxford: Oxford University Press. doi:10.1093/acprof:oso/9780199284139.001.0001

Rix, H., M. Kümmel, T. Zenhder, R. Lipp and B. Schirmer. (2001). *Lexicon der indogermanischen Verben*. Wiesbaden: Ludwig Reichert Verlag.

Schön, E. (1905). *Die Bildung des Adjectivs im Altenglischen*. Kiel: Verlag von Robert Cordes.

Schuldt, C. (1905). *Die Bildung der schwachen Verba im Altenglischen*. Kiel: Verlag von Robert Cordes.

Szemerényi, O. (1996). *Introduction to Indo-European Linguistics*. Oxford: Oxford University Press.