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Reasons to Think That Anglo-Frisian Developed in Britain

Abstract

Linguistic evidence is adduced indicating that (as non-linguistic evidence long known also suggests) the origin of Anglo-Frisian goes back to a period of common development in SE Anglo-Saxon England around 475–525. The linguistic reason to think so is that almost every characteristic innovation of Anglo-Frisian has a plausible motivation in terms of influences from Brittonic. It seems that the later Frisians originated as Anglo-Saxons, occupying territory between Kentish and Pre-Mercian, who left England and went back to the continent, of course to the coast, around 540. The conclusion is that Frisian is similar to English because Frisian is descended from English.

1. Introduction

Since the beginning of Germanic studies, it has been recognized that English and Frisian form a sub-group within northerly or “Ingvaemonic” West Germanic. As to how this state of affairs came to be, the debate has been limited to the following possibilities (or some mix of both): that the common features of Anglo-Frisian (AF) developed 1) *before* the AS conquest, on the continent (e.g. Schwarz 1951), or 2) *after* the AS conquest, due to transmarine contacts (e.g. Markey 1976). Both theories implicitly assume that there is no problem in positing that divergences are random. No consensus has yet been reached, which is a strong hint that there is something seriously wrong with the traditional world of possibilities.

There is in fact a third possibility: that AF developed in SE England *during* the (early) AS conquest, with its Frisian half being taken back to the continent by what Stenton (1989[1971], 6) calls “reverse migration”. Archeological evidence long known (for about a hundred years) shows evidence of reverse migration on both sides of the sea. During the very early Dark Ages the Frisian islands begin to show large amounts of Anglo-Saxon pottery (Bazelmans 2009, 321), and sometime during the period from about 500 to 550 a large Anglian settlement at Kempston near Bedford (along SW margins of the Fens NNW of London) was abandoned (Morris 1973, 136). It seems reasonable to posit that the Anglo-Saxons who left

Kempston (and probably some other more minor settlements in SE England) largely went to Frisia. This period is widely regarded as representing a pause or worse (from the point of view of the Anglo-Saxons) in the AS conquest, following what might be called “the Arthurian Resurgence” of around 500. Indeed Gildas, writing around 540, seems to regard the AS conquest as a thing of the past (Stenton 1989[1971], 2-3), having resulted in nothing more than a tragic partition of former Roman Britain between Britons and Germans, with Britons dominating and independent Germans¹ limited to a few areas on or near the SE coast. The interpretation of Morris, though speculative, seems reasonable: the Britons succeeded in an attempt to eliminate AS settlements between those of Kent and the Pre-Mercians, in order to prevent co-operation between these.

There is also historical evidence suggesting that reverse migration did occur. Procopius, writing about 540, states that “every year in large groups [Angles, Frisians, and Britons] migrate from [Britain] with their women and children, and go to the Franks” (Oppenheimer 2006, 326). Whether the “Frisians” mentioned self-identified as Frisians is not clear: Procopius may have confused destination with identity. More than three centuries later, “the Monk of Fulda” (860–865) states that around 531 “the Saxon people ... leaving the Angles of Britain, sailed to Hatheloe on the German coast” (Stenton 1989[1971], 7).² Stenton (1989[1971], 6–8) sums up the historical evidence (somewhat strangely ignoring the archeological evidence) as follows:

- 1) “That [“reverse migration”] was possible is clear from the narrative of Gildas.”
- 2) “[The account given by Procopius] agrees with the situation ... described by ... Gildas, and is reinforced by the ... independent tradition preserved at Fulda.”
- 3) “Coincidences like these raise ... the strong presumption that *some migration of the kind described by Procopius actually took place ...*” [italics mine].

Likewise, there is some genetic evidence (Oppenheimer 2006, 369), admittedly of limited value because it has not yet published in its raw form, showing that the modern Frisians have (in the paternal line) a surprisingly high westerly component, more or less what would be expected for a population originating in central/SE England, an area with Kempston near its center.

The bottom line so far is that non-linguistic evidence of three different kinds, archeological, historical, and genetic, converges in suggesting not only movement but *substantial* movement from SE England to the Frisian coast during the early Dark Ages.

2. The Linguistic Evidence

Yet the possibility of reverse migration as the origin of Frisian has never, it seems, been taken seriously by Germanicists. It seems worthwhile to compare what non-Germanicist (Stenton 1989[1971], 8) says about the testimony of Procopius, “some migration of the kind described by Procopius actually took place”, with what a Germanicist (Bremmer 2009, 127) says on the same matter, “Procopius ... *mentions* Frisians alongside Angles in Britain” [italics mine]. This is not, of course, an accurate summation of what Procopius says, and it is a fair question why an accurate summation could not have been given. It is as if dangerous ideas should not be planted in the minds of innocent readers. Clearly reverse migration is regarded as obviously not credible, though no reason is given. One reason might be that the linguistic evidence somehow shows that AF could not possibly have developed in Britain. But the rest of the present article will be devoted to showing that the exact opposite is true: the characteristic innovations of AF *almost all* have plausible motivations in terms of Brittonic influence. If so, they could not possibly have developed anywhere other than SE Britain.

In the case of English, it has been shown over roughly the past two decades, beginning more or less with the collection of papers in Filppula, Klemola, and Pitkänen (2002), that there is indeed significant Brittonic influence in English. An attempt to produce an exhaustive list of areal resemblances between Brittonic and English is given by White (2006). Also noteworthy is the collection of articles in a 2009 special issue of *English Language and Linguistics* (Filppula and Klemola). More recently Schrijver, a Celticist, states (2014, 21-22): “The weight of the evidence in favour of Middle English convergence towards British Celtic is such that it cannot reasonably be denied anymore.” Likewise Trudgill, an Anglicist, states (2016, 323): “Celtic and Germanic continued or resumed contact in England ... this contact had some rather major linguistic consequences, something which has not always been acknowledged in the past, but is now becoming widely accepted.” Though these assessments may perhaps be over-optimistic, there is no doubt that they are founded on substantial evidence.

Though the better-known cases for the most part involve morpho-syntax and Middle English, the mechanism involved (secondary acquisition) must have been operative during the early OE period, and would be expected to produce what may be called “phono-phonetic” influences as well. Indeed “foreign accent” is essentially a popular term emphasizing the most salient result of secondary acquisition: what linguists would call “non-native phonetic implementation”. Accordingly there is no reason to think that Brittonic influences (often phono-phonetic) in AF could not have 1) developed in early SE AS England, and 2) been taken back to the continental coast by reverse migration.

In order to avoid creating the impression that AF is, just randomly, the only form of West Germanic that shows evidence of any influences from Celtic, it

should be stressed that in larger context there appear to be four fairly distinct levels of Celtic influence in West Germanic: 1) Gaulish influences found in all West Germanic, 2) Belgic influences limited to Ingvaenic, 3) early Brittonic influences limited to AF, and 4) later Brittonic influences limited to English. Obviously only the 3rd of these can be argued for here. During the early medieval period, the various forms of Germanic spoken along the North Sea coast and in southern and eastern Britain must have been mutually comprehensible, and thus much prone to dialect mixture. But though in theory there might be great difficulty in deciding what cases of apparent Celtic influences belong to what categories, in practice the difficulty appears to be mercifully slight, enough so that it works to simply begin with a quite normal list of Anglo-Frisianisms and go from there. Only five cases will not be treated, as it has been found that no conclusion, positive or negative, could be reached if they were. Since the 2nd and 3rd of these, especially the latter, once reduced into noun phrases, are not comprehensible, brief explanations as to what is meant have been provided in associated end-notes. The cases are: 1) development of palatals, 2) spread of stressed pronominal forms into unstressed slots,³ 3) dative for genitive in /oo/-stems (Campbell 1959, 234),⁴ 4) persistence of “pure” (i.e. non-fricative) /w/, and 5) persistence of dental fricatives. Most cases involve matters of phonology, which sometimes fall into “complexes” of closely related cases. But it seems best to begin with those few cases involving matters other than phonology.

In what follows, “Pre-OE” will be used to mean the Germanic of Britain in the earliest period, before Frisian left, and so does not exclude the ancestor of Frisian. “Pre-Frisian” will be used to mean the specifically Frisian part of Pre-OE. Usage of terms has not always been consistent, as context most often makes clear what is meant. The author’s version of Brittonic historical phonology is based on Jackson (1953) as emended by Schrijver (1997). References to Jackson (1953) are often to his final chronology, where references to his main text may be found.

Though the present article was begun with the belief that the attempt of Sims-Williams (1990) to move most of Jackson’s dates about 75 years earlier was simply wrong, closer consideration of the evidence has forced the conclusion that Jackson’s dates are only mostly right: roughly speaking, dates about 25 years earlier (at least in the SE) seem better. It must be admitted that the present author’s views on the historical phonology of Brittonic are at times at least mildly idiosyncratic. Considerations of length do not allow digressions into such matters.

3. Matters of Morphology, and One (Important) Etymology

Absence of gender distinction in 3PL pronouns and demonstratives

AF shows absence of gender distinction in 3PL pronouns and demonstratives (Campbell 1959, 289–291; Bremmer 2009, 56). Obviously there are pragmatic considerations that would motivate such a loss. But just as obviously there is no reason that such considerations would apply more forcefully to AF than to other Germanic. Brittonic influence provides a plausible answer for the rapid development seen in AF, since Brittonic shows absence of gender distinction in 3PL pronouns and demonstratives (Lewis and Pedersen 1989[1961], 205, 222–223).⁵ What we seem to see here is a case of what may be called “accelerated drift”: one branch within a family showing faster drift than others because of external influences also motivating, and so accelerating, the change in question.

Identity of gerund and present participle

AF is peculiar in showing identity of gerund and present participle. English and Frisian do so in different ways: English (in time) shows identity under the verbal noun in /-ng/, while Frisian (in part) shows identity under the present participle in /nd/ (Bremmer 2009, 84). Here the case for Brittonic influence is not entirely straightforward, as only Welsh shows the same identity (Lewis and Pedersen 1989[1961], 316). But it is reasonable to posit that English Brittonic was for the most part Pre-Welsh. (An important apparent exception will be seen below, in treating /r/.) Even Cornish/Breton has (like all textually attested Celtic) no distinct present participle, and so shows only a lesser degree of similarity with AF. Some examples from Middle Welsh (Evans 1964, 138, 160) are:

<i>medylaw</i>	<i>yd</i>	<i>wyf</i>	
thinking (present participle)	(it is)	be-1SG	
[‘I am thinking (i.e. I think)’]			
<i>medylaw</i>	<i>a</i>	<i>wnaeth</i>	<i>yn hir</i>
thinking (gerund)	((it is) that)	did-3SG	(adv.) long
[‘she did think(ing) long (i.e. she thought)’]			

The point is that the same word, *medylaw* ‘thinking’, serves without distinction as both a present participle and a gerund, a syndrome that is absolutely regular in Welsh. A tangential point can hardly be passed over in silence: both the -ING construction and the DO construction seen in Welsh have highly salient analogues

in English, where their appearance has long been regarded as completely mysterious. There is no need for this.

It is consistent with the available evidence to posit that English Brittonic had identity of present participle and gerund, or at least lack of a distinct present participle, and that this feature was transferred to AF. Here there was some difference of opinion as to how this lack of distinction was to be implemented (favoring the gerund in English, but the present participle in Frisian), and also some resistance from native Germanic usage, leading to a time lag in English and only partial acceptance (also with a possible time lag) in Frisian. But it is clear that a motivation by way of Brittonic influence is plausible.

Weakening of strong/weak distinction in adjectives

AF shows an odd tendency to lose the strong/weak distinction in adjectives, at least in the genitive plural (Campbell 1959, 272; Markey 1981, 126). An example is Old Frisian *thera fundenra thinga* ‘of the found things’, where by the standards of other Germanic languages *thera* should mandate weak *fundena*. Incipient loss of the strong/weak distinction in AF is plausibly attributed to the fact that no such distinction occurs in Celtic. Of course in English the movement in question was carried to completion in the Middle period, creating a situation that was absolutely unique at the time among Germanic languages, and even today is unique at least among standard Germanic languages. (The present author is not well-informed on non-standard dialects.) In Frisian, by contrast, the trend was halted (Tiersma 1985, 51). The difference between English and Frisian seems reasonably attributed to English having been subject to continuing influences from Brittonic, while Frisian soon became separated from these.

The Origin of ‘less, least

AF is the only Germanic group to show words corresponding to the PDE adjectives *less*, and *least* (Bremmer 2009, 126), which are superlative/comparative only. Outside of AF, the word is attested only once, as a bare adverbial, in Old Saxon (Ringe and Taylor 2014, 165), where it may well be a Frisianism due to dialect mixture.⁶ The evidence of other Germanic seems to show that ‘less, least’ early on became expressed using a root /minn-/ (cf. Ringe and Taylor 2014, 165, who regard AF ‘less, least’ as an “innovation” going back to a Germanic adjective /lais-/ ‘little’, not otherwise evidenced, that somehow displaced /minn-/ in AF).⁷ No explanation is given as to why /lais-/ would not also occur in the positive. It may be noted that, since the superlative and comparative always had /i/, causing umlaut, the attested forms are all derivable from /lææs/.

But it appears that Germanicists have not taken the possibility of a Celtic origin very seriously, for it is clear that the word must be a recent borrowing from Celtic, more specifically Brittonic. Common Celtic had a word /lagu-/ ‘little’, from PIE /leg^wh-/ meaning ‘light (in weight)’, cognate with Latin *levis* and English *light*. The similarity of meaning between /lagu-/ and AF /lais-/ is plain enough. The similarity of sound, though merely vague if we assume an old (and random) borrowing from Common Celtic, becomes quite a lot less so if we assume a recent borrowing from Brittonic. Four considerations, taken together, put a very different light on things: 1) that /lagu-/ , belonging to the fading /u/-stems, could easily be normalized as /lag-/ , 2) that /a/ in Brittonic probably became /æ/ (see “the Low Vowel Complex” below), 3) that /s/ in AF /lææs-/ could be by reanalysis of /s/ in superlative /-is-/ in Celtic, and 4) that intervocalic /g/ (before /i/) had been lenited to something like /ɣⁱ/. This would get us as far as something like /læɣⁱs-/. Here the similarity of sound to AF /lais-/ is enough to raise severe doubts as to whether the similarity of meaning also seen is really just a coincidence.

But there is a problem. Since intervocalic /s/ became /h/ early in the Roman period (Jackson 1953, 694; Schrijver 1995, 374–430, esp. 381), the /s/ in /læɣⁱs-/ (which was followed by /a/) could not have survived unless it had somehow ceased to be intervocalic. The only real possibility is that /læɣⁱs-/ became /læɣⁱs-/ or rather /læxⁱs-/. More on the posited syncope will be said below. For the moment there are two points. First, Brittonic /læxⁱs-/ probably would have been nativized initially as /lais-/: /xⁱ/ was (for the moment) so alien to Pre-OE that /xⁱs/ could hardly have been nativized as anything other than /is/. The later (or concurrent) change of /xⁱs/ to /is/ in Brittonic (Jackson 1953, 696, 535–539) shows that reanalysis of /xⁱs/ as /is/ happen, no doubt by mis-assignment of frication noise to /s/. Since /lais-/, as a superlative/comparative, would regularly appear with following /i/, /lais-/ would soon become /lææs-/. Second, since by the time in question superlative /-sam-/ in Brittonic had long since become something like /-hãv-/ (“ã” is here used for nasalized /a/ because no symbol for the latter is available), the most natural analysis of /læxⁱsãv-/ would be as /læxⁱs-ãv-/ with automatic loss of /h/ after /s/: /s/ would be reanalyzed as belonging to a superlative/comparative stem. On the other hand, the comparative would not have had any /s/. Since the usual rule was that the same stem was used for both, the tendency would be to generalize either the form with /s/ or the form without /s/ as a superlative/comparative stem. Evidently western Brittonic took the latter path, resulting in Welsh superlative/comparative *lleï*. But southeastern Brittonic could easily have gone the other way, creating superlative/comparative /læxⁱs-/.

There remains the problem of mysteriously vanishing /-i-/. The best possibility appears to be that early syncope of post-tonic short Vs before /s/ caused /lágisam-/ to become /lág^sam-/. Initial stress was regular in the early Roman period (Jackson 1953, 266–726; Schrijver 1995, 16–22). Syncope of this kind may well be independently evidenced in the unexplained syncope of /a/ in cases like /karasses/ > /karses/

(‘loved-2SG’). Though all syncope in Brittonic is traditionally dated to the early medieval period (Jackson 1953, 696), after initial stress was replaced by penultimate stress (Jackson 1953, 265; Schrijver 1995, 21), syncope of /á/ in /karásses/ would not of course have been possible. Indeed the 2SG ending is described by Schrijver (1997, 53) as “historically obscure”, an implicit admission that early medieval syncope does not work. Accordingly it seems probable that there was (at least in some cases) an early syncope of post-tonic short Vs before /s/ during the period of initial stress: /kárasses, lágisam-/ > /kárses, lágisam-/. The latter would regularly become /læxʲis-āv-/, which is, as has been seen, a plausible source for AF /lais-/.

The scenario given above contradicts the chronology of Jackson (1953, 534), which would have us believe that /ks/ became an /xs/ that 1) was somehow different from the /xs/ that became /-is/, and 2) does not, apparently, exist in living languages. But since original /ks/ and /sk/ fall together as /x/ (Jackson 1953, 534, 635–638), in a language where /st/ and /sp/ become /t/ and /f/, the simplest solution is that original /ks/, having become /xs/, was (very early) metathesized to /sx/, perhaps becoming /sk/. Obviously such metathesis, when occurring across morpheme boundaries, would tend to be reversed or resisted by analogy, and (unless syncope had not yet happened at the time of metathesis) that must be what happened with /læxs-/ < /lægs-/.

To sum up, AF had a superlative/comparative stem /lææs-/ ‘less’, and there are reasons to think that SE Brittonic had a superlative/comparative stem /læxʲis-/ ‘less’. Regardless of exact details, the similarity of sound, not to mention absence of any use in the positive, is too much to be regarded as coincidental. Though further research will be required on the matter of early syncope, Brittonic /læxʲis-/ must be the source of AF /lææs-/.

4. Matters of Phonology

It seems best to treat first a few simple cases lacking any close connection with other cases.

Metathesis with /r/

AF shows numerous cases of metathesis with /r/ where other Germanic does not (Hogg 1992, 303–304; Bremmer 2009, 39–41, 113). To say that AF had the same kind of /r/ as other Germanic, but that this /r/ just randomly caused more metathesis in AF than in other Germanic would hardly be explanatory. To say that AF just randomly developed a different kind of /r/ than other Germanic, though a bit better, would not be much better. The /r/ “of a different kind” could hardly have been anything other than retroflex /r/, which in moraic position still exists in SW

British English and (in its derivative rhotacized or “molar” sub-type) in American Standard English (Tristram 1995, 291). Non-moraic retroflex /r/ is also common in British English. Retroflex /r/ would then have been later replaced in Frisian due to contact with neighboring forms of Germanic having a more usual kind of /r/. Other examples of Frisian converging toward continental West Germanic (as is hardly surprising) will be encountered below. As to why AF developed retroflex /r/, a possible answer is that it acquired this from Brittonic. Two bits of independent evidence render such a scenario not *ad hoc*.

First, a fading dialect of Breton (N Tregonais) has retroflex /r/ (Tristram 1995), causing it to be described as sounding like “Welsh with an American accent”. That this is due to English influence is not plausible. English influence in Breton could only be by (non-recent) prestige, but such influence would be expected to produce significant (non-recent) English lexical influences, which do not occur. Accordingly retroflex /r/ in Breton must be native. It is known that Breton has, understandably, been subject to a great deal of French influence. These days, /r/ in almost all Breton /r/ is uvular, clearly because of relatively recent influences from French. It appears that before /r/ in Breton became uvular, it was a trill, which is easily seen as the result of an earlier wave of French influence. Since it is known that Breton came to Brittany from SW Britain, the most satisfactory scenario, the only one that leaves no areal coincidence unresolved, is that retroflex /r/ was brought to Brittany by the Breton migrations, only to be nearly exterminated by two waves of French influence.

Second, intrusive retroflexion before /ʃ/, strikingly similar to “wosh” for *wash* in American English, occurs in a certain dialect (Guémené-sur-Scorff) of *central* Brittany (McKenna 1988, 44). Here, influences from English are not even superficially plausible. It seems that as original retroflex /r/ in this dialect was replaced by French equivalents, merely phonetic retroflexion (no longer associated with /r/) persisted as an aspect of phonetic implementation.

A possible problem is that the /r/ of Welsh is a trill. Thus it might be said that retroflex /r/, though it apparently existed in most English at some point, to judge by the extent of metathesis, is not independently evidenced in Brittonic outside of the S. But there is some evidence suggesting that this is not true. The peculiar development seen in the fact that Welsh /mox-ros/ ‘pig’-‘moor’ appears in England (Herefordshire) as Moccas, evidently with a change /xr/ to /kk/ (Jackson 1953, 569), may well indicate that to the east of Wales /r/ in English Brittonic /r/ was of the “molar” type. Surely molar /r/ would be more likely than trilled /r/ to be, in effect, swallowed by a preceding velar. (The change of /x/ to /k/ is a side-issue relating to English phonotactics.) As there is reason to think that retroflex /r/ in Brittonic was not in fact a peculiarity of the S, it is plausible to posit that AF acquired retroflex /r/ from Brittonic, and that it is this /r/ that is responsible for the extensive metathesis seen in AF.

Metathesis of /tI/ to /ld/

AF shows a peculiar metathesis of /tI/ to /ld/ (Hogg 1992, 256; Bremmer 2009, 40), though in OE the change is limited to West Mercian. As usually happens with metathesis, the cases in AF are sporadic, so that it is impossible to formulate any precise rule. But both languages agree in one case where metathesis would be possible under any formulation: /boʔI/ ‘property’ *vel sim.* > /bold/. Connected with this, it may be noted, is OE *byld*, PDE *build*, where irregular umlaut gives us reason to suspect that what is supposed to have been front/round /ü/ was really back /i/, by velarization from moraic /l/. (More on matters related to this will be said below, in “the Umlaut Complex”). In any event, the immediate occlusion posited by Hogg (1992, 256) implies a direct phonotactically motivated change of /tI/ to /ld/, without any intervening /tI/. Indeed a change of /tI/ to /ld/ seems improbable, both theoretically and empirically (e.g. OE /hææʔI/ ‘health’). There is no obvious reason that only preceding long Vs would preserve /tI/. To posit, as Ringe and Taylor do (2014, 341), that the change was /tI/ to /ld/, is no better: a change of /tI/ to /ld/ would have /bæʔI/ ‘belt’ as a counter-example. Clearly the awkwardness of dental + /l/ must be relevant here. What we need, to make developments in AF non-random, is a reason to think that such sequences would be regarded as more awkward in AF than in other Germanic.

Brittonic influence may well provide one. It is consistent with the available evidence to posit that Brittonic had /ld/: there appears to be no evidence on how long /ld/ persisted before becoming /ll/, as it surely did (Jackson 1953, 471). But Brittonic certainly did *not* have /tI/: due to the circumstances of its creation (Jackson 1953, 696), /tI/ in Brittonic could never occur before consonants. Brittonic also did not have any /tI/ or /tI/: /tI/ had no conceivable source other than /tI/, but /tI/ did not become /tI/. Accordingly the only combination of dental and /l/ that Brittonic could possibly have had was /ld/. It seems probable that Britons, hearing alien /tI/ in Pre-OE, altered it to familiar /ld/. This would explain not only why the change occurs in only AF, but also why there was no intervening stage with /tI/ or /tI/: since these too were alien to Brittonic, substituting either would not solve the problem. If only /ld/ existed in Brittonic, then only /ld/ would solve the problem, and it appears that this was indeed the situation.

Absence of final devoicing with plosives

AF also shows a somewhat odd (for West Germanic) failure of final devoicing with plosives. Though at the present moment Frisian has final devoicing of plosives, there is good evidence (Tiersma 1985, 30) that this is in fact a recent development. In this case, the requisite plausible explanation in terms of Brittonic influence is as follows. Brittonic had plosives and fricatives, voiced and voice-

less. After apocope, voiceless plosives (unlike the other three types) could not occur at the end of a lexical word, since word-internally they existed only where created by syncope of medial vowels in compounds (Jackson 1953, 561–564). By Brittonic standards, final devoicing of plosives would thus be positively perverse, as it would turn an allowed final into a prohibited final. For this to work with the author’s preferred dating of apocope, the latter would have to have been at the stage of mandatory release: /-ǣ/ had become [-ǣ̥]. Since Pre-Frisian was probably in Britain from about 475 to 525, there is no inconsistency in positing that the change of /-ǣ/ to [-ǣ̥] was in progress during this period. Reasons will be given in the following section, concerning the development of nasalized /aa/, to think that at the beginning of the AF period Brittonic still had /-ǣ/.

The Low Vowel Complex

OE certainly develops two low vowel phonemes, front /æ(æ)/ and back /ɑ(ɑ)/, where West Germanic had only one (Hogg 1992, 61, 80–84).⁸ There is no direct evidence that OF did the same, but it works to posit that in Frisian earlier /æ(æ)/ and /ɑ(ɑ)/ became /e(e)/ and /a(a)/ (Bremmer 2009, 27, 29–30), no doubt due to influences from adjacent forms of continental West Germanic that did not have /æ(æ)/ and /ɑ(ɑ)/ but did have /e(e)/ and /a(a)/. Though English and Frisian share a (more or less) common development of /a(a)/ to /æ(æ)/, English /aa/ and Frisian /aa/ for the most part have different sources, suggesting that /aa/ was not inherited from Pre-OE. The development of diphthongs will be treated in “the Diphthong Complex” below.

Though Germanicists have traditionally seen it as random that these changes occur in AF, there is no need for this. It is not controversial that Brittonic /ai/ became open /ee/ and Brittonic /aa, au/ became open /oo/ (Jackson 1953, 287; Schrijver 1995, 195). Though there is no certain evidence that an intermediate stage with /ææ/ and /aa/ occurred, the Latin spelling system could not, of course, provide any such evidence. In the case of open /oo/ there is some uncertain evidence (from English place-names) suggesting a stage with /aa/ (Laker 2010, 178–179), and if there was a stage with /aa/ there was probably a parallel stage with /ææ/. It is at least consistent with the available evidence to posit that a stage with /ææ, aa/ did occur.

There is no direct evidence on the pronunciation of short /a/ in Brittonic till quite recently, enough so that its relevance to earlier Brittonic is questionable. According to William (1960, 7), short /a/ in Welsh is pronounced as a mildly front /a/,⁹ which is not quite /æ/. But the change of original /aa/ to /oo/, followed in time by loss of quantity distinctions (Jackson 1953, 338–344), would create space for some backward movement of short /a/. (Welsh later recreated quantity distinctions.) Given that Brittonic short /a/ regularly appears in English as /æ/

(Jackson 1953, 272), a pronunciation more front than back is plausibly seen as old. Since stranger things have happened than for short /a/ and long /aa/ to develop secondary qualitative differences, it seems probable that backing of long /aa/ in Brittonic was accompanied by fronting of short /a/, causing fronted short /a/ to become regarded as the short of long /ææ/. Long /aa/ probably had no short at all until shortening of final long Vs, including /-aa/, created one. In any event, to Britons long /aa/ would have implied the possibility of short /a/ if any language they were secondarily acquiring happened to have anything that fit the bill phonetically. Though most short /a/ in Pre-OE was regarded as /æ/, occasional cases that clearly sounded more like /a/ would of course be assigned to /a/, creating the somewhat marginal existence of short /a/ in AF. Accordingly the “low-vowel split” of AF has a plausible motivation in terms of Brittonic influence.

A related peculiarity of AF is that nasalized /aa/ (only occurring before a lost voiceless fricative) is de-nasalized to /oo/ (Hogg 1992, 77-78; Bremmer 2009, 24-25). Occasional overflows of this syndrome into Old Saxon (Ringe and Taylor 2014, 145-146), largely limited to cases involving /T/ or labials, seem better taken as due to a more limited change or to later dialect mixture than as indicating that OS shared the larger change with AF. Though it is usual (e.g. Bremmer 2009, 24), to assert that the acoustic back-rounding effect of nasalization led to nasalized /aa/ being denasalized as /oo/ in AF, it seems clear that an obvious connection has been missed: the acoustic effect of nasalization first caused nasalized /aa/ to be taken as nasalized /aã/, and then caused nasalized /aã/ (not /aa/) to be de-nasalized as /oo/. It cannot be coincidental that AF, the only form of West Germanic where original /aa/ split into front and back versions, is also the only form of West Germanic where /aa/ is de-nasalized as /oo/.

As for the relevance of Brittonic in all this, if Brittonic did not have nasalized Vs, nasalized /aa/ should have been denasalized to /aã/, so that finding /oo/ makes little sense. But it is not at all improbable that Brittonic did have nasalized Vs. Nasalized fricatives, which require an airstream running through both mouth and nose, are not easy to implement. In the days before apocope, contrast between lenited /b/ and lenited /m/, which both became /v/, would almost certainly be maintained by having a nasalized V in cases like /læx̃sãv-/. In later days, after apocope, only nasalized /v/ would be possible, since the sound would now occur in initial position without a preceding V. The case of nasalized /aã/ in AF provides some indirect confirmation that Brittonic as of around 500 had nasalized Vs. If so, Sims-Williams (1990, 245–247) cannot be completely right about his early dating of apocope, though reasons were seen in the preceding section to think that Jackson (1953, 695-696) cannot be completely right about his later dating either. Apparently the change was in progress during the early AS conquest.

Finally it seems worthwhile to make some brief comments on the appearance of /on/ < /an/ in Frisian (Bremmer 2009, 24-25) and (West) Mercian, including

dialects plausibly subject to influences from (West) Mercian (Hogg 1992, 78). The traditional interpretation is that this is a coincidence: as an innovation it cannot be a marginal archaism, and traditional assumptions do not permit any other possibility. But if Pre-Frisians in England really did live primarily in the area in and around Kempston, they were only a little to the SE of the Pre-Mercians. If during the days when they were neighbors both dialects had a change of /an/ to /on/, then in later days, after large numbers of both groups had moved away, the status of /on/ for /an/ in its original home would be weakened, leading to replacement by more usual /an/. Such an “evidence-destroying” change of /on/ back to /an/ would produce a geographic distribution seeming to have coincidence as its only possible explanation. But a less Germanophilic interpretation of the AS conquest, admitting both 1) that Anglo-Saxons could be (and were) forced out of England, and 2) that the early Mercians did not sweep across the Midlands to the Welsh border, encountering no serious resistance from the hapless Britons they found along the way, reveals another possibility.

AF also shows a strange shortening of final /oo/ to /-a/ (Ringe and Taylor 2014, 299-300; Bremmer 2009 209, 59–62), seen most notably in genitive plurals, nominative plurals of /oo/-stems, and nominative singulars of masculine /n/-stems. The obvious question (strangely not asked by either Ringe or Bremmer) is why AF did not shorten final /-oo/ to /-o/, as other West Germanic did. There appears to be a good answer in terms of Brittonic influence. If the chronology of Jackson is more or less correct, then as of around 500 the only back Vs Brittonic had in final position were /-u/ (< /-uu/ < /-oo/) and /-ɑ/ (< /-aa/ < /-aa/). Here it is assumed that shortening of final long Vs occurred before /uu/ became /i:/, but this does not appear to be problematic. It is plausible to posit that Britons took Pre-OE /-o/ as /-ɑ/ simply because the phonotactics of their language offered no better alternative.

The Diphthong Complex

AF shows somewhat odd reflexes for /ai, au/, which for the most part became respectively /ɑɑ, eo/ in OE, and /ææ, aa/ in Frisian. As noted above, /ɑɑ/ in English and Frisian ordinarily have different sources. Overall, the reflexes of /ai, au/ in AF are lower than their analogues (mostly open /ee, oo/) in other West Germanic, due to absence of assimilation towards /-i, -u/. English shows clear dissimilation of original /ai, au/, and Frisian (assuming that /ee/ goes back to /ææ/) shows lack of raising. Though /eo/ cannot receive much treatment here, it is worth noting that Frisian shows, in the eventual appearance of /jaa/ (Bremmer 2009, 29) strong lowering of original /-o/, and that English shows, in the eventual loss of original /-o/, strong weakening (as also with /au/). The common element in both is reduction. All this indicates that AF 1) weakened original /-u/ and /-i/, and, as a result of this, 2) did not move original /a-/ toward /-u/ and /-i/.

Though it is (predictably enough) traditional to see the divergence of AF from other West Germanic as random, we can probably do better. Brittonic had evidently lost all inherited diphthongs in /i/ and /-u/ (preceded by a short V). That this is true can be seen by perusing the summary of sound changes given by Jackson (1953, 694). In Brittonic, the closest equivalents to Pre-OE diphthongs in /-u/ would have been hiatus sequences like “io” in “Riothamus”, where Latin “io” represents Brittonic /riU-/ , from (more or less) /riiʲio-/ ‘king’. It seems probable that the pronunciation of /riU-/ was essentially the same as what is traditionally posited for (long) “io” in OE, save for the minor difference between secondary and primary stress. Such sequences always had a front/back difference, near akin to dissimilation. Presumably the expedient of using /-U/ to nativize Pre-OE /-u/ would have been applied to /eu/ and /au/, producing /eU/ and (with dissimilation) /æU/. Parallelism would suggest that Pre-OE /ai/ was nativized as /aI/.

Since the development of original /i, u/, especially when unstressed, turns out to be relevant here, some interpretation must be offered. Taking Welsh as our guide, the general rule is that of the four cases (stressed and unstressed, /i/ and /u/) only stressed /u/ does not eventually become /ë/, by which is meant the V of PDE *but*. It is not disputed that there was an intermediate stage where /i, u/ on route to /ë/ became /I, U/.¹⁰ Cases where original /u/ appears in English place names with “i”, “e”, or “a” (cases with “y” are doubtful) must indicate that the stage with /ë/ had been reached, for otherwise either “u” or “o” would be expected. The earliest possible example, dated by Jackson (1953, 680) to about 500, is *Devon* (river of Leicestershire and Nottingham) containing Brittonic /duv-/ ‘water’ (Jackson 1953, 675). Not much later, about 540, is Gildas’ *canine*, as a pun on a name with earlier /kun-/ (Jackson 1953, 671). Here it is not likely that short /a/ in *canine* was pronounced as [U], whereas a pronunciation with [ë] (quite natural in English) seems reasonable. Accordingly it seems that unstressed /ë/ had developed by about 525.

One possible solution (among many) is presented here. Forms where there is a significant change have been put in bold. The changes will be explained below.

	Start	Adapt.	Assim.	/-I, -U/	Mono.	End
OE:	/ai/	/a.I/	/aI/	/aë/	/aa/	/aa/
	/au/	/æ.U/	/æU/	/æë/	/æë/	/æë/
	/eo/	/e.U/	/eU/	/eë/	/eë/	/eë/
OF:	/ai/	/a.I/	/æI/	/æe/	/ææ/ ¹¹	/ææ/
	/au/	/æ.U/	/aU/	/ao/	/aa/	/aa/
	/eo/	/e.a/	/ea/	/jaa/	/jaa/	/jaa/

Adaptation: Original /ai, au/ are adapted in terms of Brittonic phonemes and phonotactics as hiatus sequences, with dissimilation. Pre-F renders /eo/ as /e.a/,

probably by generalization of final cases where (as noted above) only /-ɑ/ was possible.

Dissimilation: Frisian assimilates low Vs away from following Vs.

/-I, -U/: OE changes /-I, -U/ to /-ĕ/.¹² Frisian changes /-I, -U/ to /-e, -o/, and /ea/ to /jaa/.

Monophthongization: Frisian monophthongizes all diphthongs. OE monophthongizes only /aa/.

To sum up, AF begins by changing /-i, -u/ to /-I, -U/, creating /æ-, ɑ-/ and applying dissimilation in the distribution of these. All of this is accordance with Brittonic. All later developments in English produce greater similarity (in some sense) to Brittonic, while all later developments in Frisian produce greater similarity (in some sense) to continental West Germanic. Granted that English remained in contact with Brittonic while Frisian, having left contact with Brittonic, entered contact with continental West Germanic, this is as would be expected. Kentish appears to take a somewhat intermediate path: like English in rendering /eo/ as /eU/, but like Frisian in developing /j-/ rather than /-ĕ/. Overall, the development of original diphthongs in AF appears to have a plausible explanation in terms of Brittonic influences.

The Umlaut Complex

In this section and the following one it is assumed that OE was a language of the normal attested human type in not having phonemic short diphthongs (White 2004; White 2015, 6). AF is somewhat unusual in not having, by the start of the Middle period of English and High German, front/round Vs from /o(o)/ and /u(u)/. As the present author finds arguments that early ME developed new /ö(ö)/ from OE “eo” quite unconvincing, the condition regarding origin in /o(o)/ or /u(u)/ will not be repeated. Though SW ME is traditionally regarded as having /ü(ü)/, Wright and Wright (1928, 99) observe that supposed /ü(ü)/ in SW ME shows signs of having been something other than /ü(ü)/. This can hardly have been anything other than /i(i)/, by which is meant an acoustically central V made by laxing rather than by fronting and rounding. Germanicists, including the Wrights, seem to have gotten nothing more out of their observation than the idea that /ü(ü)/ in SW ME was, perhaps, oddly pronounced. Since this, even if true, would appear to have no significance, it has not made it into the conventional wisdom.

Evidence for /i(i)/ in medieval English is not in fact limited to SW ME: short <ie> in Pre-EWS, being in contrast with /i, ü, u/, must represent /i/. Similarly, short “eo” in Anglian, being in contrast with /e/ and /ö/, must represent /ĕ/, which (as has been seen above) existed in Brittonic. The evidence of Anglian OE regarding high Vs, inconclusive and irrelevant to AF in an event, will be ignored from here

on. In EWS it seems that <ie> was used to spell short /i/ because an earlier change of /ie/ to long /ii/ had made it seem that <ie> meant /i(i)/.

In Kentish and Frisian (KF), which for the purposes of umlaut must be treated together, there is also some evidence (admittedly less clear than in the case of SW English) that they too once had /i(i)/. In KF the predominant umlaut of both /u(u)/ and /o(o)/, assuming that Campbell (1959, 123) is right about “y” in early Kentish being a Mercianism, is /e(e)/, though Island North Frisian has /i(i)/ (Bremmer 2009, 33). Since /i(i)/, being lax, is lower than /ü(ü)/, which is relatively tense, a change of /i(i)/ to /e(e)/ seems more probable than a change of /ü(ü)/ to /e(e)/. Furthermore a change of /i(i)/ to /e(e)/ would be only a movement away from the center of the V space, while a change /ü(ü)/ to /e(e)/ would have entailed loss of rounding, which involved visual cues. Positing original /i(i)/ in KF would also explain falling together of expected /ü(ü)/ and /ö(ö)/, since /i(i)/ would have been acoustically similar to both. Though we might posit that /ü(ü)/ became /ö(ö)/, later unrounded, such a change would be well-motivated only if KF /ü(ü)/ was oddly low, which would land us back in the range of /i(i)/. There seems to be no avoiding it: KF had /i(i)/. On the other hand, there is no good evidence that KF also had /ü(ü)/.

As for why KF /i(i)/ would become /e(e)/ or /i(i)/, if /i(i)/ was to be eliminated from the language, perhaps because it had become regarded (however arbitrarily) as a characteristic feature of peasant dialect, acoustically /e(e)/, /i(i)/, /o(o)/, and /u(u)/ would have been more or less equally good options. But with no visual evidence for rounding, /e(e)/ and /i(i)/ would have been favored. There appears to be no clear reason that /e(e)/ would have been favored over /i(i)/, but then again Island North Frisian appears to show that there was some difference of opinion on this point. As for analogues, if “ie” in EWS meant /i(i)/, then the same change occurred in EWS, and a change of /i(i)/ to /i(i)/ is known from southern Welsh. A change of /i(i)/ to /e(e)/ may have occurred in Irish, where the somewhat mysterious entity spelled “ao” appears as /e(e)/ in some dialects and as /i(i)/ in others (MacEóin 1993, 106). Rather more concretely, /ee/ as a rendering of Brittonic /ii/ occurs in the English place-name element “Creech” (Jackson 1953, 310; Laker 2010, 180). Overall, it is as if Brittonic-influenced peasant dialect in the early SE, the time and place of early AF, had /i(i)/, which was later in effect stigmatized out of existence.

Of course the references to “Brittonic /ii/” just above suggest that the missing piece here, that Brittonic /i(i)/, will soon fall into place. Brittonic probably developed /ii/ around 500. Since there is no reason to think that Britons learning Germanic would not have perceived as short /i/ anything that sounded like short /i/, which as far as they knew was only accidentally absent in their language, the fact that only long /ii/ existed in Brittonic will be ignored from here on. According to Jackson (1953, 695–696), Brittonic did not develop /ii/ till 500–550. This, if true, would mean that Brittonic had no /ii/ during the period when AF was developing in the early SE, which would in turn mean that Brittonic /ii/ could not be relevant

to KF, though the same does not apply to the later SW. But there are two reasons to severely doubt Jackson's dating. First, he fails to realize that if Germanic [üü], in the days before phonemic umlaut, fell within the range of Pre-OE /uu/, which is rightly the conventional wisdom, then any Brittonic [īī] could well do so too, since it had much the same sound. Accordingly, early loans with OE /uu/ do not indicate that Brittonic had not yet developed its second /īī/. Second, he seems to forget that his firm dates, the earliest of these being not long after 500, are all *terminus ante quem* dates, hardly to be taken as representing *actual* dates. Nor is it probable that evidence for /ī(i)/ in the early SE is illusory when evidence for /ī(i)/ in the later SW is not. There is no real evidence that Brittonic around 500 did not have /īī/. Overall, finding evidence for /ī(i)/ in medieval English is a red flag for Brittonic influence.

Reasons have been given above to think that, in the early SE *before* phonemic umlaut, the existence of /ī(i)/ in Brittonic would cause lack of contrast between the umlauts of /u(u)/ and /o(o)/ in KF. But in the later SW *after* phonemic umlaut, matters would be different. There would be no reason that peasant /ī(i)/ would not in time be seen as corresponding to noble /ü(ü)/, once this developed, which would mean there was no reason to seek /e(e)/ or /i(i)/ as a replacement. The traditional interpretation is, of course, that in both EWS and LWS “y” meant /ü(ü)/. But it would be perverse to posit that original /ī(i)/ in Brittonic-influenced peasant dialect was lost in WS when it evidently survives (and /ü(ü)/ does not) in SW ME. Since /ü(ü)/ in Pre-WS would sound much like /īī/ in Brittonic, it makes sense to think that it would be taken as /ī(i)/ by Britons, causing /ī(i)/ for /ü(ü)/ to become a characteristic feature of WS peasant dialect. The situation would have been that where noble dialect had /üü/, /ü/, /ie/, and velarized /i/, peasant dialect had /īī/, /i/, /ī/, and /i/. It seems that as /ī(i)/ drifted up the sociolinguistic scale from peasant dialect to noble dialect, it was first accepted in cases of the “ie” type, where noble aversion to peasant /ī(i)/ for /ü(ü)/ would not have applied. As noted above, the change of /ie/ to /ī(i)/ led to “ie” being seen as a spelling for /ī(i)/. Somewhat later, noble resistance to peasant /ī(i)/ for /ü(ü)/ also collapsed, so that a contrast had to be lost. The difference between EWS and LWS was that in EWS older /ī(i)/ became /i(i)/, causing contrast between older /ī(i)/ and /i(i)/ to be lost (and spelling confusion between “ie” and “i”), while in LWS older /ī(i)/ held its ground, causing contrast between older /ī(i)/ and newer /ī(i)/ to be lost. The conclusion is that in both EWS and LWS “y” meant /ī(i)/. It is this /ī(i)/ that survives, somewhat patchily, in SW ME.¹³

The main remaining questions are 1) why /ö(ö)/ in WS was not taken as /ī(i)/ in WS peasant dialect as it was in KF peasant dialect, and 2) why WS, though it does show a distinct umlaut for /u(u)/, does not do so for /o(o)/. It is as if Brittonic in the later SW had, in the interval between the first and second phases of the AS conquest, developed a non-distinct equivalent for /ö(ö)/. Not surprisingly, this appears to be true: Brittonic had probably developed an odd pre-velarized pronunciation of (high and low) /ee/ as something like [ëe] (Jackson

1953, 695, 697). (Only high /ee/ is relevant here.) Though Jackson leaps straight from /ee/ to /oe/, implicitly thinking in terms of phonemes, it seems effectively certain that there was an intervening stage with [ëe], before this was later contrastively phonemicized as /oe/. (One may compare French /mee/ > /moi/.) But in the meantime, both /ee/ and future /öö/ were taken as [ëe], which is to say /ee/, creating lack of contrast between /öö/ and /ee/ in peasant dialect. Though [ëe] was hardly an ideal equivalent for something like [oö], it at least involved the middle of the V space and a non-front V followed by a front V. As peasant [ëe] for /ee/ became [ee], peasant [ëe] for /öö/ would, of course, do the same. In the case of short /ö/, it appears that /e/ was favored over /i/ by analogy with the long case. (In KF, analogy with the long case favored /i/.) Much as in the case of peasant /i(i)/ and noble /ü(ü)/, peasant /e(e)/ eventually exterminated noble /ö(ö)/.

If what has been said in this section is true, we have explanations for several unanswered questions regarding front/round (F/R) Vs in AF:

- 1) Why F/R Vs show a lesser and briefer presence in AF than in other Germanic: F/R Vs were alien to Brittonic.
- 2) Why WS and (less clearly) KF show evidence for /i(i)/: /i(i)/ existed in Brittonic.
- 3) Why KF does not have F/R Vs: before phonemic F/R Vs could be created in KF, Brittonic /i(i)/ developed in the slots they would have occupied.
- 4) Why KF shows /e(e)/ as the common umlaut of /u(u)/ and /o(o)/: /i(i)/ is somewhat low.
- 5) Why WS has a distinct umlaut for /u(u)/, but not /o(o)/: in the case of /öö/, Brittonic of the later SW had developed a vague equivalent in /ee/ pronounced as [ëe], and in the case of /ö/, analogy with the long case favored /e/ over /i/.

The /h-x/ Complex

In this section, like the preceding one, it is assumed that OE was a language of the normal attested human type in not having short diphthongs (White 2004; White 2015, 6).¹⁴ If so, then obviously breaking cannot have been a change creating short diphthongs. Though breaking is traditionally regarded as occurring before consonants other than /h-x/, all such cases seem to be explicable as purely graphic or due to later sound changes (White 2015, 7). From here on, “breaking” will be regarded as referring only to cases with /h-x/.

AF shows signs of original /h-x/ having been both 1) unusually weak when it was [h], and 2) unusually strong when it was [x]. As /h-x/ is rather awkward, in what follows it will for the most part be referred to as /h/ when it was [h] and as /x/ when it was [x]. That AF /h/ was unusually weak is shown by early loss in

intervocalic position before unstressed Vs (Hogg 1992, 271–281; Bremmer 2009, 36–37) and in /ne + habban/ (Campbell 1959, 188; Bremmer 2009, 85). That AF /x/ was unusually strong is shown by its distorting effect on preceding front Vs, most strikingly (and oddly) with breaking (Hogg 1992, 84–95; Bremmer 2009, 33–35), but also with palatal umlaut (Hogg 1992, 167–170). Though it is also traditional, in treating cases with EWS “ie”, to posit that intervocalic /h/ in OE was first unusually strong (enough so to cause breaking) before becoming unusually weak (enough so to be lost), this seems hardly probable, and can be avoided by positing a “second breaking” peculiar to WS (White 2016, 24–25). Since ordinarily velars “float” freely to the front or back in accordance with phonetic convenience, the fact that AF /x/ clearly did not do so is in itself an indication that unusual developments have occurred. It appears that in AF there was 1) a split off of /h/ from /h-x/, and 2) a split of /x/ into two versions, one front and one not. The first change would render [h] no longer optionally strengthenable to [x], making it more vulnerable to loss. The second would make distorting effects on preceding Vs at least *possible*, though a change of front /x/ to non-front /x/ after front Vs could hardly be considered natural. Cases like later English *enough* and OF *siuchst* ‘see-2SG’ appear to indicate that “non-front” /x/ was actually rounded /x^w/, which is to say /x^w/. The present author’s previous view (White 2016, 7) that non-front /x/ in OE was back /x/ must accordingly be emended, OE spellings with “-o”, like *reoht*, though consistent with /x^w/, are not indicative of /x^w/, as there are reasons to think that the OE spelling system was developed by Irish missionary linguists and (though reinterpreted by the English) basically represented Irish perceptions (White 2015). Overall it seems that original /h-x/ split into /h/, /xi/, and /x^w/. But with no evidence of contrast, such a split would have to be externally motivated.

As for what breaking actually was, it seems that in English it was a change of /xi/ after front Vs (when not also before umlaut conditioners) to /x^w/. This may be symbolized as /E(E)xⁱ/ > /E(E)x^w/ (White 2016, 6–9). In Frisian, breaking is much more limited, occurring only with short Vs and only when /x/ is followed by /s/, /t/, (probably) /T/, or /x/, though again not before following umlaut conditioners (Bremmer 2009, 34). In English, /EEx^w/ soon became /Eox^w/, as is hardly surprising, and such cases are of no further interest here. But in short cases, such as /rex^t/ ‘right’ > /rexⁱt/ > /rex^wt/ (*reoht*) and /max^t/ ‘might’ > /mæxⁱt/ > /mæx^wt/ (*meaht*),¹⁵ the change was apparently reversed, so that distorting effects on the preceding V follow: /rex^wt/ > /rexⁱt/ > /rixⁱt/ *riht*. The same syndrome, with one more change, turned /mæx^wt/ into /mixⁱt/ *miht*. Clearly the development of /x^w/ in such cases was a false step, without lasting significance. Starting from early /rexⁱt, mæxⁱt/, the only thing not surprising in any of this is palatal umlaut (which should have started happening at the beginning) happening at the end. Other than that, we have only a perverse change followed by its own reversal, which merely puts developments back on the expected path. The sequence as a whole is bizarre. Nor does it help, it may be noted, to fall back on short diphthongs: this

would merely make the historical phonology of OE bizarre *in a different way*. What is needed is a motivation for the unusual developments seen in AF, not an implausibly unique sound-system for AF.

A final oddity of AF (Hogg 1992, 277-278; Bremmer 2009, 36-37) is that /h/ was not lost in cases like /sih-ist/ ‘see-2SG’, though it was in cases like /Tuuh-ist, -aθ/ ‘press-2SG, -3PL’ and /fooh-ist, -aT/ ‘catch-2SG, -3PL’. The idea that the difference between these two types is a matter of strong verbs vs. weak verbs (e.g. Campbell 1959, 186-187; Hogg 1992, 280-281) is completely *ad hoc*, to be accepted only with reluctance and in the absence of any credible alternative. But there is a credible alternative: English *sihst* and Frisian *siuchst* can be seen as deriving from a change of unstressed /hi/ to /xi/ when both after (phonemic) front Vs and before voiceless dentals (White 2016, 20–22). Such a change, symbolizable as /EhiT/ > /ExiT/, would affect /sihist/ but not /Tuuhist/ and /foohist/. (For the moment the difference of development with regard to breaking, Frisian having it while English does not, is a side-issue.) If AF had /xi/, the posited change is not terribly surprising, since /hi/ after front Vs would sound much like /xi/. And if AF did not have /xi/, we are back to the *ad hoc* scenario. But three questions would still have no clear answer: 1) why /hi/ after front/round Vs would not also become /xi/, 2) why voiceless dentals would particularly favor creation of /xi/, and 3) why /ha/ after back round Vs would not become /xw/.

In all this the phonemic inventory and phonotactics of Brittonic appear to be highly relevant. Brittonic undeniably had a phoneme /h/ that was distinct from any /x/ (Jackson 1953, 694, 696) for a very good reason: it was derived from /s/.¹⁶ Accordingly it is to be expected that original /h-x/ in Pre-OE would split into /h/ and /x/ (at least) in early AF peasant dialect.

The matter of /x/ is considerably more complex. It is clear that, as noted above in treating the case of /lais-/ , /x/ (< k, g) before voiceless dentals became /xi/ in Brittonic, Gaulish, and Gallo-Romance (Jackson 1953, 525–527). Though /s/ in Brittonic is traditionally excluded from this change, reasons have been given above to think that this is not warranted. Since fronting of [x] before voiceless dentals does not seem to qualify as naturally predictable, a phoneme /xi/ seems warranted regardless of contrast. By about 600, /xʰt/ and /xʰs/ had become /-it/ and /-is/ in Brittonic (Jackson 1953, 696). Unfortunately it is not clear how long before 600 /-it/ and /-is/ had languished in peasant dialect. The parallel development seen in cases like French *nuit* and English *night*, taken together with the evidence of Gaulish and Brittonic, suggests that already in Gallo-Brittonic /-it, -is/ had developed from /xʰt, xʰs/: the areal distribution of /-i/ from /x/ is in effect a ghost image of where Gallo-Brittonic was spoken during the Roman period. It seems that by around 525 Brittonic had developed two other kinds of /x/, one a neutral /x/ from earlier /k/ after non-nasal Cs (Jackson 1953, 696), and the other a rounded /x^w/ (or /h^w/) from /hwë/ after apocope and initial /hw/.¹⁷ For the last part of this to work, the date of apocope in the case of /hwë/ would have to be

a bit earlier than what is posited by Jackson (1953, 695-696). But since, as /-ë/ became [-ë], /-hwë/ (perhaps /h^wë/) would easily be re-interpreted as /x^w/, which already existed elsewhere, this does not seem problematic.

Though Jackson (1953, 696) dates neutral /x/ to about 575, evidence given elsewhere in the main text (181-182, 566) shows that around 525 Irish /x/ could be rendered by an inscriber as “CC”, and that around 550 original /kk/ could be inscribed as “H”, which is to say that his dating is too late. Though even 525–550 might seem to be too late to have any relevance to AF, there are two mitigating considerations. First, Christian inscriptions were restricted to areas around the Irish sea, which for Brittonic were as marginal as marginal could get, and so would probably be among the last places to receive innovations originating elsewhere. Second, Christian inscriptions must represent the most exalted and (more the point) archaic language that inscribers could come up with, as in PDE “Here lies...”. Accordingly the Christian inscriptions of early medieval Britain must be seen as lagging indicator. It seems probable that, in areas less isolated and dialects more lowly, the development of neutral /x/ was somewhat earlier than 525–550. Though how much earlier cannot be clear, an origin around 475 for neutral /x/ seems within the range of realistic possibility. The evidence of AF seems to indicate that in SE Brittonic neutral /x/ became /x^w/, though it must be admitted that there is no independent evidence for this.

As for how all this, if true, would affect AF, first it may be noted that a three-way split of /h-x/ into /h/, /xⁱ/, and /x^w/ would happen as soon as Britons began to learn Germanic. In the case of /x/, the first version of the split would probably have /xⁱ/ after front Vs and under conditions of umlaut, and /x^w/ elsewhere. If there was a preference for /xⁱ/ when both after back Vs and before voiceless dentals (as seen in French *fruit*), it was soon undone by a change of all such /xⁱ/ to /x^w/. Perhaps such a change had occurred in SE Brittonic. Be that as it may, the most important question is why the initial distribution of /xⁱ/ and /x^w/, presumably more or less in accord with phonetics, would ever be undone. The answer appears to be hypercorrection. In peasant dialect the workings of palatal umlaut, tending to turn /rexⁱt/, mæxⁱt/ and into /rixⁱt/, mexⁱt/, would not long be delayed, and if in noble dialect there was an aversive reaction against this, we have what the evidence calls for: /E(E)xⁱ/ > /E(E)x^w/. Perhaps there was also an aversive reaction against overuse of /xⁱ/ before voiceless dentals, which would explain absence of the *fruit* type.

In the table below, only a simplified view of breaking can be presented: /rexⁱt/, mæxⁱt/ are intended to represent types, not tokens. Developments involving hypercorrection cannot of course be treated without distinguishing between noble dialect (ND) and peasant dialect (PD). In the table, “Pl.Um.” means “palatal umlaut”, and “||” is used to represent replacement of a form in ND by its analogue in (earlier) PD, as opposed to a true sound change.

	Start:	Pl.Um.I:	Breaking:	Pl.Um.II:	Percolation:
ND:	/rɛxʲt/	>	/rɛxʲt/	>	/rɛx^wt/ > /rɛx ^w t/ /rixʲt/
PD:	/rɛxʲt/	>	/rixʲt/	>	/rixʲt/ > /rixʲt/ > (/riit/?)
ND:	/mæxʲt/	>	/mæxʲt/	>	/mæx^wt/ > /mæx ^w t/ /mixʲt/
PD:	/mæxʲt/	>	/mexʲt/	>	/mexʲt/ > /mixʲt/ > (/miit/?)

In Frisian, initial developments (through breaking) were the same as in OE noble dialect. After breaking, Frisian went back to the continent. From that point, developments were as follows: /rɛx^wt/ > /rjuxt/ *riucht* and (less clearly) /mæx^wt/ > /maxt/ *macht*. The latter implies a change of /æx^w/ to /ax/, as part of the general reversion to Germanic norms, in this case having only one phoneme /h-x/. The development of /sihist/, where (unlike in English) breaking does occur, was apparently as follows: /sixʲst/ > /six^wst/ > /sjuxst/ *siuchst*. It is worth noting that the change of /ix^w/ to /ju/ shows substantial similarity to labio-velar mutation (Bremmer 2009, 35-36). As in some other cases, Frisian is like English in the beginning but like, or at least more like, continental West Germanic in the end.

Finally there is the matter of /hi/ becoming /xʲ/. Here, two phonotactic rules of Brittonic appear to be of great importance: 1) that front /xʲ/ could only (due to the circumstances of its creation) occur before a voiceless dental fricative, and 2) that /h/ could not occur before unstressed Vs. The reason for the difference between “voiceless dental fricative” and “voiceless dental”, seen earlier in treating AF, as controlling conditions is that in Brittonic earlier /t/ after /xʲ/ had become /T/. Since unstressed /hi/ was not possible within Brittonic, Britons would tend to seek an equivalent that was, and obviously /xʲ/ was the only plausible possibility. But since /xʲ/ could only occur before a voiceless dental fricative (VDF), substituting /xʲ/ for /hi/ would only be well-motivated in cases where /hi/ was followed by a VDF. In cases where unstressed /ha/ occurred before a VDF (and after a round V), substituting /x^w/ would violate the rule requiring /xʲ/ before VDFs, while substituting /xʲ/ would not preserve acoustic similarity with the original sequence. Accordingly /h/ would be retained (in altered form) only in the /sihist/ type. In such cases there was probably greater resistance in English than in Frisian to breaking before VDFs, due to English having more enduring contact with Brittonic. (Perhaps early breaking in such cases was soon reversed.) Though original /xt/ does trigger breaking in English, breaking (with short Vs) is reversed, as has been emphasized above. And though in Brittonic /t/ could not occur after /xʲ/, it might trigger the rule in the minds of Britons speaking Germanic, since there was no possible negative evidence against /t/ as a trigger in Brittonic. Perhaps reversal of breaking began with the broader interpretation of the Brittonic rule (as applying to /t/) becoming accepted in noble dialect. Be that as it may, re-analysis of Germanic /hi/ as /xʲ/ (under certain circumstances) would be sensible to speakers of Brittonic.

If what has been said in this section is true, several questions have possible answers:

- 1) Why [h] in English and Frisian is weaker than [h] in other West Germanic: due to Brittonic influence [h] became /h/, no longer associated with [x].
- 2) Why /h/ becomes a form of /x/ only when the result is /xi/ followed by a VDF: other cases either did not sound like /xi/, or would have produced /x^w/ before VDFs.
- 3) Why breaking occurs at all in AF: it was a hypercorrect reaction against the effects of /xi/ in peasant dialect.
- 4) Why breaking is abortive in English but not in Frisian: English remained in contact with Brittonic, while Frisian did not.

5. Conclusion

The arguments given above vary gradiently in terms of where they fall on the putative plausibility scale, largely because it is sometimes less than certain that Brittonic actually had the feature in question. Likewise all are necessarily speculative, in part because explanations are (at least in their beginnings) inherently speculative. But a survey of almost all of the features traditionally regarded as characteristic of AF shows that every one treated has a plausible motivation in terms of Brittonic influence. The fundamental question is this: what are the chances that such a pattern in evidence would exist if there really is no connection at all between AF and Brittonic? If the similarities in question are all due to coincidence, then it should be possible to make a superficially plausible but historically impossible argument about the characteristic features of AF being due to influences from, say Old Church Slavonic. But until and unless something of the sort is done, any assertion that it could be done is mere speculation.

The cases treated above do not have to be proven in isolation, for they do not exist in isolation. It would be quite impossible to prove that any given Balkanism, treated as an isolated case, is due to language contact rather than mere misleading coincidence. To treat cases that do not exist in isolation as if they do is to falsify reality. The more cases there are, the more the chance that they are all due to coincidence goes down. This is just a linguistic version of the exponential math involved in calculating the chances of surviving a given number of rounds of Russian Roulette. In the case of Anglo-Frisian as in the Balkans, the overall pattern in the evidence is in itself a fact, a forest in the trees, that has to be explained. In the present case, the number of cases is smaller, so that the chance of coincidence being the explanation is higher. But that does not mean that the chance is significantly higher than zero.

In theory it would be possible to posit that Anglo-Frisianisms developed in Britain and spread to Frisia without reverse migration. But the case of Low German influence in North Germanic shows that, as would be expected, influences from transmarine trade contacts flow from sellers to buyers: sellers, having more wealth, are of higher status. Since in later trade between Frisia and England the Frisians were the sellers, linguistically significant transmarine contacts should have resulted in influences flowing from Frisian to English, not the other way around. As the alternative, reverse migration, is independently evidenced, there is little point (other than Germanic pride) in denying it.

A stray point should not be passed over. The fact that Frisian patterns sometimes with Mercian (in metathesis creating /ld/ and in cases of the *mon* type) and sometimes with Kentish (in umlaut) has a natural explanation if Pre-Frisian originated in an area of England intermediate between the areas of Pre-Mercian and Kentish: the area in and around Kempston. There is thus no need to posit that occasional resemblances between Frisian and Mercian are coincidental.

To sum up, Anglo-Frisian shows clear signs of a British origin in its numerous areal resemblances to the Brittonic of early medieval SE Britain. Consideration of the Brittonic evidence reveals no reason to think that either common development on the continent or later transmarine contacts had any real significance in the genesis of Anglo-Frisian. In English, influences from Brittonic become stronger over time, causing English to become (among other things)¹⁸ pretty thoroughly Brittonicized West Germanic. In Frisian, they fade away, becoming no more than relics of an irrelevant past, as Frisian becomes more and more similar to nearby continental West Germanic. All in all, evidence of various types, not least the long-ignored evidence of Brittonic, points to the conclusion that Frisian is similar to English fundamentally because Frisian is *descended from* English.

Notes

- 1 Many German federates, most notably the “Saxons” of Abingdon, must have remained loyal till the later AS conquest. The Victorian view of the AS conquest as a race war has more to do with the Victorians than with reality.
- 2 The Monk of Fulda also asserts that the continental Saxons were descended from the insular Saxons (Stenton 1989[1971], 7), which puts an interesting twist on the better-known (but no better-evidenced) theory of Bede.
- 3 The reason to think that AF pronouns beginning with /h-/ derive from stressed forms is essentially that they begin with /h-/. But as spread of stressed pronouns into unstressed slots seems to be common, little can be made of it.
- 4 The scenario for Brittonic influence would be that in Germanic the feminine 3rd person pronoun the dative was used as a *de facto* reflexive genitive in an

abortive effort to preserve the reflexive/non-reflexive distinction during the period when this distinction was being lost in masculines, so that using the form with inherited reflexive with /s-/ might seem to signal masculine gender. Since Brittonic (like all Celtic) had no reflexive/non-reflexive distinction, the dative in such usages would naturally be reinterpreted as a genitive, with this usage spreading to other feminines.

- 5 That lack of gender distinction in 3rd pronouns and demonstratives is old in Brittonic is strongly suggested by that fact that it is also seen in Old Irish (Lewis and Pedersen 1989[1961], 195, 217).
- 6 The wider distribution of ‘less’ as a bare adverbial may indicate that it began as a bare adverbial, with adjectives later back-formed to it.
- 7 The occasional appearance of /minn-/ in Frisian is almost certainly a Saxonism.
- 8 The present author accepts the view of Moore and Knott (1942, 43, 121-122) that “restoration of /a/” never happened.
- 9 It is probably not coincidental that Middle English apparently developed a mildly front /a/, causing contrast to be lost between former /æ/ and /a/. This would seem to represent a later wave of Brittonic influence in English.
- 10 Though Jackson excludes Cornish/Breton from any change of /i, u/ to /I, U/, it seems probable that /e, o/ in these (Jackson 1953, 695) can be derived from /I, U/.
- 11 Some /ai/ in Frisian gives /aa/. De Vaan (2011) gives plausible conditions for the split.
- 12 It seems probable that loss of contrast between unstressed /I/ and /U/, both becoming /ë/, would happen earlier in cases where these were preceded by a stressed V.
- 13 At the time the EWS spelling system was set up, “y” meant /ü(ü)/. But by the time the EWS spelling system is (significantly) attested, reverse spellings with “ie” for “i” show that whatever “ie” had meant had become /i(i)/.
- 14 The term “short diphthongs” is short for “phonemic short diphthongs”.
- 15 Since “mæoht”, mentally de-composed into “maeoht”, would have qualified as an illegal triphthong, finding “meaht” instead is not surprising. In any event /x^w/ must have struck Irish ears as /xʲ/, quite reasonably spelled with a preceding back V, in this cases “a” (White 2015, 11).
- 16 Unfortunately it is necessary to note that in treating the matter of pre-vocalic /s/ Jackson (1953, 694) makes two grave errors: positing an exotic and unknown phoneme, “sigma”, intermediate between /s/ and /h/, and saying that all intervocalic /h/ was lost during the early Roman period. In fact intervocalic /h/ was retained in superlatives like Middle Welsh *mwyhaf* ‘most’ and *ieuhaf* ‘youngest’, and also (following syncope) devoiced preceding /b, d, g/ in superlatives (Evans 1964, 39-41). Apparently what Jackson meant to say was that /h/ was lost before *unstressed* Vs.
- 17 In Cornish, /h^w-x^w/ is spelled as “wh” initially and as “ugh” finally, obviously under English influence. What this tells us about the meaning of “wh” and

“ugh” in English, that they were non-contrastive spellings for a phoneme /h^w-x^w/, has not yet been appreciated, since the value of Cornish spelling for the interpretation of English spelling has not yet been appreciated.

- 18 Norse influences caused English to become semi-creolized and semi-Norse in lexicon, and of course French influences caused English to become “Romanticized in lexicon.

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