

Settler Colonization and Language Contact: How they Shaped Old English

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1. Migration or diffusion?

The traditional story of the *Adventus Saxonum*, or the arrival of the Germanic-speaking populations in Britain, is one of invasion, genocidal violence and conquest. Following the withdrawal of the Roman troops in the fifth century, Germanic tribes washed up on the southern and eastern shores of the island and proceeded to plunder their way inland, forcing the native Britons to the northern and western frontiers, into areas which were to become Wales, Cornwall, Cumbria, and Southern Scotland. This characterization of the events is heavily influenced by *De Excidio et Conquestu Britanniae*, a sermon written by the sixth-century British monk Gildas, who depicted the coming of the Germanic-speakers as a harrowing time in which any Britons who remained in the occupied regions were massacred or reduced to servitude.

Archaeologists, however, came to doubt this view, partly as a result of an anti-migrationist trend in the field that sought to decouple material culture from tribal identities, and instead emphasized that artifacts could be spread through peaceful or semi-peaceful diffusion, rather than violent invasions and migrations. Through this lens, it was argued that a relatively small elite of male Germanic warriors had arrived in Britain, and their cultural and political dominance resulted in the bulk of the pre-existing population, which remained in place, adopting Anglo-Saxon culture until they began to conceive of themselves as English, rather than British. Though it originated in archaeological circles, this “elite dominance” model eventually came to be endorsed by historians such as Wood (2010).

English historical linguists have tended to have difficulties accepting the viewpoint that the spread of Germanic languages in Britain was merely the result of an elite dominance

scenario. Old English, which emerged by the seventh century from contact between the various Germanic dialects brought to Britain, contains very little obvious influence from the Celtic languages, and toponymic evidence suggests an almost total replacement of Celtic and Latin place names with Germanic ones during the transition between late antiquity and the early medieval period. Celticists, on the other hand, have seized upon the acculturation model, and have pushed back against the notion that Old English is devoid of Celtic influence. While the number of English words derived from British Celtic is widely accepted to be extremely small, it has been suggested that various English grammatical features bear the mark of a Celtic substrate, but only manifested themselves in writing once the Norman Conquest had extinguished the dominance of the West Saxon literary form, which had supposedly preserved a conservative and more purely Germanic structure than the Celtic-influenced dialects spoken by the commoners. This idea has become known as the “Celtic hypothesis.”

In this paper, I will begin by deconstructing the Celtic hypothesis on linguistic grounds. I will then investigate the *Adventus Saxonum* utilizing archaeological, toponymic, and above all recently-published archaeogenetic data, in order to argue that the evidence in favor of a model of settler colonization via mass migration, rather than elite dominance, is insurmountable in the south and east of Britain. Following this, using theories of language contact and creolization, and analyzing analogous scenarios for which there is more historical evidence, I will explain why Celtic was unable to strongly affect early insular Germanic,¹ despite the fact that some Britons did in fact live alongside the settlers and even started families with them. To conclude, I will examine the reasons for why the linguistic fates of Britain and Gaul differed from one another so

¹ Throughout this paper I will use the term “early insular Germanic” to refer to the collection of dialects that eventually evolved into Old English.

drastically, despite the fact that both places experienced colonization by Latin-speakers and Germanic-speakers.

2. *The Celtic hypothesis – a critique*

While certain aspects of the Celtic hypothesis are intriguing, it contains a number of significant flaws which should not be overlooked. For instance, the most widely-cited ostensible examples of substratal Celtic features in English grammar (the use of periphrastic “do” and the present progressive tense) did not become prominent until the very *late* Middle English period, rather than emerging instantaneously with the collapse of Anglo-Saxon rule as would be expected if the kind of diglossia proposed by Celticists had actually existed, not to mention that it is possible to track their development and increasing use in the language over time. Overall, these features probably cannot be traced to any singular origin point (Schendl 2012), and their spread may have been the result of increased mobility and contact between different dialects within the (at the time much smaller) Anglosphere. Other hypotheses, such as the claim that the preservation of the phonemes /w/ and /θ/ reflect some kind of memory of a Celtic-speaking past, appear more like wishful thinking on the part of the Celticists than anything else (Coates 2010). And only adding to the problematic nature of the Celtic hypothesis is the fact that many of those promoting such ideas have tended to make comparisons with forms of Welsh, Cornish, and Breton dating at earliest to the late Middle Ages, rather than the ancestral British Celtic of the fifth and sixth centuries. This conveniently ignores the possibility that some of the similarities with current English forms could be due to a more recently-developed sprachbund scenario within the British Isles.

There are indeed some features of English dialects which may bear the mark of an early Celtic contact influence. One of these is the “Northern Subject Rule,” native to Northern England and Southern Scotland. This idiosyncratic system of agreement between plural subjects and verbs (e.g. “the friends just walks” but also “they talk and walks”) mimics, to a degree, that found in languages like Welsh. Coates (2010) considers the Northern Subject Rule to be “one of the strongest candidates of all for the substratal impact of C[eltic] on E[nglish],” though Hickey (2012) notes that even here a Celtic origin is in dispute. Overall, however, most of the potentially Celtic features present in the language today, particularly in regional varieties in Britain, seem to have arisen in the early modern and modern periods, most notably during the height of the British Empire in the nineteenth and early twentieth centuries, when speakers of Irish and Scottish Gaelic migrated en masse to Anglophone cities like Liverpool and Glasgow, while the depleted Celtic linguistic heartlands of Ireland and the Scottish Highlands began increasingly to shift to the more economically advantageous English (Mufwene 2020).

Further issues with the Celtic hypothesis lie in the toponymy of England, which overwhelmingly suggests that the Germanic-speaking settlers did not understand Celtic, nor did they demonstrate much interest in engaging with it in a meaningful way (Insley 2019). Situations abound in which the individuals who coined a given toponym appear to have assumed that a generic Celtic geographical term was a proper name, e.g. locations with names such as “Creech” and “Crook,” from Brittonic **crüg* ‘hill,’ ‘burial mound’ (Insley 2019),² not unlike the manner in which European colonists would apply Native American words to place names in the United

² Padel (2013) suggests that this may have been a word which was borrowed into Old English and understood to a degree, but only as a place name, rather than as a word which would have been used in everyday speech. He refers to a 7th century charter from Somerset, in which it is stated that there is a hill called *Cructan* by the Britons, and *Crycbeorh* by the Saxons (the second element is the Old English *beorh*, meaning the same thing as *crüg*, making this toponym a tautology). In the present day, the place name still exists as Creechbarrow, derived from the Old English version.

States. It is mainly in the western portion of the island, where British influence is widely agreed to have been both culturally and demographically more significant, that we see significant evidence of the Germanic-speakers utilising Celtic terms such as *cumb* ‘valley’ and *torr* ‘peak’ (Parsons 2011) as place-name elements whose Native meanings were understood.

3. Modeling the Adventus Saxonum

As we have seen, the Celtic hypothesis is effectively premised on the “elite dominance” model of Germanic speaking settlement. Its proponents have often tended to argue from the perspective of population demographics, and in particular archaeological estimates of the number of migrants involved. Hickey (2012), who has cautiously endorsed certain aspects of the Celtic hypothesis, provides an effective summary of this position:

“Estimates vary here: the number of Germanic settlers during the fifth century has been put at anything between 10,000 and 200,000 (Filppula, Klemola, and Paulasto 2008: 15). But given a population of Britain just before the Germanic arrivals of approximately one million then the relationship would have been anything from 1:100 to 1:5. The latter ratio is hardly likely as it would have implied a huge movement from the continent to England. A figure somewhere in the middle, say 1:20, would still imply that the Celts greatly outnumbered the Germanic settlers, assumed to be about 50,000 with this ratio.”

To me, this premise seems fundamentally un-sound. For one thing, the implication appears to be that the migrants arrived in a single wave, and that they would have settled in an equally-distributed manner around the island. This is clearly not the case. The widespread

historical and archaeological consensus on the arrival of the Germanic-speakers in Britain, no matter the exact form one believes that this arrival took, is that it was overwhelmingly concentrated in the south and east, in areas that would become the kingdoms of Kent, Sussex, Essex, East Anglia, and Lindsey. This directly corresponded to the most heavily Romanized zone of the island, and it may thus reasonably be assumed that it was the most adversely affected by the collapse of Roman institutions in Britain, leading to a disproportionate decline in the population. That this was occurring even prior to the end of Roman control has support in the archaeological evidence. According to Dark (2003), in the late fourth century, “part of eastern Britain may have already been losing a significant portion of its rural population [...] This does not seem to be a localised change in settlement location, size or character but a genuine desertion.”

It is obvious that the migrants and their descendants would have formed a much more significant proportion of the population within the regions they settled directly. And if the migrant settlements had flourished to a greater degree than their Romano-British counterparts, it is not difficult to envision a scenario in which speakers of early insular Germanic could have come to predominate within a couple of centuries. To take an analogous example: in the 1600s, the “great migration” of English Puritans leaving for North America totaled around 20,000; a century and a half later, in 1770, the combined population of New England (Massachusetts, Rhode Island, Connecticut, New Hampshire, Vermont, and Maine) had ballooned to more than 580,000. Admittedly some of this growth was the result of augmentation by newer settlers, but the same could easily be suggested for southern Britain between the fifth and seventh centuries.³

³ Estimated colonial and pre-federal statistics

However, we are currently in the realm of speculation. Let us instead turn to data and factual evidence. The advent of archaeogenetics, the study of ancient DNA, has allowed scholars to identify and/or confirm migration events that either occurred in the prehistoric era, or else were poorly recorded in the historical record. Though attempts had been made to investigate the effects of Anglo-Saxon migration through the lens of archaeogenetics a decade ago (Schiffels et. al. 2016; Martiniano et. al. 2016), these studies were limited by a lack of samples. However, by 2022, archaeologists had amassed a vast collection of skeletons from various Anglo-Saxon era cemeteries from across the south and east of Britain. These were augmented with skeletons dating to the British Iron Age, as well as skeletons from the putative source areas for the Anglo-Saxon migrant groups (e.g. Northern Germany, Denmark, and Dutch Frisia),⁴ for a full data set of hundreds of samples.

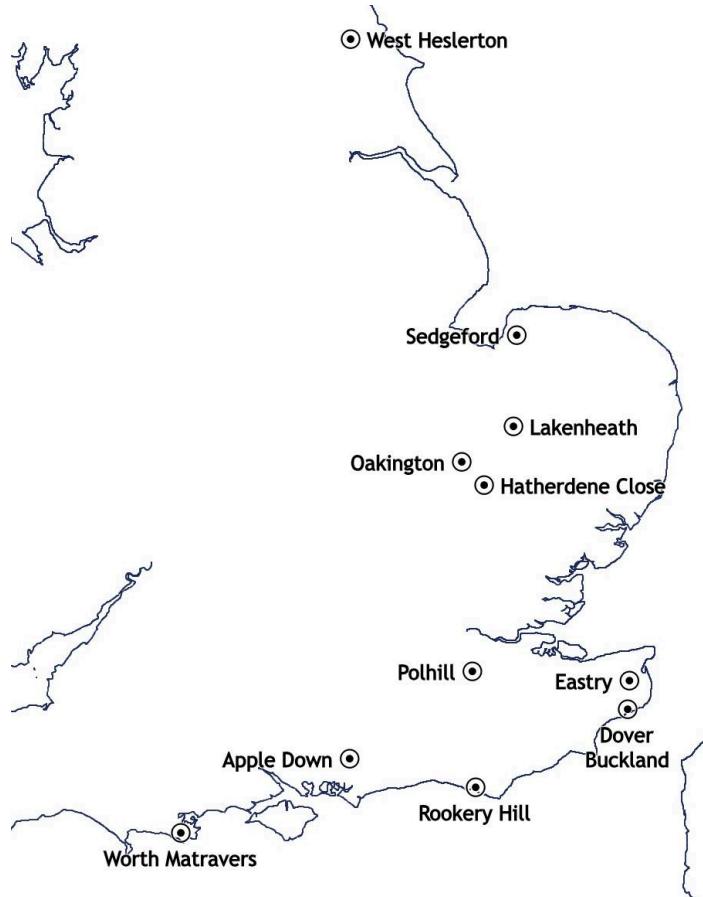
The demographic shift revealed by the resulting study (Gretzinger et. al. 2022) was striking. On average, 76% of the genetic data from the Anglo-Saxon era cemeteries could be traced back to a “Continental Northern European” (CNE) source, while those from the Iron Age exhibited a “Western British Isles” (WBI) profile, not unlike modern-day individuals found in Wales and Ireland. Furthermore, the migration continued longer than had been initially assumed, with new settlers arriving as late as the eighth century. The authors noted that “we find no significant differences of CNE or WBI ancestry between male and female individuals, and find individuals of both ancestries within prominent and/or furnished burials.” Such data indicates that the notion of a numerically small but politically dominant class of Anglo-Saxon men subjugating the British population is unlikely to be accurate in the core settlement areas in

⁴ McColl et. al. (forthcoming) propose that the “Anglo-Saxon” migrant source can be modelled as being most similar to ancient samples from Mecklenburg, in Northern Germany.

the south and east. Intermarriage between the two groups did occur, with the authors finding direct evidence of it at a cemetery at Dover Buckland, in Kent. However, at Apple Down in Sussex, those with predominantly “CNE” ancestry were buried in different alignments, and in different locations, from those with predominantly “WBI” ancestry, suggesting a degree of segregation in the community.

	Mainly CNE (“Continental Northern Europe”) ancestry	Mainly WBI (“Western British Isles”) ancestry	Mainly CWE (“Continental Western Europe”) ancestry	CNE + WBI mixed ancestry	CNE + CWE mixed ancestry	WBI + CWE mixed ancestry
West Heslerton (Yorkshire)	32 78.05%	2 4.88%	0 0.00%	5 12.20%	2 4.88%	0 0.00%
Oakington (Cambridgeshire)	19 73.08%	1 3.85%	0 0.00%	6 23.08%	0 0.00%	0 0.00%
Hatherdene Close (Cambridgeshire)	11 64.71%	5 29.41%	0 0.00%	1 5.88%	0 0.00%	0 0.00%
Sedgeford (Norfolk)	15 78.95%	1 5.26%	1 5.26%	0 0.00%	2 10.53%	0 0.00%
Lakenheath (Suffolk)	11 73.33%	0 0.00%	0 0.00%	4 26.67%	0 0.00%	0 0.00%
Polhill (Kent)	8 88.89%	0 0.00%	0 0.00%	1 11.11%	0 0.00%	0 0.00%
Eastry (Kent)	0 0.00%	1 20.00%	1 20.00%	0 0.00%	3 60.00%	0 0.00%
Dover Buckland (Kent)	44 64.71%	2 2.94%	0 0.00%	12 17.65%	6 8.82%	4 5.88%
Rookery Hill (Sussex)	1 11.11%	3 33.33%	1 11.11%	0 0.00%	0 0.00%	4 44.44%
Apple Down (Sussex)	5 55.56%	1 11.11%	3 33.33%	0 0.00%	0 0.00%	0 0.00%
Worth Matravers (Dorset)	0 0.00%	14 93.33%	0 0.00%	1 6.67%	0 0.00%	0 0.00%

Total	146 62.66%	30 12.88%	6 2.58%	30 12.88%	13 5.58%	8 3.34%
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Figures 1 & 2: Ancestry proportions for various Anglo-Saxon era cemeteries in Britain; based on Gretzinger et. al. (2022) supplementary figure 5.7, as well as a map, created by the author of this paper, showing the locations of these cemeteries. The “CWE” group, likened to samples from Iron Age France, has a limited presence even during the Anglo-Saxon period, but is prominent in southern England in the present day. Note that Worth Matravers is the westernmost location in the study, and was likely a place in which the migrants and their descendants had yet to arrive in significant numbers. While the sample sizes may seem small, it is worth noting that environmental factors have resulted in what is effectively an unbiased random sample of a given cemetery, increasing the statistical validity of the results.

In light of this, how can we model the migration of the Germanic-speakers, and the corresponding spread of their language(s) in Britain? The genetic evidence suggests that it took

different forms in different regions, but on the whole I believe that the most common pattern was settlement colonization not unlike that practiced by the English in North America a millennium later. The migrant society flourished and allowed its descendants, some of whom were of partial British stock, to expand into the British hinterland, gradually incorporating more Britons into their settlements as they did so. Clearly there were Britons who lived in the immigrant communities, but the data (see Fig. 1) indicates that most of the time, they formed a minority in those communities.

The overall picture is one in which a number of Britons decided to join up with the new settler society. What happened to their compatriots in the south and east remains unclear, though to me it seems plausible that the upper classes participated in a kind of early “white flight” as proto-Anglo-Saxon culture came to predominate in the area.⁵ In general, this was an era in which conceptualizations of ethnic identity were in a state of significant flux, and Pohl (1998) notes that the lower classes likely identified more with their local community than with a larger tribe. In a world in which being a “Roman” brought no clear benefits, pragmatic Britons sensing the changing tide and deciding to assimilate into communities that spoke Germanic would not have been abnormal.

The initial settlement of the Germanic-speakers does not appear to have been characterized by violent, invasive intent, though—again, not unlike the English in North America—skirmishes between the settler society and those seeking to defend the vestiges of Romano-British culture may well have occurred. Gildas, a Latin-speaking British Christian,

⁵ Modern data from *Gretzinger et. al.* suggests that the “Iron Age British” component of the DNA of individuals living in Southern and Eastern England in the present day is quite low; instead, these people can be largely modelled as a combination of “Continental Northern European” ancestry and “Continental Western European” ancestry

does cite at least one specific battle between the two sides, the Battle of Mons Badonicus,⁶ and later on, in areas that became part of the Kingdom of Wessex, there is evidence that the Britons formed an underclass, or at the very least a distinctly disadvantaged population. Gretzinger et. al. point out that “the absence of sex bias during the early medieval CNE-WBI admixture does not exclude possibilities for sex bias in the later admixture processes that caused the dilution of CNE ancestry in present-day England.” We will return to this idea later.

The earliest “Anglo-Saxons” may well have been mercenary soldiers employed in Britain by the Romans, but the genetic evidence indicates that the migration quickly came to include women and children as well, thus allowing for distinct migrant communities to take shape and grow. Toponymic data allows us to tentatively track the formation of these communities within the landscape. Place names ending in “-ham” and “-ingham” are among those believed to represent a very early stratum of toponyms given by the settlers and their descendants in Britain (Parsons 2013; Hough 2020). Such names usually have the suffix appended to a Germanic male personal name; for instance, “Birmingham” means the home (“-ham”) of the people (“-ing-”) associated with a man named Beorma. When these toponyms are plotted on a map, it is possible to trace four key settlement zones which the migrants gravitated towards, and by which they might have expanded throughout Britain.

⁶ The location of this battle, a victory for the Britons, remains obscure but it is generally thought to have been fought somewhere in the south or southwest of England. Breeze (2020) places it in Braydon, Wiltshire.

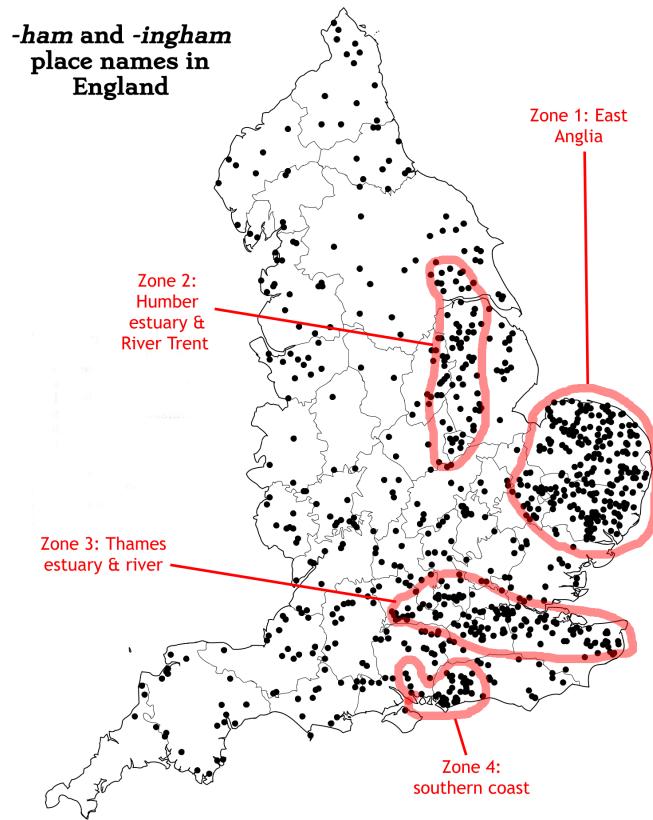


Figure 3: Work of the author, based on Mills (2011). A similar graphic, also made by the author, can be found at https://upload.wikimedia.org/wikipedia/commons/9/9f/-ham_and_-ingham_place_names.png

East Anglia clearly has the most robust collection of these names, and had been identified by archaeologists even prior to the publication of Gretzinger et. al. as an area which had experienced mass-migration (Martin 2015). Two other significant “-ham”/“-ingham” zones would appear to match the course of the river valleys of the Thames and the Trent. A picture can be drawn of the Germanic-speakers initially settling around the estuaries of these rivers, before they and their descendants ventured further inland. The final zone lies in Eastern Hampshire and Western Sussex, near the Meon river, where, Hawkins (2020) argues, locally powerful Britons were able to direct the initial flow of Germanic-speaking immigration. These linguistically

defined settlement zones would appear to line up reasonably well with archaeological evidence of early furnished burials, which represent intrusions of Germanic material culture into Britain (Charles-Edwards 2013: 51).

4. Language contact in Sub-Roman Britain

Britons (or at least those of British descent) evidently took part in the creation of Anglo-Saxon society. If this was the case, why did Celtic have such a limited influence on early insular Germanic and, ultimately, Old English? I propose that in southeastern England, the incorporation of Britons into Germanic-speaking communities occurred slowly enough that at any given point, Celtic-speakers shifting to Germanic formed only a small minority of the population. That this was the case early in the settlement period is evident in the data uncovered by Gretzinger et. al. When Britons married into settler society, their children would have grown up native speakers of the locally predominant Germanic dialect. Even if individuals of partial or complete British ancestry living amongst those descended from the migrants understood Celtic, potentially using it as children and later using it to communicate with speakers of the language dwelling further west, its low prestige and lack of utility would have ensured that few if any recognizably Celtic features were transferred into early insular Germanic. Those for whom Celtic was a native language, and who had to learn Germanic as adults, may have had their

foreign accent stigmatized, while their children acquired the target language with as little interference as possible.⁷

As the so-called Anglo-Saxons, some of whom were certainly of mixed descent, pushed westwards, this process would have repeated itself. Linguistically identifiable Britons would have continued to form a minority in the expansionist Anglo-Saxon society, and came to assimilate to the dominant culture; as a result their language disappeared and left little influence. The people who identified as English would thus gradually have become more “biologically” British while remaining resolutely, or almost resolutely, Germanic in speech. Modern genetic data studied by Gretzinger et. al. reveals a cline in the population structure of present-day England: the “WBI” ancestry component, though present throughout the country, is low in the south and east but gradually increases in proportion as one moves north and west. (In contrast, the “CNE” component shows the opposite distribution: high in the south and east, but lower in the north and west.) This pattern is also reflected in English toponymy (Padel 2013).

The following question then arises: are there analogous situations in which a similar pattern can be observed? The most obvious case is likely that of the spread of Slavic dialects into former Roman territories south of the Danube River not long after the importation of Germanic into Britain began, and here, too, recent archaeogenetic material has suggested that the linguistic shift was accompanied by mass migration (Olalde et. al. 2023).⁸ However, once

⁷ I myself can provide a firsthand account of such a process: as someone of Serb/Croat descent, born and raised in San Francisco, whose parents grew up in then-Yugoslavia and are native speakers of Serbo-Croatian, I initially spoke English with a pronounced accent that began to weaken when I started school, and was more or less replaced by Californian English by the time I was eight years old. Interestingly, I have a cousin who, despite having been born and raised in the United States, retains a slight accent. The main difference between our linguistic backgrounds is that my parents spoke English almost exclusively when I was growing up, while my cousin’s parents have continued to mostly speak Serbo-Croatian in their home.

⁸ See also the following presentation by Joscha Gretzinger on an upcoming archaeogenetic study focusing on the spread of Slavic: <https://www.youtube.com/watch?v= npc5Q2BoGRI>

again, the historical evidence for the exact processes at play is scant. Luckily, there is a more recent case in which historical evidence *is* extensive, and also exhibits the model of a settler colonial society which, while not entirely eradicating the pre-existing population in the area, more or less eradicated their language. This is the seventeenth-century Plantation of Ulster.

The Plantation of Ulster is often remembered in the popular imagination as a scheme devised by King James I (King James VI in Scotland) to get rid of the troublesome “reivers” who dwelt along the Anglo-Scottish border, effectively killing two birds with one stone by shipping them to Ireland’s most unruly province. This story has taken on a kind of legendary status amongst those of Ulster-Scots descent living in the Appalachian Mountains in the United States, being used to explain the supposedly hardscrabble, clannish character of the region (e.g., Webb 2005). However, while many border families were relocated, the truth was that the bulk of the migration happened more organically. Scores of settlers from predominantly southwestern, rather than south-eastern, Scotland (Leyburn 1962: 94) mingled with others who had come from various parts of England. Not unlike the Germanic-speaking migrants in Britain, who would have spoken dialects which were similar but distinct from one another, the migrants to Ireland spoke different variants of Early Modern English and, in the case of the Scottish settlers, Scots. This migration drove an Anglophone wedge between the Native Irish of Ulster and the Scottish Highlanders of Argyll and the Hebrides, who spoke closely-related Goidelic Celtic languages and shared similar cultures. Meanwhile, the Ulster-based Germanic variants themselves developed from different combinations of dialects spoken by Scottish and English settlers, with the ultimate results being Ulster Scots and Mid Ulster English.

Since these Germanic-speakers lived in close proximity to Irish-speakers, one might assume that Irish had a significant influence on the speech of their descendants. However, this is

not the case. Maguire (2020), in an extensive study of the development of Mid Ulster English, finds particularly scant evidence for Irish influence on the phonology of the dialect, noting that “only one phonological feature (Palatal Velarization) [is] likely to be derived entirely from the language, in addition to the contribution Irish has made, through borrowed words and place-names, to the distribution of the /x/ phoneme” (Maguire 2020: 145). To explain this phenomenon, Maguire argues that:

“MUE [Middle Ulster English] was established by a very sizable native-speaker population who, for the most part, did not learn Irish, and that the language shift from Irish to English in Ulster happened over a long period, often in more peripheral areas, so that the shifting speakers were never in the majority, especially in the populous lowland areas of the province, and had time to accommodate fully to more prestigious supraregional phonological patterns that derived from English and Scots. As such, they were never in a demographic position to substantially alter the speech of the native English speaker community” (Maguire 2020: 146).

Needless to say, such a phenomenon is more or less exactly what I argue happened to Celtic in Anglo-Saxon England, albeit on a larger scale and over a longer duration of time. The death of Celtic was a slow, drawn-out process which would have taken many centuries; indeed, the parts of England nearest the Welsh border remained Celtic-speaking until the sixteenth century (Padel 2013). Ulster represents another case in which Germanic-speaking and Celtic-speaking groups initially lived separately, but in which the Germanic-speakers gradually

incorporated the Celtic-speakers into their society such that their linguistic influence was little-felt.

An additional similarity between the two situations is that the effects of the English and Scottish settlement were not equally felt in all areas of Ulster. Maguire writes that “by 1659, around 37 percent of the population of Ulster was [from Britain],” but that “this was unevenly distributed, so that between 43 and 45 percent of the population of the most densely populated counties (Antrim, Down, and (London)Derry) were English or Scottish. By 1732 [...] 62 percent of the population was Protestant” (Maguire 2020: 149). He claims that the reason for this increase was continued migration from England and Scotland, rather than conversion of the Irish; again, parallels can be drawn with post-Roman Britain, where migration continued for multiple centuries. It may also be argued that the increase was due in part to greater flourishing of the Protestant British communities in comparison to the Catholic Irish ones. Likewise, the settlers in fifth-century Britain, who had dwelt at the marshy fringes of the greater Roman world prior to their migration into the former Roman province, may have been better suited to life in a place in which Roman institutions were falling apart than those who had grown up with those institutions and perceived themselves as Romans.

Drawing on Thomason and Kaufman (1988), Maguire points to two different examples of language shift—the first, similar to the situation which characterized the development of English and Scots in Ulster, and which I argue characterized the initial spread of Germanic in Britain, and the second, in which a small minority group imposes their language onto a much larger, linguistically homogeneous population, with the language shift occurring rapidly, within a couple of generations (Maguire 2020: 148). This did indeed occur in the development of Hiberno-English outside of Ulster. Proponents of the Celtic hypothesis of Old English language

development would appear to view the situation in post-Roman Britain as being more akin to the latter, but as the recent genetic evidence demonstrates, they have both *underestimated* the scale of the migration, and seemingly *overestimated* the accompanying oppression suffered by the Britons in the southeast.

While I have up to this point described a scenario of gradual assimilation, not necessarily characterized by systematic discrimination or social stratification, was this true throughout all of what became England? Previously I mentioned that in at least one cemetery studied by Gretzinger et. al. there are indications that those of migrant descent and those of Native descent were separated in death. Such a dynamic has support in the historical evidence. Gildas characterizes relations between the Anglo-Saxons and Britons as entirely hostile in nature, with the Anglo-Saxons killing, subjugating, and even enslaving the Britons. While scholars have been deconstructing the dramatic nature of Gildas' narrative for the past half-century, the specific point that Britons were enslaved remains intriguing. The word used by the Anglo-Saxons to describe the Britons was *wealh*, which is the origin of the ethnic names "Wales" and "Welsh," but in Wessex, the word also came to mean "slave" or "servant" (Hickey 2012). Furthermore, the laws of the West Saxon king Ine, dating to the seventh century, differentiate between "English" and "Welsh" inhabitants of the kingdom, and suggest that the Welsh were at a disadvantage in West Saxon society (Härke 2011).

If we posit a somewhat modified elite dominance scenario for parts of Wessex (as well as, potentially, other regions in the north and west of England), in which the Germanic speakers would have formed a significant proportion of the population while still remaining a clear minority, can the lack of obvious Brittonic influence still be explained? I believe that it can. Here, in light of the notion of British enslavement in particular, a loosely similar situation to

consider might be that of African American Vernacular English. While the processes by which those of African descent in British North America (and later the United States) found themselves as a slave class were entirely different to any scenario by which the Britons could have come to be so, there are certain linguistic analogues between the two.

African American Vernacular English is often considered to have significant roots in the various West African languages previously spoken by the enslaved individuals who were kidnapped from their homes and taken across the Atlantic. There is a particularly common myth that “Black nursemaids” in upper-class White households transmitted features of their speech to the White children that they helped to raise, and that this had a major influence on the development of the so-called southern accent. In reality, Mufwene (2015) demonstrates that such a “Creole-origins” hypothesis is incorrect. While grammatical features of the slaves’ Native West African languages may have influenced the English morphosyntactic constructions that they gravitated towards, present-day African American Vernacular English is still mostly representative of Southern American English, spoken by those of African descent and then taken to cities in the northern and western parts of the United States during the Great Migration. Furthermore, the actual languages that the Africans brought with them would have been of a vast number, and certainly not all of them would have been mutually intelligible. The situation at hand would not, for the most part, have been conducive to significant transfer from any single one of the Africans’ Native languages to the dialects of English that were forming in the South.

Mufwene (2015) draws a distinction between the way in which the Africans in the Virginia tidewater region acquired English, and the spread of English to the massive plantations of coastal South Carolina and Georgia, where Gullah, which was far more strongly influenced

by African languages, developed.⁹ Gullah was a product of an extreme demographic imbalance and early segregation between those of African descent, who formed the overwhelming majority, and the White colonists. The situation of the Britons in an increasingly Anglo-Saxon southwest England would seem to be more akin to the situation in Virginia: they would have outnumbered the West Saxons¹⁰, but with the West Saxons forming a proportion of the population significant enough that, when combined with their sociopolitical dominance, their language would come to be seen as desirable, even necessary, to learn to speak fluently. It is also easy to imagine that lower-class native insular Germanic speakers would also have been present in West Saxon society, forming an analogue to the sizable population of White indentured servants in Virginia. Hickey (2012) points out that several of the features in Old and Middle English that have been posited as transfer features from Celtic also have been argued to be language-internal changes. I find it plausible that in regions where Celtic speakers did form a majority of the overall population, they would, through congruence, have selected features from the feature pool within the imported Germanic dialects that corresponded to those in their native language. Thus it may be that something like “*do*-support,” a construction which originated in Southwestern England (Coates 2010), had at least partial Celtic roots, but for the likes of McWhorter (2008) to make the claim that it was purely the result of a large mass of Britons incorrectly learning the language of their Germanic conquerors seems highly disputable. And given that the construction only became ubiquitous in the language in the fifteenth and sixteenth

⁹ A scenario in Britain more demographically similar to the one which produced Gullah would probably be that of Cornwall; however, the spread of English throughout the region was quite slow, spanning the Middle Ages to the 18th century, and its gradual nature lessened significant substrate influence. In the modern period, Welsh English, Hiberno-English (outside of Ulster), and variants of Scottish English spoken in the Highlands and the Hebrides could be viewed as closer analogues.

¹⁰ I use the term “West Saxon” here as a shorthand for Germanic-speakers in Wessex. In reality these people would have been descended from a variety of different tribes and subgroupings, and many would have had some British ancestry as well, but they eventually came to operate under a West Saxon identity.

centuries (Hudson 2002), using it as evidence of early Celtic substrate transfer in a South Carolina-esque elite dominance model is certainly erroneous. As Insley (2019: 264) aptly points out, “we really cannot take features of Early Modern English as evidence for a Late British substrate carried over into Middle and Early Modern English from a hypothetical ‘Late British derived Old English.’”

A potential confounding variable in all of this is the possibility that, at the time the Germanic-speakers began to arrive in Britain in significant numbers, Celtic and Latin were in competition with each other. Currently there exists a lively debate between scholars taking the traditional perspective that while Latin was spoken by the elites and in the cities, Celtic remained the predominant language in rural areas, contrary to radical claims made most notably by Schrijver (2002) that a British dialect of Latin was far more widespread than has been previously assumed, and was in fact the most widely-spoken language in Southeastern Britain, both in the cities and in the countryside. Aspects of Schrijver’s theory have been supported by Woolf (2020), who notes that the terms *wealh* and *wealas* were Old English versions of words used by Germanic-speakers on the continent to specifically designate Romans and Romance speakers,¹¹ suggesting that “the *Saxones* encountered recognizably Roman people when they arrived.” Adams (2007), while not going remotely as far in his argumentation as Schrijver, suggests that the presence of Latin curse tablets in Britain, seemingly written by Britons, may reflect the spread of the language to the local non-elite. Charles-Edwards (2013) has also speculated that Latin, or at the very least bilingualism in Celtic and Latin, may have been the predominant linguistic state in the southeast, and notes that Gildas characterized Latin as the Britons’ language, though he was admittedly writing for an educated, literate audience.

¹¹ Kerkhov (2018: 30) notes that an early Old English term for the Gallo-Romans was *Galwalas*.

Furthermore, early English toponymy shows influence from Latin, as terms like *vicus* ‘town’ (among other meanings), *portus* ‘port,’ *ora* ‘shore,’ and **funta* ‘spring,’ were adopted by the Germanic-speakers as productive place-name elements in the south of England (Coates 1999; Hawkins 2020), giving toponyms such as Chalfont and Windsor, though Insley (2019) has suggested that **funta* represents a borrowing of a Latin word that had previously passed into Celtic. There is also the matter of *ceaster* ‘fort’ or ‘fortified settlement’, an Old English word derived from Latin *castrum*. *Castrum* has direct descendants in modern Italian, Spanish, and Portuguese (all *castro*), but seemingly was not taken into any continental Germanic languages, suggesting that it was borrowed within Britain as a result of contact with a local Latin-speaking community.¹²

Whatever the reality of the situation, it must be said that in Britain there is a great deal more evidence of contact *between* Latin and Celtic, than there is between either of the two languages and Germanic. A possible explanation for this phenomenon is that Celtic speakers and Latin speakers, having coexisted for centuries, viewed themselves as two subtypes of the same overall ethnicity—Romanized Britons and not-so-Romanized Britons—while Germanic was a distinctly foreign language, imported by an “other” consisting of recent immigrants. Alternately, the Latin speakers moving away from the increasingly alien society in the east could have continued to occupy positions of prestige in the west, and thus been able to influence

¹² Parsons (2011), discussing the work of Margaret Gelling, has claimed that *ceaster* could have been borrowed by the Germanic-speakers while they were still living on the continent, like *stræt* ‘street.’ I disagree, since Old English *stræt* has obvious cognates in contemporary continental West Germanic languages (Old Saxon, Old Frisian, Old Dutch, Old High German), as well as their present-day descendants, while *ceaster* does not. The places that were given *ceaster* names were generally Roman-era settlements, but did not contain the Latin version of the suffix during the Roman period (Padel 2013), e.g. *Colonia* ‘Colchester,’ *Glevum* ‘Gloucester,’ *Mamucium* ‘Manchester,’ and *Venta* ‘Winchester.’ To me, all of this evidence suggests that *ceaster* was specifically a term borrowed from British Latin into early insular Germanic and used by speakers of that language to denote settlements, particularly forts, that they recognized as Roman or Romano-British.

the development of Celtic in that area. While Coates (2017) suggests that the processes operating in Celtic and Old English were so different that speakers of the two languages seemed to be going out of their way not to interact with one another, at least one Celtic language of the time—Old Welsh—shows strong influence from Latin. This influence was most obvious in the lexis, with Woolf (2020) pointing out that Welsh “contains more than 900 words borrowed from Latin during antiquity, including terms for quite prosaic items such as ‘fish,’ in sharp contrast to the mere dozen or so words borrowed from Celtic into Old English.” Theories have also been raised that Latin affected the development of the Brittonic languages structurally. In a conservative analysis, Russell (2011) cites several grammatical constructions and morphological features in British Celtic that exhibit potential Latin influence, including compound prepositions and pluperfects. Russell argues that the latter in particular was based on “Latin pluperfect subjunctive forms [ending] in *-isset* ... which would have resembled [British Celtic] preterite stems like *carass-*.” Ultimately, any competition between Latin and Celtic would have served to weaken both of their positions when faced with an increasingly powerful Germanic-speaking society, and would have lessened each language’s ability to transmit substrate features to English.

5. A tale of two language contact scenarios

To conclude, I will contrast the linguistic situation in Roman and post-Roman Britain to that in Gaul over the same time frame. Questions have been raised over why, despite ultimately taking on the name of another Germanic-speaking group in the Franks, Gaul retained a great deal of its Gallo-Roman identity—most notably, in continuing to speak a descendant of

Latin—while Southeastern Britain was radically transformed into a Germanic cultural and linguistic zone. Moreover, the lexical influence of Continental Celtic on the Latin spoken in Gaul was far greater than any British Celtic influence on early insular Germanic (to the point where modern English contains significantly more words of Continental Celtic origin, arriving via French after the Norman Conquest, than it does words borrowed from British Celtic during the early contact period). In truth, we are dealing with two different issues here. First, why did Gaul continue to be Latin-speaking in the post-Roman era, while areas outside of the Germanic zone in Britain retained Celtic? And secondly, why was such a Germanic zone able to establish itself in the first place, and moreover to expand, while Gaul—despite also experiencing migration from Germanic-speaking groups—mostly continued to be Romance-speaking?

The demise of Celtic in favor of Latin in Gaul is a matter of some debate, particularly with regards to the timeline. Mufwene (2004) argues that in both Britain and Gaul, the lower classes had yet to shift to Latin at the time of the collapse of the Roman Empire in the west of Europe, partly utilizing the case of Britain as evidence for the situation south of the channel. In this view (which would obviously not be in agreement with the idea that Latin was widespread in rural Southeastern Britain in the late Roman period), Latinization was a primarily post-Roman phenomenon. In contrast, Kerkhov (2018) contends that Latin had largely replaced Celtic by the fifth century, with the exception of a few remote upland areas such as the Massif Central, the Jura mountains, and parts of the Alps. Meanwhile, Adams (2007) finds evidence for a distinctly regional Gallic Latin forming during the Roman period, influenced to a degree by Celtic. This argument is necessarily predicated on a quick and early shift from Celtic to Latin in most of the area, though Adams does concede that “Gaulish lingered on into the Empire, longer no doubt in isolated rural areas” (365).

I tend to side with proponents of earlier Latinization, but what is clear either way is that the Roman conquest of Gaul was a classic elite takeover, in which the Romans controlled the region but were content to leave most of the Native populace in place, so long as they recognized Roman authority. Mufwene (2004: 213) states unambiguously that “the Romans did not colonize Europe on the settlement model [...]” and this situation would have lent itself to substrate influence in the Latin spoken there. The same is true of Britain—where, according to Adams (2007), there is evidence of a developing regional variety of Latin very similar to that found in Gaul, due in part to the similarity in dialects of Celtic on both sides of the channel—but Britain had been conquered later, was geographically further away from Rome, and may well have experienced less direct settlement from Latin-speakers. Both of these factors could potentially explain a lesser Latin influence in Britain, as could the fact that the Germanic-speakers who settled the island arrived directly in the most Romanized zone (Charles-Edwards 2013: 31), in contrast to Gaul, where the most Romanized areas in the south experienced decidedly less Germanic settlement than their northern counterparts. The Gaulish disparity continues to be felt in the present day linguistic landscape, as the Gallo-Romance language area has traditionally been divided into the *langues d'oil* (including modern French) in the north and the *langues d'oc* in the south, with the former, particularly Walloon and Picard (Kerkhov 2018: 175¹³), being subjected to a far greater degree of Germanic influence than the latter.

¹³ Kerkhov actually argues that in areas in the far north, including present-day Belgium, that ended up Romance-speaking, Germanic was a *substrate* influence resulting from Germanic-speakers switching to Latin, and that this influence spread through Gaul north of the Loire as a prestige Romance variant after the Franks gained power in the region. In positing this, Kerkhov is explicitly attempting to sidestep debates about the scale of the Germanic speaking migration into the *langues d'oil* region. I believe that such an approach is misguided, since demographic ratios, while not the be-all-and-end-all for language contact between a migrating population and a native population, do influence it to a significant degree, and thus cannot be ignored.

With regards to the differing fates of Germanic in Northern Gaul and Southern Britain, it is likely that the proportion of immigrants to natives was simply higher in Britain than in Gaul. In much of the area that was to become France outside of the very far north, where Germanic languages like West Flemish have persisted into the present day, self-identified Franks would have been a minority elite, and evidently saw fit to Romanize, with Adams (2007: 313) noting that a Frankish law code from the early sixth century, the *Pactus legis Salicae*, “represents a remarkable [cultural] accommodation to the Franks’ new home.” Needless to say, this accommodation would have included a shift to Gallo-Romance, not unlike the manner in which the Norman conquerors ended up shifting to Middle English while also influencing its development.

In Britain, however, the Germanic-speaking communities formed a far greater part of the overall population, and showed little reverence for local Roman traditions, instead choosing to maintain links with cultural cousins across the North Sea. Such attitudes can be seen in the poem *Widsith*, which Neidorf (2013) convincingly argues was composed during the migration era, before a distinct insular Anglo-Saxon identity was formed. *Widsith* situates Germanic-speaking Britain within the greater Germanic world, as it terms the Romans *runwalas* ‘Roman foreigners’ and the Roman empire the *wala ric* ‘Roman/foreign kingdom,’ indicating an obvious othering of Roman culture. In fact, Neidorf believes that the reference to the *wala ric*, which casts the Romans as the default foreigners (rather than specifically British Romans), indicates that the poem may be reflective of an oral tradition that pre-dated the migration. Even so, its themes were of interest to the Germanic-speakers in Britain, and provide evidence for a non-assimilationist mindset among them.

Ultimately, these two examples show that contact between an incoming language and a native language can result in many different scenarios, including complete linguistic replacement, replacement with significant substrate influence, and non-replacement with the incoming language forming a superstrate. Various factors determine which language will “win out,” so to speak, including the migrating population’s attitude towards both the native population and its language, the native population’s attitude towards the incoming population and its language, the specific type of migration (e.g. elite dominance vs settler colonization), and whether speakers of the two languages lived amongst one another or separately. In Eastern and Southern Britain, as I have hopefully demonstrated, a large mass of Germanic-speaking settler colonists upended the linguistic landscape while also demonstrating little interest in engaging with the established Romano-British culture. Speakers of early insular Germanic dialects incorporated Britons into their communities at a slow rate such that Celtic, and possibly Latin, were unable to transfer meaningful substrate influence as their speakers shifted to what ultimately became Old English. The lack of Celtic influence on Old English is thus not an anomaly, but wholly expected.

References

Adams, J. N. *The Regional Diversification of Latin, 200 BC – AD 600*. Cambridge University Press, 2007.

Breeze, Andrew. *British Battles 493–937: Mount Badon to Brunanburh*. Anthem Press, 2020.

Charles-Edwards, T. M. *Wales and the Britons, 350–1054*. Oxford University Press, 2013.

Coates, Richard. Review of *English and Celtic in Contact*, by Marku Filppula, Juhani Klemola, and Heli Paulasto. *Linguistic Society of America* 86 (2010): 441-444.

Coates, Richard. “New Light from Old Wicks: The Progeny of Latin *Vicus*.” *Nomina* 22 (1999): 75-116.

Coates, Richard. “Celtic whispers: revisiting the problems of the relation between Brittonic and Old English.” *Namenkundliche Informationen* 109/110 (2017): 147-173. <https://ul.qucosa.de/api/qucosa%3A31804/attachment/ATT-0/?mobile-app=true&theme=wiki>

“Colonial and pre-federal statistics.” https://www2.census.gov/library/publications/1975/compendia/hist_stats_colonial-1970/hist_stats_colonial-1970p2-chZ.pdf

Dark, Kenneth R. “Large-scale population movements into and from Britain south of Hadrian’s Wall in the fourth to sixth centuries AD.” *Reading Medieval Studies* 29 (2003): 31-49. https://centaur.reading.ac.uk/84556/1/RMS-2003-03_K._R._Dark%2C_Large-scale_population_movements_into_and_from_Britan_south_of_Hadrian%27s_Wall_in_the_fourth_to_sixth_centuries_AD.pdf

Fordham University. “Medieval Sourcebook: Bede (673735): Ecclesiastical History of the English Nation, Book I.” <https://sourcebooks.fordham.edu/basis/bede-book1.asp>

Gretzinger, Joscha, Sayer, Duncan, Justeau, Pierre, et. al. “The Anglo-Saxon migration and the formation of the early English gene pool.” *Nature* 610 (2022): 112-119. <https://doi.org/10.1038/s41586-022-05247-2>

Härke, Heinrich. “Anglo-Saxon Immigration and Ethnogenesis.” *Medieval Archaeology* 5, vol. 1 (2011): 1-28.

Hawkins, Jillian. "Words and Swords: People and Power along the Solent in the 5th Century." In *The Land of the English Kin: Studies in Wessex and Anglo-Saxon England in Honour of Professor Barbara Yorke*, edited by Alexander James Langlands and Ryan Lavelle. Brill, 2020.

Hickey, Raymond. "Early English and the Celtic Hypothesis." In *The Oxford Handbook of the History of English*, edited by Terttu Nevalainen and Elizabeth Cross Traugott. Oxford University Press, 2012.

Hough, Carole. "The migration of Old English to Scotland: Place-name evidence for early Northumbrian settlement in Berwickshire." In *Language on the Move Across Domains and Communities: Selected Papers From the 12th Triennial Forum for Research on the Languages of Scotland and Ulster*, edited by Joanna Kopaczyk and Robert McColl Millar. Forum for the Research on the Languages of Scotland and Ulster, 2020.

Hudson, Richard. "The rise of auxiliary DO: verb non-raising or category-strengthening?" *Transactions of the Philological Society* 95, vol. 1 (2002): 41-72.

Insley, John. "Britons and Anglo-Saxons." In *Kulturelle Integration und Personennamen im Mittelalter*, edited by Wolfgang Haubrichs and Christina Jochum-Godglück. De Gruyter, 2019.

Kerkhov, P. A. "Language, law and loanwords in early medieval Gaul: language contact and studies in Gallo-Romance phonology." PhD diss., University of Leiden, 2018.
<https://scholarlypublications.universiteitleiden.nl/access/item%3A2971768/view>

Leyburn, James. *The Scotch-Irish: A Social History*. University of North Carolina Press, 2009 (originally published in 1962).

Maguire, Warren. *Language and Dialect Contact in Ireland: The Phonological Origins of Mid-Ulster English*. Edinburgh University Press, 2020.

Martin, Toby F. *The Cruciform Brooch and Anglo-Saxon England*. Boydell and Brewer Ltd., 2015.

Martiniano, Rui, Caffell, Anwen, Holst, Malin, et. al. "Genomic signals of migration and continuity in Britain before the Anglo-Saxons." *Nature Communications* 7 (2016):
<https://doi.org/10.1038/ncomms10326>

McColl, Hugh, Kroonen, Gus, Moreno-Mayar, J. Victor, et. al. “Steppe Ancestry in Western Eurasia and the Spread of the Germanic Languages.” Preprint; final version forthcoming. <https://www.biorxiv.org/content/10.1101/2024.03.13.584607v2>

McWhorter, John. *Our Magnificent Bastard Tongue: The Untold History of English*. Penguin, 2008.

Miller, Katherine Leah. “The Semantic Field of Slavery in Old English: *Wealh, Esne, Prael*.” PhD diss., University of Leeds, 2014.

Mills, A. D. *A Dictionary of British Place-Names*. Oxford University Press, 2011.

Mufwene, Salikoko S. “Language Birth and Death.” *Annual Review of Anthropology* 33 (2004): 201-222. <https://mufwene.uchicago.edu/publications/languageBirthAndDeath.pdf>

Mufwene, Salikoko S. “Driving forces in English contact linguistics.” In *English as a Contact Language*, edited by David Schreier and Marianne Hundt. Cambridge University Press, 2013.

Mufwene, Salikoko S. “The Emergence of African American English.” In *Handbook of African American Language*, edited by Sonja Lanehart. Oxford University Press, 2015.

Mufwene, Salikoko S. “Population structure and the emergence of World Englishes.” In *The Cambridge Handbook of World Englishes*, edited by Daniel Schreier, Marianne Hundt, and Edgar W. Schneider. Cambridge, 2020.

Neidorf, Leonard. “The Dating of *Widsið* and the Study of Germanic Antiquity.” *Neophilologus* 97 (2013): 165-183.

Olalde, Iñigo, Carrión, Pablo, Mikić, Ilija, et. al. “A genetic history of the Balkans from the Roman frontier to the Slavic migrations.” *Cell* 186, no. 25 (2023): 5472-5485. [https://www.cell.com/cell/fulltext/S0092-8674\(23\)01135-2](https://www.cell.com/cell/fulltext/S0092-8674(23)01135-2)

Padel, Oliver J. “Brittonic place-names in England.” In *Perceptions of place: twenty-first century interpretations of English place-name studies*, edited by David N. Parsons and Jayne Carroll. English Place-Name Society, 2013.

Parsons, David N. "Sabrina in the thorns: place-names as evidence for British and Latin in Roman Britain." *Transactions of the Philological Society* 109, no. 2 (2011): 113-137. <https://doi.org/10.1111/j.1467-968X.2011.01276.x>

Parsons, David N. "Churls and athelings, kings and reeves: some reflections on place-names and early English society." In *Perceptions of place: twenty-first century interpretations of English place-name studies*, edited by David N. Parsons and Jayne Carroll. English Place-Name Society, 2013.

Pohl, Walter. "Conceptions of Ethnicity in Early Medieval Studies." In *Debating the Middle Ages: Issues and Readings*, edited by Lester K. Little and Barbara H. Rosenwein. Blackwell Publishers, 1998.

Project Gutenberg. "The Project Gutenberg Ebook of *On the Ruin of Britain* (Gildas)." Accessed December 12, 2024. <https://www.gutenberg.org/cache/epub/1949/pg1949-images.html>

Russell, Paul. "Latin and British in Roman and Post-Roman Britain: methodology and morphology." *Transactions of the Philological Society* 109, no. 2 (2011): 138-157. <https://doi.org/10.1111/j.1467-968X.2011.01251.x>

Schendl, Herbert. "Middle English: Language Contact." In *English Historical Linguistics: and International Handbook*, edited by Alexander Bergs and Laurel J. Brinton. De Gruyter Mouton, 2012.

Schiffels, Stephan, Haak, Wolfgang, Paajanen, Pirla, et. al. "Iron Age and Anglo-Saxon genomes from East England reveal British migration history." *Nature Communications* 7 (2016): <https://doi.org/10.1038/ncomms10408>

Schrijver, Peter. "The rise and fall of British Latin: evidence from English and Brittonic." In *The Celtic Roots of English*, edited by Markku Filppula, Juhani Klemola, and Heli Pitkänen. University of Joensuu, 2002.

Thomason, Sarah, and Kaufman, Terrence. *Language Contact, Creolization, and Genetic Linguistics*. University of California Press, 1988.

VU Medicinos fakultetas. "Dr Joscha Gretzinger paskaita." Video presentation, 1 hour, 20 min., 27 sec. Posted March 5, 2025. Accessed April 19, 2025, at <https://www.youtube.com/watch?v= npc5Q2BoGRI>

Webb, Jim. *Born Fighting: How the Scots-Irish Shaped America*. Crown, 2005.

Wood, Michael. "Michael Wood's Story of England (Episode 1: Romans to Normans)." BBC documentary, September 2010. Accessed April 19, 2025, at <https://www.youtube.com/watch?v=U3Jd395jkP0>

Woolf, Alex. "Imagining English Origins." *Quaestio insularis: selected proceedings of the Cambridge Colloquium in Anglo-Saxon, Norse, and Celtic* 18 (2017): 1-20.

Woolf, Alex. "British Ethnogenesis: A Late Antique Story." In *Celts, Romans, Britons: Classical and Celtic Influence in the Construction of British Identities*, edited by Francesca Kaminski-Jones and Rhys Kaminski-Jones. Oxford University Press, 2020.